ISSN 2961–1709

KMC Journal

Peer-Reviewed
Open Access
DOI
Indexed
Multidisciplinary

Volume 8 Issue 2 August 2026

Published by
Research Management Cell (RMC)
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
Email: rmckmcjournal@gmail.com

ISSN 2961–1709 (Print)

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Email: rmrkmcjournal@gmail.com
Website: kailalicampus.edu.np

KMC Journal is a double-blind peer-reviewed multidisciplinary journal published by the Research Management Cell of Kailali Multiple Campus, Dhangadhi, Nepal.



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ISSN 2961-1709 (Print)

Printed in Nepal

Layout and Cover Design: Subin Raj Pandey
Sangam Books Publication Pvt. Ltd., Kathmandu

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Editorial

KMC Journal is a double-blind peer-reviewed, open-access multidisciplinary journal published by the Research Management Cell (RMC) of Kailali Multiple Campus, Dhangadhi, Far Western University, Nepal. Published twice a year, this journal provides a platform for the researchers, educators, academicians, teachers, trainers, practitioners and professionals across the world to share knowledge in the form of high quality empirical research papers from different disciplines including Education, English Language and Literature, Social Sciences, Humanities, Management, Forestry, Law, Science and ICT. The journal encourages national and international researchers and scholars to share their research experiences through publication to the global audience.

KMC Journal is a refereed journal which adopts a rigorous process of screening, reviewing, editing and proofreading. The editorial board makes the first decision regarding the submitted articles as the first step of the review process. Accepted articles are sent to two anonymous reviewers for review. If the reviewers recommend the article for publication with some feedback, the reviewed articles are sent back to the concerned authors to revise addressing the comments and feedback of the reviewers. Finally, the editorial board makes the decision whether to publish the revised article or reject. The journal does not take any charge for publication. The Research Management Cell of Kailali Multiple Campus bears all the expenses.

KMC Journal, Volume 8, Issue 2 includes 24 research-based articles from English education, English literature, Education, Management, and Humanities. All these papers have been published after undergoing the rigorous processes of reviewing, editing and proofreading. We believe that all these articles will be fruitful for the practitioners in the concerned disciplines around the globe. We request to all the valued readers, academicians and scholars to contribute by being published in the coming issues of this journal.

We express our sincere gratitude to all the authors for their appreciable contribution. We are thankful to our valued reviewers for their scholarly work and support to the Editorial Team throughout the process. We are grateful to the Research Management Cell of Kailali Multiple Campus for the publication of the journal.

Happy Reading!

Editor-in-Chief
KMC Journal
August 2026

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98947

From Darkness to Light: Socioeconomic Division in Adiga's *The White Tiger*

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Abstract

This study examines the socioeconomic division on *The White Tiger* by Aravind Adiga which foreshadows the shift in the status of the Darkness to the Light as a key metaphor of inequality in modern India. It primarily underlines major problems such as stratification of classes, institutional corruption, lack of social mobility, and psychological traps of the underclass prevailing in India, which are expressed in the metaphor of Rooster Coop. Based on qualitative textual analysis approach, this study employs a mixed theoretical approach that draws on the theory of Karl Marx (theory of class struggle) and Frantz Fanon (postcolonial theory of internalized oppression and violence). The analysis of the narrative voice, characterization, and symbolism through close reading is based on a transformation of Balram Halwai as a subaltern subject to a self-made entrepreneur. The evidence illustrates that the novel is a criticism of the illusion of meritocracy as it reveals the aspects of structural inequalities and power relations of hegemony dominating the approach to opportunity. Although the upward mobility is made to seem a possibility, it depends on moral transgression and violence, which echoes the idea of liberation by rupture of Fanon. At the same time, the model of Marxism explains the way in which economic systems sustain exploitation and division of classes. The study adds to the subtle perspective of the socioeconomic division, combining both psychological and structural approaches, to provide a new understanding of mobility as a liberation and as complicity.

***Keywords*:** Socioeconomic division, class struggle, postcolonial theory, Marxism, social mobility

Introduction

The White Tiger (2008) by Aravind Adiga is a thought-provoking critique of modern-day India as it reveals the paradoxes of the economic development of post-liberalization India. The economic reforms, launched since 1991, led to a more rapid globalization, privatization and marketization, but also to a growing socio-economic polarization between more well-off people living in the cities and the poor in the

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countryside. Adiga does not show the liberalization as a road to universal prosperity but an India where the economic growth is unequal resulting in millions of people being stuck in poverty, exploitation and social exclusion. In this context, *The White Tiger* questions the ideology of meritocracy and the promise of upward mobility, a promise that still has a hold on individual lives in the face of structural inequalities.

The novel is in first person and told from the perspective of Balram Halwai, a poor Bihar boy who finds his way to success as an entrepreneur in Bangalore and by the side of the wealthy, educated elite. Balram's passage from 'Darkness' to 'Light' from rural deprivation to urban capitalism is a rich metaphor for the social and political dynamics—of class, power, violence and identity—in modern India. The duality of Darkness and Light is used as a metaphor to reveal the divide between the people of the fringes of society and those who are enjoying the benefits of neoliberal modernization of the nation. Instead of claiming the moral legitimacy of social mobility that has been created within a system based on exploitation, corruption and institutional injustice, Adiga challenges that moral legitimacy.

In this study, the theory of Karl Marx and Frantz Fanon are used concurrently to analyze *The White Tiger*. The framework of Marx's criticism to Capitalism is helpful in understanding the material conditions that underline class inequality, labor exploitation, and the accumulation of wealth. His ideas of class struggle, alienation and the relations of production shed light on the structural processes by which the ruling class keeps the working poor in an economic and ideological subservient position. Fanon's postcolonial theory builds on this analysis to account for the impact of system of oppression on the psychological consciousness. Fanon's theories of internalized subjugation, of violence and of decolonization can help account for the progressive rejection of servitude by Balram, and the acceptability of violence as a tool of self-emancipation. Combined, Marxist and Fanonian views portray that the socioeconomic inequality in the novel takes place at two levels: economic exploitation and psychological domination.

One of the novels' main themes is the surprising metamorphosis of Balram Halwai. His journey from a servant's role to that of a prosperous businessman seems to defy blatant class divisions, but he is only successful through trickery, bribery and murder, and he is re-creating the same way of domination as those he is trying to overcome. As such, Balram is both a victim of a system of oppression and an agent that reinforces the system of oppression. This moral ambiguity makes traditional stories of individual success harder to accept, and implies that gaining success in capitalist society within an unequal society may necessitate participation in exploitative mechanisms. Adiga thus moves away from the concept of personal responsibility and attention to the social and institutional conditions that produce violence, inequality and social deprivation.

By applying a qualitative textual approach, this paper examines how Adiga develops socioeconomic divide through his use of voice, symbolism, characterization

and spatial representation in the narratives. There is special emphasis on the metaphor of the "rooster coop" which represents the psychological enslavement and indoctrination imposed on the oppressed that encourages them to be subordinates. The study also explores the symbolic opposition between Darkness and Light that represents the uneven development of India, its urban and rural dichotomy, the gap between the rural and the urban. In these literary techniques, Adiga brings to light class divisions that are being reproduced by neoliberal capitalism while being obscured by a discourse on opportunity and economic growth.

This study attempts to reveal that *The White Tiger* deconstructs the myth of meritocracy of neoliberalism as it has created structural class inequality by creating and sustaining an interconnected economic exploitation, ideological domination and psychological oppression. Based on the theory of class struggle provided by Marx and the understanding of colonial consciousness offered by Fanon, the study argues that the process of Balram Halwai coming from Darkness to Light is not a real process of social emancipation, rather it is an enigmatic process in which resistance is fused with complicity. Beneath all these moral ambiguities, Adiga sheds light on the mechanisms of socioeconomic mobility in an inequitable social system and comes to understand that progress involves engaging in the system of violence and exploitation that reproduces inequity, rather than equal opportunity.

Literature Review

In the recent literature in Indian English, the issue of the socioeconomic inequality under the neoliberal globalization has emerged as a central issue. Literature and the discourse of development have come together to look at the uneven impacts of market-oriented development, urbanization and globalization since the 1991 economic liberalization of India. Most of the novels in modern India do not celebrate the prosperity but rather expose the abyss that lies between the rich and the poor, the existence of caste and class inequalities, and the commercialization of man in a capitalist society. In this larger critical discourse, the uncompromising portrayal of post-liberalization India of Aravind Adiga's *The White Tiger* (2008) is worth special note. It narrates the stories of economic success alongside the narratives of structural exclusion, institutional corruption and moral decay. This has led to a number of significant studies of the novel, with varying emphases, from a Marxist approach, a post colonialist one and a narratological approach, all of which shed light on different aspects of the novel's critique of an Indian society.

One of the most prevalent research focus areas looks at the novel as a high impact political criticism of the socioeconomic inequality, in its symbolic construction of India as divided between privilege and deprivation. Adiga's (2008) portrayal of 'India of Light' and 'India of Darkness' (p. 14) has been one of the most fruitful concepts to explore in the novel, in terms of the spatial, economic and ideological differences it represents. This binary is not just a geographic metaphor in the sense that it reveals the

inequalities in the structure of India's development model. In contrast to "Light" and "Darkness," Singh (2016) posits that this opposition is an ideological one, which is achieved by normalizing unequal access to wealth, education, and institutional power which make inequality an inevitable part of national progress. Such interpretations are useful in revealing the symbolic significance of the spatial division of the novel, but tend to focus on the metaphor's description rather than the history and politics of the novel's ongoing production of these unequal spaces.

The novel has also been enriched by the Marxist criticism which highlights its critique of the capitalist exploitation and class domination. In this view, instead of being understood as a story about individual achievement, Balram Halwai's journey from a low socio-economic class village servant to a successful businessman is seen as a result of structural violence and systemic exclusion. Thus, Sharma (2019) argues that Balram's success is only possible on the basis of his engagement with the logic of exploitation of neoliberal capitalism and not a sign of true social mobility. An ideological conditioning that forces the oppressed to accept willingly their own subjugation is at the very heart of this interpretation, which is called the "Rooster Coop." Marx's idea of false consciousness has been used to read Balram's statement about the "Rooster Coop — the greatest thing to come out of this country" (Adiga 2008, p. 147) in which he shows the power of dominant ideologies to make resistance look normal. Likewise, Mukherjee (2018) claims that the novel is not about a liberating form of capitalism, but is a novel about the new forms of slavery of competition, aspiration, and consumerism that the neoliberal system creates. However, much of the Marxist interpretations emphasize economic determinism with a tendency to overlook the psychological, cultural, and narrative aspects of the internalization and reproduction of ideology.

This class-based interpretation is complemented by the postcolonial reflections, which focus on questions of identity, agency and the colonial past and its continuity in neoliberal India. Postcolonial critics do not see Balram as a victim of economic exploitation, but his metamorphosis as the sign of a fractured subjectivity resulting from the overlapping of the histories of colonialism and globalization. Balram is a postcolonial subject, according to Kumar (2021), one who is a victim of the system of oppression yet is still struggling to find freedom in systems that are still upholding colonial relations of power. Through their analysis of Balram's killing of Ashok using violence theory of Frantz Fanon, several scholars read Balram's act of violence as an ethically dubious act of resistance in which the marginalized gain agency over the oppressive structures. Similarly, Homi Bhabha's idea of hybridity has been used to resolve Balram's 'fuzzy' sense of self as he traverses between rural and urban environments, servitude and autonomy, traditional and capitalist culture. Roy (2020) also suggests that the novel challenges the stable ideas of identity by demonstrating that social mobility has a flip side; it involves moral bending and psychological disintegration as well. Many studies of the postcolonial, however, while providing

valuable clues to a process of identity formation, often focus too much on issues of subjectivity, and pay comparatively less attention to the material conditions of class exploitation which condition it, creating an artificial distinction between cultural and economic studies.

Despite this rich body of scholarship, certain gaps remain. Much of the existing research tends to isolate economic inequality, psychological oppression, and narrative strategy as discrete areas of analysis rather than interrelated dimensions of a unified structure. However, no study has comprehensively examined these dimensions as an integrated framework .Moreover, insufficient attention has been paid to the interconnectedness of these spaces as mutually reinforcing systems of exploitation. Addressing these gaps, the present study synthesizes Marxist and postcolonial frameworks to examine socioeconomic division as simultaneously structural, psychological, and narrative. By doing so, it seeks to offer a more integrated understanding of how *The White Tiger* interrogates class, power, and identity in contemporary India.

Methods and Procedures

This paper presents a qualitative research design based on the textual analysis to discuss the portrayal of socioeconomic division in *The White Tiger* by Aravind Adiga. The qualitative method is especially appropriate since the study is aimed at interpreting the meanings within the narrative structure, symbolism, and ideological discourse instead of measuring the data. The novel is treated as a socio-literary text which does not merely mirror, but also criticizes lived realities of inequality, stratification of classes and limited mobility in post liberation India. The statement of Balram, who states that he is tomorrow (Adiga, 2008, p. 5) is being considered to be one of the main entry points of the narrative, as it announces not only the aspirational subjectivity but also the conflict between personal ambition and the structural constriction that the methodology is to unpack.

The analytical model is guided largely by the Marxist literary criticism which forms the basis of the study of the relations of classes and material circumstances in the text. The idea of Karl Marx that the history of all the existing society is the history of the struggle of classes (Marx & Engels, 1848/2002) informs the exploration of the impact of economic organization on power relations, working relations and access to opportunity. In this respect, the novel can be seen as an attack against capitalist modernity, in which inequality is reproduced through a systematic exploitation, and not personal failure. The metaphor of the Rooster Coop plays the key role in this analysis and serves as a symbolic portrayal of ideological control. The claim made by Balram that it is the best thing coming out of this country (Adiga, 2008, p. 147) is analyzed as one of the ways dominant systems maintain themselves by instilling fear, obedience and social conditioning within.

Besides Marxist theory, the research uses postcolonial framework provided by Frantz Fanon to investigate the psychological aspects of oppression and resistance. The

moral rupture and ensuing resurrection of Balram can be critically viewed in light of the argument by Fanon that violence can be a transformative experience to a colonized subject. His quote, "Let animals act like animals; let humans act like humans" (Adiga, 2008, p. 276), is considered to be the moment of ideological opposition, being the rejection of forced inferiority, as well as the acceptance of individualistic ethics of survival. The internalized oppression is specifically relevant in the context of Fanon as Balram is capable of reproducing the structures that oppress him in the first place, after which he tries to break out of them.

The procedural aspect of the paper includes the systematic close reading of the chosen passages of the novel, and the specific focus might be on the repeated patterns of the thematic issues, including such aspects as the hierarchy of the classes, servitude, corruption, countryside-city and identity reconstruction. These parts of text are considered as units of analysis and they are analyzed in the context of the wider theoretical frameworks. The passages are chosen according to their relevance in the thematic context and frequency so that the analysis is focused and reflects the main issues of the novel. The process of close reading provides an opportunity to interpret the language, metaphor, narrative strategy in a subtle way.

In order to attain analytical rigor, the study employs a coding procedure whereby textual data is categorized into interpretive categories based on Marxist and Fanonian ideas. These types are structural inequality, ideological control, psychological entrapment, violence as resistance, and narrative self-legitimation. Through the classification of the data in this fashion, the study can trace patterns throughout the text and determine relationships between material conditions and subjective experience. Such an approach also facilitates to analyze in layers, whereby individual passages are not read in autonomy but are analyzed under a larger ideological system.

Narrative voice is an important element of the methodology. The first person epistolary narration of Balram is not merely discussed as a narrative technique but as a discursive action which forms legitimacy to his actions. The paper explores the negotiating power of his voice to deliver guilt, justification, and self-fashioning, and thus creating the perception of the readers. This feature of the methodology implies the role of discourse in supporting or disrupting hegemonic ideologies and indicates that narrative itself is a place of power.

Besides, the research is interpretative and critical, acknowledging the fact that meaning in literary texts is not fixed and unique. Rather, it is created by the interaction of text, theory, and reader. With the combination of Marxist and Fanonian approaches, the approach does not engage in a simplistic interpretation of the novel but rather focuses on the complexity of the novel. This interdisciplinary method can offer a more detailed interpretation of the functioning of the socioeconomic division on several levels.

Finally, the approach to the study allows analyzing inequality in *The White*

Tiger as a multidimensional phenomenon, material, psychological, and narrative. The close textual analysis with the theoretical interpretation reinforce the research to transcend the surface description and reveal the underlying ideological processes at play. The method does not only enhance the quality of research analysis, but provides a solid foundation of the findings on textual evidence and critical theory that provides a comprehensive representation of socioeconomic divide as a lived experience and a produced discourse.

Results and Discussion

The analysis reveals that *The White Tiger* does not create socioeconomic divide as a problem of society, rather it is the basis of the modern Indian society. The novel depicts inequality as something that is deeply rooted in history, perpetuated by institutions and normalized as ideologies. Aravind Adiga discloses in the endless juxtapositions of 'Light' and 'Darkness' how social divisions are geographically and psychologically structured in post-liberalization India. The dichotomy is not just a stylistic tool, but is a political and ideological position which defines who has access to what, how one can move, how one can learn and how one is seen. The term 'two countries in one' captures a sense very much akin to that of Marxism that India is a society in which there are class antagonisms rather than social harmony. The expression 'two countries in one' is very close to the Marxist understanding of society in terms of class antagonisms and not social harmony in Adiga (2008). In this regard, the novel challenges the neoliberal idea that economic liberalization always results in "equal opportunity" and social development.

Light and Darkness can be seen as a metaphor for unequal power and legitimacy distributions. The "Light" is the economic privilege, institutional recognition and social visibility, while the "Darkness" is the poverty, dispossession, invisibility, and exclusion from the structures of authority. It is through fear and obedience that oppression can become internalized, as Balram notes, "the greatest thing to come out of this country in the ten thousand years of its history is the Rooster Coop" (Adiga, 2008, p. 147). The metaphor of the "Rooster Coop" is a system where subaltern people are 'trapped' not just by being overtly pushed by others but by 'opting out' of being subordinate. It is an example of the Marxist notion of false consciousness, in which oppressed people unwittingly play a role in perpetuating the system which oppresses them. Capitalism in the novel does not destroy hierarchy, but reorganizes and reproduces it in new economic frameworks that are related to globalization.

It also finds that Balram's journey brings out the fact that there is no meritocracy in the neoliberal capitalist society. In his statement "I am tomorrow" (Adiga, 2008, p. 319), it seems that success in a globalized world lies in his upward mobility and entrepreneurship. However, a closer look uncovers his ascent can only be achieved by resorting to violence, manipulation, corruption and moral compromising. Balram's success is a reflection of a lack of legitimate opportunities for social mobility for

the lower classes and is therefore not empowered, but a mere reflection of the same. Meritocracy is thus shown to be an ideology that conceals class and power related systemic inequalities.

In this interpretation the points made by Karl Marx and Friedrich Engels (1848/2002) are more or less correct, namely that "the ideas of the ruling class in every epoch are the ruling ideas" (The German Ideology, p. 64). The dominant ideology pathologizes inequality as if it were a normal or 'just' state of affairs. Balram explicates that "a few men… have trained the other 99.9 percent… to live in perpetual subservient" (Adiga, 2008, p. 176) is an example of internalization of systems of domination. Instead, his social rise is not the result of openness of capitalism, but rather of a structural breakdown in it. In a Marxist view, the success of Balram comes to represent the fact that the working class can never transcend its own oppression by being a part of it. A Marxist interpretation would be that Balram's success is proof that the working class is unable to be liberated by joining in the systems of oppression. The novel challenges the ideology of neoliberalism by revealing the structural nature of inequality in terms of a narrative of individual achievement.

At the same time, a Fanonian reading complicates this reading, by highlighting the psychological aspects of oppression and liberation. According to Frantz Fanon (2004/1961) the colonized man "is a free man in and through violence" (p. 44). Balram utters, "I murdered him" (Adiga, 2008, p. 276) and this confession is thus a radical rupture from the systems of domination. Violence is the way in which the oppressed subject tries to find agency and self to reclaim their selfhood. But the novel is doing something more nuanced to Fanon's revolutionary paradigm, as it shows how Balram's liberation is not yet complete, and there is a moral ambiguity to it. His change does not destroy structures of oppression, but it creates other forms of oppression. Balram then becomes an employer and is able to reap the same benefits as he sought for others, by exploiting them. So, his freedom is caught up in complicity.

The analysis also demonstrates the much greater power of the "Rooster Coop" as a symbol of ideological and psychological control than direct physical control. The oppressed classes do not unite against the oppressor for fear of punishment and family responsibility and as they are taught to obey. As Balram explains, servants do not steal even if they are starving, because they are afraid of their families (p. 150). This is an illustration of the ways systems of domination at work lead to emotional and/or psychological conditioning, not physical. The Coop thus symbolically represents the ways by which capitalism imposes its constraints on marginalized people and normalizes their exploitation as inevitable and "natural. The Coop is thus a symbol of the machinery of capitalist discipline which forces marginalized people to accept their exploitation as natural and inevitable.

Significantly, the discussion unveils that the paper critiques the traditional Marxist expectations on collective class solidarity. The Communists Manifesto offers

a markedly different vision of revolution than the traditional accounts, which are based on the notion of unity among the proletarian class. The theme "the proletarians have nothing to lose but their chains" is a well-known and often quoted slogan of Marx and Engels (1848/2002) that also reads, "They have a world to win" (p. 500). Nevertheless, in *The White Tiger* collective resistance is not present. Social relations among the oppressed are dominated by such things as isolation, competition and the law of survival. This makes them think less of solidarity, and more of survival, so that rebellion is individual and not collective. Balram's escape from the Coop does not break the system, it only reveals its seemingly impossible for anyone to escape temporarily if they're an exceptional person. The lack of collective consciousness is a reflection of the disintegration of the "neoliberal" capitalism that is based on competition instead of collective struggle.

Another major conclusion of the analysis is that corruption in the novel does not appear as an anomaly but it is necessary as part of the fabric of capitalist modernity. Political leaders, landlords, and business elites perpetuate systems of exploitation by offering bribes and manipulation and through institutionalized corruption. In Delhi, Balram states that "the Ministers… have their fingers in all the affairs of the country" (Adiga, 2008, p. 97), implying that economic and political power is interdependent and interconnected in a web of corruption. The lack of trust in moral standards among elite is a sign of decay in general. The decline in moral standards among the elites is a symptom of decay in the whole of neoliberal society. Corruption becomes a normal way of doing business and supports to consolidate the wealth and power of dominant classes. The novel takes, therefore, a critical look at the moral failures of individuals, but also at the corruption of the system itself, inherent in capitalist systems.

Moreover, violence is used throughout the novel as a method of oppressing as well as a means of social mobility. The killing of Ashok by Balram is not just about taking care of his personal vendetta, but also his violent infiltration of the capitalist system. The phrase "Once I was a driver to a master, but now I am a master of drivers" (Adiga, 2008, p. 302) is a reflection of the process of power reproduction through domination. In a limited sense, Fanon's claim that "violence is a cleansing force" (1961/2004, p. 94) is confirmed, since violence helps Balram to get rid of being subordinate. But at the same time the novel condemns this process, showing that violence really only reinforces those oppressive structures it wants to challenge. Violent liberation is morally disturbing as it turns victims into players in the system of exploitation.

This structure of the novel also serves as a way to explore these thematic issues. Balram is a narrative unreliable narrator who is convincing and has a message to be communicated, the details of whose story are carefully crafted to support his actions and to build up his identity. With his storytelling he is metamorphosing himself from servant to entrepreneur. This approach to storytelling prompts readers to reflect on the connections between truth, idea and representation. Balram's definition of success is

derived from his selective memory, rationalizing and self-legitimizing processes, which help him to develop his narratives as tools of power. By narrating, he can influence the meaning of his experiences, thus intimately planting himself in the "Light."

Further, the study suggests that the novel is also a critique of globalization and the neoliberal development as it reveals the increasing disparity between the urban prosperity and the rural backwardness. But the economic growth which has come with modern India, gains mainly for the elite class of urban population while the rural masses are stuck in the vicious circle of poverty and exploitation. This is the story of the migration of Balram from the village of Laxmangarh to Bangalore, which represents this uneven development. Cities are places of opportunity, but also a place of alienation, exploitation and moral decay. The novel thus challenges to some degree the prevailing discourses of globalization's beneficence. Rather, it paints an image of economic modernization as highly unequal, producing wealth for a select few and further marginalizing the masses.

The study allows for a more general theoretical framework as it is shown that The White Tiger is working simultaneously on the structural, psychological and ideological levels. The novel is revealing structurally of the class inequality in the postcolonial capitalist society. Psychologically it explores the mechanism of internalization of oppression via fear, obedience and aspirations. It challenges ideologically the narrative of meritocracy, entrepreneurship and neoliberal progress which mask an underlying injustice. These dimensions overlap to produce an intricate depiction of capitalist modernity and the material and psychological reproduction of exploitation.

Finally, this paper analyzes that Balram's changing from Darkness to Light continues to be highly ambivalent. His transformation is a protest against oppression, but it is also a reflection of the violence and exploitation that is a part of the capitalist system. It is no easy story which provides simplistic moral solutions or revolutionary alternatives. Rather, it challenges the reader to deal with the paradoxes of neoliberal modernity, in which liberation and domination are interdependent, and in strange ways. *The White Tiger*'s critique on class hierarchy, the ideology, corruption and violence exposes the socioeconomic divisions and the morality of survival in the current capitalist society.

Conclusion

The present study examined the novel *The White Tiger* of Aravind Adiga utilizing the complementary theory of Karl Marx, the theory of class struggle, and the theory of post colonialism of Frantz Fanon, to prove how socioeconomic inequality is maintained through material violation and psychologisation. Together, Marx's theories provide some insight into the structural nature of class oppression, labor exploitation and unequal distribution of power, while Fanon's theories throw some light on the internalization of colonialism and its legacy of social inferiority and colonial consciousness in post-liberation India. What is interesting is that while the village

servant Balram Halwai manages to become a successful entrepreneur in the end, he has been oppressed by the very same capitalist system he has been trying to escape from all along.

The study helps with literary scholarship, as well as with the larger interdisciplinary discussions of meritocracy, globalization and national development, by disrupting prevailing viewpoints. It demonstrates how literature can be used as a potent tool to uncover the human toll of economic growth and reveal the interplay of class, power, and colonial history that affects the lives of the underprivileged population. It draws upon Marxist and postcolonial frameworks to provide an all-encompassing view of socioeconomic inequality as a multidimensional issue, which is embedded in structures and processes of history.

This analysis can be expanded in future researches with comparative studies of postcolonial literary texts from other parts of the world, such as other parts of South Asia, to investigate how class conflict, urbanization, migration and marginalized identities are portrayed in different cultural contexts. These can broaden our understanding of inequality in the world whilst emphasizing the importance of a structural justice, ethical governance, and equitable opportunity for sustainable social change. In conclusion, *The White Tiger* is an essential literary work that continues to inspire critical analysis of inequality, power, and human dignity in today's increasingly globalized world.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98948

Classroom Assessment Practices of the Secondary Level English Language Teachers

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Abstract

Classroom assessment practices enhance students' language learning by promoting learners' engagement and connecting their theoretical knowledge with real-life situations. This study explores the classroom assessment practices of the secondary-level English language teachers. A qualitative research approach was employed under an interpretive research paradigm, applying semi-structured interviews guided by a set of interview guidelines. Participants included four secondary-level English teachers from four government-funded community schools in Taplejung, with more than 10 years of teaching experience. Using narrative inquiry as a research method, the information was collected, coded, and thematically analyzed to understand how the participants make meaning of their experiences with classroom assessment practices. The study found that the teachers perform classroom assessments; however, these assessments lack transparency and consistency. In addition, all four language skills are not equally emphasized during teaching and assessment. The teachers also encountered several challenges in the effective implementation of classroom assessment, including a large number of students, students' irregular attendance, a lack of teachers' authority to issue internal marks, and students' low language proficiency. The findings suggest teacher training, workshops, and policy alignment to conduct the classroom assessment effectively.

***Keywords*:** Classroom assessment, English language teachers, secondary-level classrooms, narrative inquiry

Introduction

The National Curriculum Framework (2021) proposed the inclusion of both formative and summative assessment tools to evaluate students' knowledge and skills. It indicates that there is a policy of 25% formative and 75% summative assessments at the secondary level (Curriculum Development Centre, 2021). However, only a few public schools in Nepal evaluate their students using both formative and summative

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assessments; most rely solely on summative assessment tools, such as terminal and final examinations, which do not provide students with adequate feedback to enhance their learning (Sapkota, 2022; Nepali, 2012). There exists a gap between policy expectations and classroom practices. The curriculum suggests that stakeholders inculcate formative assessment to support students' learning and development; however, in classroom practice, it was found to be used in a traditional way (Saud et al., 2024). The formative assessment has become only a tool to assign marks rather than to improve students' learning outcomes. In a similar vein, Sigdel and Sherpa (2024) argued against Nepal's existing assessment practices and advocated for valid, reliable, learners-engaged, and goal-oriented assessments.

Assessment is the integral component of formal education. The information collected through the assessment informs teachers about learners' difficulty areas and encourages them to work collaboratively to overcome those difficulties (Almeida et al., 2010). This allows teachers to diagnose students' strengths and weaknesses. Knowing each student helps teachers adopt appropriate teaching strategies, which, in turn, intensifies their learning. In the field of language education, language was traditionally tested in a skills-based, isolated manner, with little relevance to authentic real-world communication, emphasizing mainly grammar, vocabulary items, and translation. However, communicative language testing has become a prominent way of assessing language use in real-world contexts and attempts to evaluate what test-takers can do with language rather than their language knowledge (lexical, grammatical, or phonological). Furthermore, it focuses on fulfilling communicative purposes within real-world contexts (Morrow, 2018). The students are focused on developing communicative competence.

With the shift from teacher-centered to learner-centered pedagogies, assessment moves from measuring students' achievement to promoting learning. Traditionally, students were evaluated based on their knowledge and skills; a type of assessment called summative assessment. Ur (2013) described it as the process of evaluating students by providing only a grade, typically a percentage, indicating the end of the specific academic year. This assessment lacks regular feedback and focuses only on students' achievement. In contrast, formative assessment is a scientifically grounded educational technique that aims to evaluate the students' learning during the educational process, often called 'assessment for learning' (Bennett, 2011). It emphasizes the students' learning process rather than their final achievement. This assessment supports students' self-regulated learning (Xiao & Yang, 2019) and enables educators to adapt instructional strategies to address students' needs and interests (Razali et al., 2021). It always encourages teachers to provide detailed feedback that includes not only grades or scores but also continuous guidance to achieve specific learning goals (Hwang et al., 2022). The teachers learn to what extent the students can grasp the shared knowledge and identify their strengths and weaknesses.

Classroom assessment has gained attention, with a focus on enhancing students' learning. It includes all classroom activities performed by teachers and learners to collect information that can be used for diagnostic purposes to improve teaching and learning (Black & William, 1998). They argued that the classroom is the place where the educational quality is raised. However, policymakers and curriculum designers ignored classroom practices, and policies were enacted that addressed classroom problems only marginally (Black & William, 1998). The classroom assessment requires teachers to collect, analyze, and use evidence of students' learning to identify their strengths and weaknesses, track their progress toward desired learning outcomes, evaluate them, and inform parents (McMillan, 2013). Teachers are encouraged to reflect on their teaching strategies to improve them. Although classroom assessment is important for developing students' cognitive, affective, and psychomotor domains of educational objectives, teachers still rely on traditional exam-oriented assessments to evaluate the students' performance (Isik, 2021). The study indicated that ELT teachers perceived assessment as merely an official procedure to improve their students' performance.

Classroom assessment plays a significant role in enhancing the students' learning. Some researchers equate classroom assessment with formative assessment, while others consider it inclusive of both formative and summative functions of classroom assessment (Brookhart, 2004). This study focuses only on the formative functions of classroom assessment, specifically monitoring classroom activities. The teachers were positive towards formative assessment, and it also promotes students' learning through active engagement (Kafle & Neupane, 2025; Rai, 2019). Similarly, Neupane (2023) noted that students preferred project-based assessment to exam-oriented assessment, as it provides ample opportunities to learn from one another. Previous studies mainly explored teachers' and learners' perceptions of formative assessment; however, less attention has been given to the assessment practices in language classrooms designed to enhance students' language proficiency. This study primarily focuses on classroom assessment activities implemented by secondary-level English teachers. Moreover, it explores the challenges teachers encounter in classroom assessment. To meet this objective, the following questions guide the study:

1. How do secondary-level English teachers practise classroom assessment?
2. What challenges do secondary-level English teachers face in classroom assessment?

Literature Review

Language assessment has received attention primarily in EFL and ESL contexts. There occurs a paradigm shift from 'Assessment of Learning' to 'Assessment for Learning'. Assessment of learning mainly focuses on measuring learning after the delivery of all materials and is used to categorize students and assessment reporter (Schellekens et al., 2021). Both teachers and students get fewer opportunities to improve their instructional strategies and learning. In contrast, assessment for learning

emphasizes students' learning progress and provides sufficient feedback to both teachers and students to improve their language teaching and learning. It motivates teachers to use appropriate teaching strategies and encourages students to learn. The assessment for learning teachers view assessment as an investigative tool to learn more about students, their learning, potential biases, and understand their own teaching practices (Tjendani et al., 2019). This assessment places greater emphasis on classroom activities that foster students' learning.

Classroom assessment practices act as a bridge between curriculum, classroom instruction, and students' learning outcomes (Hussain et al., 2019). The teachers employed different classroom activities, such as group work, pair work, and group discussion, that aligned with the curriculum objectives. These activities develop students' collaborative, cooperative, and communicative skills, which come under 21st-century skills. Similarly, presentations and project work provide students with hands-on learning experiences and deepen their understanding of the concepts. The students' creativity and critical-thinking skills can be developed. By adopting these interactive activities, teachers can track students' learning progress and identify their strengths and weaknesses. It also helps teachers understand their own instructional strengths and weaknesses. This results in improvement of the teaching-learning process.

This study employs the theory of multiple intelligences. According to Gardner (1983), humans possess eight distinct intelligences: logical-mathematical, linguistic, interpersonal, intrapersonal, musical, visual-spatial, bodily-kinesthetic, and naturalistic. This theory believes that each individual possesses different cognitive abilities, strengths, and intelligences. It argues that assessment should be conducted during teaching and learning and opposes paper-and-pencil tests used to make decisions about students' promotion and to show schools' effectiveness. In a similar vein, Taufiqi and Purwanto (2024) argued against traditional examination-oriented assessments that measure only verbal-linguistic and logical-mathematical intelligence, ignoring other intelligences. This theory advocates classroom assessment activities that further develop students' potential and talents.

A number of researches has been carried out nationally and internationally addressing assessment practices. The classroom assessment facilitates students' learning through the integration of interactive activities, such as presentations, group projects, self- peer-, and portfolio-assessment practices (Hussain et al., 2019). In Nepal, Sapkota's (2022) study found that the use of formative tools in the classroom is less common. Similarly, Gyawali (2021) centered his study on the pitfalls of the current evaluation system, which revealed an inequitable relationship between the Continuous Assessment System and learning facilitation, resulting in disruptions to students' learning outcomes. Moreover, Sigdel and Sherpa's study (2024) findings suggest student-friendly, goal-oriented, and evidence-based assessment practices. This study found that students experience some fear of high-stakes exams and seek

classroom activities that evoke their creativity and motivate them to participate. Ghimire (2023) focused on teachers' perceptions and practices regarding formative assessment practices. The findings revealed that the teachers have clear ideas about formative assessment, but challenges such as limited time and resources, resistance to change, and the need for ongoing professional development hinder its effective implementation.

Methods and Procedures

This study employed an interpretive research paradigm. It emphasizes understanding the individuals and their interpretations of the world around them (Kivunja & Kuyini, 2017). Following the interpretive paradigm, I used a qualitative research design to explore the participants' subjective experiences of classroom assessment practices. Among several qualitative research methods, this study adopted a narrative research design. I maintained the dimensions of temporality, sociality, and spatiality (Clandinin & Connelly, 2000) throughout processes of data collection, analysis, and interpretation. They helped me to understand the participants' experiences that unfold over time, shaped by personal and cultural factors in a specific context.

Participants

I used purposive sampling, aligning with Gentles et al. (2015), who consider it a suitable strategy to conduct a qualitative study. For this study, I purposively selected four secondary-level English teachers from four government-funded community schools in Taplejung district, Nepal. The selected participants were Master's degree holders with more than 10 years of teaching experience. Among the four participants, one was female, and the remaining three were male. Consent was obtained from the head teachers of the respective schools to conduct an interview. After that, I built rapport with the participants and explained the purpose of my study. Additionally, informed consent was taken from them before the data collection.

Data Collection

I used semi-structured interviews as the main data collection tool. The selected participants were interviewed following a set of interview guidelines. The face-to-face interviews, followed by several online conversations, were conducted in a conversational manner to encourage participants to share their detailed experiences on classroom assessment practices. I created a friendly, and comfortable environment that helped them share their vivid experiences. Moreover, I kept their private experiences confidential and did not break the confidentiality I maintained with my research participants when interpreting, describing, and analyzing the data. I obtained participants' consent and recorded their interviews.

Data Analysis

I transcribed the recorded data and shared it with my participants to ensure their shared experiences and stories were not misinterpreted. After that, I translated

the transcriptions from Nepali to English. Then the data were coded and categorized thematically under different themes. I read and reread the data to generate the themes. Finally, I analyzed and interpreted the themes following the guidelines of thematic process suggested by Saldana (2015), which includes coding stories, identifying themes and patterns, restoring experiences, and interpreting meaning, aligning with the purpose of exploring the classroom assessment practices of secondary-level English teachers.

Results and Discussion

Three themes emerged from participants' responses: diverse assessment practices, unequal practices in teaching language skills and challenges in classroom assessment.

Diverse Assessment Practices

The main concern of this study was to explore the classroom assessment practices. When one of the participants, Bhima Devi, was asked to share her classroom assessment practices, she responded:

> *We maintain the portfolios of every student where we include their project works, test exams but just for the sake of doing. However, at the end, if they score NG in their written exams, they are considered to have failed. So, conducting different activities is just like our rituals; we are compelled to do them, so we do. But I do not see actual progress in our students. When we were students, we also scored pass marks even though there was not all this stuff. Even I was able to complete my Master's level, so what is the use of all this, especially in schools in remote areas where English is taught for only 45 minutes a day, interspersed with Nepali?*

Her reflection resonates with the view of Saud et al. (2024), who noted that the valuable records kept in portfolios never find their way to go back into the classroom to bring about the desired changes to enhance students' learning achievement. Maintaining portfolios has only become a requirement of the institution; however, the teachers lack the knowledge to make effective use of them. She takes classroom assessment as a ritual rather than for learning. Moreover, the participant has talked about the dominance of the written examination. This aligns with Sapkota's (2022) findings, which stated that the written examination is the dominant tool for evaluating students' knowledge and skills. The classroom formative activities that enhance learners' development remain overshadowed by summative assessment. Her story also revealed the gap that exists between assessment policy and classroom practices. The assessment policy expects students to demonstrate their language proficiency, with a focus on communicative competence; however, classroom practices provide limited English exposure.

If formative assessment is used constructively, it can achieve the desired learning outcomes for students. As Ashok reflected, "*It is very good from students'*

perspectives, but teachers have to work hard, and here, teachers become happy if they have to perform fewer tasks. They think it has given more workloads to them." Ashok's statement aligns with Black and William (1998), who noted that teachers often resist new assessment approaches due to their comfort with traditional methods and concern about their practicality and impacts on students' learning. Although such an assessment has several benefits for students, teachers prefer to continue using their conventional assessment methods. They considered formative assessment a burden, which aligns with Isik's (2021) findings, which stated that teachers see such assessment as a forced duty and are not happy conducting it. When I asked another participant, Kishor, to share his practice, he replied:

> *We allot the marks for attendance, classroom participation, and their project works. I am not able to give time to check everyone's homework every day due to the large number of students in each class, but I follow one technique to check the homework, like telling them to do homework, and the next day, I tell the random roll number, like Roll:no-20, and tell him/her to read out the homework. In this way, I make them do the homework. At least, the students become quite alert. All these activities make students active, and a close relationship between teachers and students is maintained as well. When students are absent regularly, we consult their parents to find out the reasons. We are doing all of this because of this assessment system. Last time, I gave a project: prepare a report on the sharing they did with their friends they met after a long time (details such as where you stayed, with whom, and how you spent all these days). They prepared the reports and shared them in the classrooms, so they did not feel hesitant or afraid. It brings positive changes to the students.*

His approach adheres to the CDC's formative assessment guidelines. While most teachers in Nepal rely on summative assessment, this initiative demonstrates that some are working to implement formative assessment practices despite the challenges. Adopting such practices improves teaching and learning (Sapkota, 2023). Moreover, the students are actively engaged in the learning process and become regular. It has brought the parents and the school together; as a result, it has become easier to handle the students and has improved them. They assign specific marks for classroom participation, attendance, and project work that hone their creativity and language skills. The emphasis on behavioural criteria, including classroom behaviour, interaction, participation, and extra-curricular activities, in their grading enhances their learning process (Li & Wu, 2018). It does not improve the students' learning only, but also shapes their behaviour and attitudes. Despite the large classroom sizes, he adopted a technique to ensure that everyone was doing their homework. His attempts to integrate assessment into teaching motivate students to contribute actively to the learning process. This alignment of assessment with teaching and learning fosters lifelong learning in students and promotes active participation, which supports assessment for learning and further provides continuous support for specific learning goals (Hwang et al., 2022).

Unequal Practices in Teaching Language Skills

The main aim of the English curriculum is to develop students' communicative competence. For that, all four language skills should be taught so that students can express their ideas and opinions freely without any hesitation. When I asked one of the participants regarding his classroom practice of language skills, Kishor replied:

> *I do not conduct these listening and speaking skills as I have not seen teachers do so in other public schools, in either. But I provide students with the meanings of difficult words using a dictionary and teach pronunciation through drilling. Furthermore, I have the Grade-9 students do a film review. All these skills are mentioned in the coursebook, but they are being skipped totally in our context. But when I was an English teacher at Aadarsha Boarding School (name changed), I conducted a listening test after their SLC exam (grade-10) playing a cassette player, but I did not conduct one during class hours. It was during 2066-2067 that schools received some audio cassettes, but we did not use them.*

The participant's response highlights that they acknowledge the presence of listening and speaking activities in their textbooks; however, they skipped them. Classroom practice may be influenced by the practices of surrounding teachers. This aligns with Ulum (2015), who noted that EFL teachers neglected listening skills, leading to poor listening comprehension among students. His story emphasized that the audio materials were provided to them, but they could not make use of them. This indicates that the provision of instructional materials does not guarantee the classroom use. There is a need for better curriculum training and professional development programs to effectively integrate instructional materials and develop students' language skills (Kadel, 2024).

Similarly, Ashok mentioned that he had not used the audio materials to teach listening activities. However, he read the lessons and made the students listen. His reflection resonates with the practices of teachers in remote parts of Nepal. However, his practice of conducting listening does not align with DeVito (2000), who stated that there are five stages of listening: listening, understanding, remembering, evaluating and feedback. In the conversation with Man Kumar, he said:

> *There are listening tasks after each lesson. However, the students here do not enjoy listening to the audio. We also conduct a monthly listening activity. Most of the time, I have to interpret it into Nepali so they can complete the assigned tasks.*

His reflection emphasized the importance of English exposure in conducting listening texts. This aligns with the findings of Gilakjani and Sabouri (2016), who noted that students' listening comprehension can be enhanced through the use of relevant materials and activities, teachers' support, and regular practice. In the context

of Nepalese classrooms where listening and speaking skills are mostly ignored, his practice of listening activities has become an exemplary. Another participant, Bhima Devi expressed;

> *In class nine, at the beginning of the session, I set the rule that students would deliver a short speech of 4-5 sentences every day, but they often miss their turn. So, if we conduct all of these, there is a high probability that students will leave the schools. It's really challenging to evaluate all these skills, even though internal assessment is really good.*

The participant was positive towards the internal assessment. However, she expressed that it is challenging to assess and evaluate all four language skills of the students as they fear students leaving the school due to the incorporation of various engaging and interactive activities in the classroom. Regarding this, Sumbul et al. (2024) asserted that the English language learners' speaking skills are affected by various factors, including educational and institutional factors, personal motivation and practice, language environment and exposure, and technological exposure. There is not only a specific factor that hinders students' language learning process.

Participants' classroom assessment practices indicate that listening and speaking skills are only minimally integrated into language classrooms. Lack of exposure to an English environment was found to be one of the major challenges regarding the effective implementation of all language skills. However, MI theory emphasizes integrating all language skills to foster students' diverse intelligences. It also emphasizes the students' holistic development by giving equal priority to all language skills.

Challenges in Classroom Assessment

Despite several benefits, classroom assessment poses several challenges in its effective implementation. While having a conversation with Ashok, he argued:

> *The school grants full authority to assign internal marks to students up to Grade 9 based on their overall performance, but for Grade 10, the principal collaborates with parents to assign the marks. The school tries to award full marks even when students are not capable of earning them.*

The participant argued against being given the authority to award internal marks to Grade-10 students. This lacks reliability and validity. It aligns with the findings of Sigdel and Sherpa (2024), who argued that the classroom formative assessment lacks transparency and consistency. The classroom assessment is expected to develop and assess what transformative learning takes place in students. The next participant provides the evidence of the context of student regularity, which is a part of the internal assessment. Bhima Devi expressed:

> *Last year, at our school, we had only 7 students in grade-10 at the beginning of the session. After a few months, only 5 students remained and by the end of the session, only 1 was attending regularly. Anyway, all those 5 students appeared in the exam.*

The story of Bhima Devi shows that students' irregularity hinders the effective conduct of internal assessment. Singh (2022) opined that students' regularity improves overall academic performance. Moreover, the teachers are compelled to provide pass marks to their students in the internal assessment even in their absence. According to the assessment system, in SEE, three marks are allocated to classroom participation, including attendance, classroom interaction, homework, classwork, and project work. Allocating certain marks to classroom participation encourages students' active participation in classroom activities. In the conversation with Kishor, he shared:

> *We have 50-70 students in each class. We do not keep the records of every student. We provide students with summaries of the lessons being taught, and they also feel comfortable with this. Here, we even have Grade-9 students who cannot read the text properly. In 2081, a student named Phaben Limbu (name changed) in Grade-9 had difficulty recognizing the English alphabet and made frequent mistakes while copying from the whiteboard. Involving the students in speaking activities is far more difficult for me.*

He noted that a large number of students is a challenge for effective formative assessment. A similar finding was reported by Saud et al. (2024), who noted that large classrooms and unprofessional behaviour hinder teachers' ability to conduct internal assessment effectively. Additionally, students' low language proficiency hinders the teachers from carrying out the internal assessment effectively. Due to the large number of students in a single class, they have to assign the internal marks based on their classroom performance rather than assessing their actual language skills. Another participant added, "*We have classes in all seven periods, so we do not have time to check their assignments in detail as well. Mostly, I check the homework orally."* His sharing indicates that teachers are given more workloads. As a result, they are unable to conduct the classroom assessment. The internal assessment can contribute to promoting students' learning achievement if carried out effectively. It improves students' language proficiency by getting regular feedback and support from the teachers. However, internal assessment is conducted in a traditional manner (Saud et al., 2024). This traditional way of conducting internal assessment (i.e., assessment of learning) casts students' actual learning into the shadows. So, it should be carried out effectively (i.e., assessment for learning) to enhance the students' learning achievement.

Conclusion

This research explored the assessment practices of the secondary-level English language teachers. Four secondary-level English language teachers participated, with more than 10 years of teaching experiences in the public schools of Taplejung district. This classroom assessment practice benefits the teachers by maintaining good rapport among teachers, students, and parents. The students' regularity has been maintained, which supports the students' learning. These assessment practices also motivate teachers to adopt innovative teaching strategies that address students' diverse needs.

However, regarding language skills, the teachers prioritize reading and writing, with less attention to listening and speaking. It was found that the listening skills are assessed only during SEE examinations to award marks.

Besides several benefits of classroom assessment, several challenges were identified, including a large number of students, students' irregular attendance, a lack of teachers' authority to issue internal marks, and students' low language proficiency. Furthermore, a lack of an English learning environment is found to be the main barrier to speaking in their classrooms. To address the challenges, the schools should focus on teachers' training, regular professional development programs, and encourage them to adapt classroom assessment that enhances students' participation and promotes their learning. However, this study addressed only the classroom assessment practices followed by secondary-level English language teachers from Taplejung district. Also, the findings suggest the need for training and workshops to effectively implement classroom assessment.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98950

Multimodal Digital Tasks to Foster Integrated Skills in College EFL Learners: A Conceptual Framework

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Abstract

English as a Foreign Language (EFL) instruction faces a persistent gap: no principled framework currently guides how multimodal digital tasks should be designed to develop college-level learners' integrated reading, writing, listening, speaking, and digital skills, even as digital technologies and multimodal communication continue to reshape the field. This conceptual paper addresses that gap by proposing a theoretically grounded framework for designing such tasks. Using a systematic narrative synthesis of empirical and conceptual research published between 2020 and 2025 (with foundational earlier sources retained where still influential), the framework integrates five theoretical traditions (Task-Based Language Teaching, multiliteracies pedagogy, social semiotic theory, sociocultural theory, and multimedia learning theory) into five interconnected dimensions: theoretical grounding, multimodal task design principles, digital tool integration criteria, skill integration mapping, and multimodal assessment design. The resulting framework offers a structured, evidence-informed basis for task design, illustrated through a sample multimodal documentary-project task. As a conceptual contribution, the framework has not yet been tested empirically, and its applicability across institutional and cultural contexts, particularly under-resourced ones, remains to be established. The paper concludes with implications for curriculum designers, language teachers, teacher educators, and policymakers, and outlines directions for future empirical validation.

***Keywords*:** Digital multimodal composing, multiliteracies pedagogy, integrated skills, EFL college-level learners

Introduction

Language teaching has changed dramatically in the first decades of the twenty-first century, driven by digital technologies, multimodal communication practices, and new pedagogical paradigms. These shifts have redefined what it means for learners to communicate effectively, moving the goalposts from mastering isolated language skills

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to navigating meaning across multiple modes and platforms. EFL instruction has been no exception to this shift: how language courses are conceived, planned, and taught has changed accordingly (Hafner & Ho, 2020; Lim, 2020). The communication form of the modern world is a multimodal phenomenon, and the human being must learn to work and to orchestrate the meaning of texts, images, sounds, actions, and space (Kress, 2010; Yu et al., 2024). The traditional model of teaching reading, writing, listening, and speaking as separate, isolated skills is increasingly seen as insufficient for preparing learners to meet twenty-first-century, multimodal communication demands (Kress, 2010; Yu et al., 2024).

Digital transformation has been a wonderful transformation; it has displayed tremendous potential and challenges in the field of language teaching in the digital world. This period also exposed a need for principled guidelines on the effective use of digital technologies and multimodality in language teaching (Akhmetzadina et al., 2023), prompting renewed attention to how multimodal digital tasks should be designed for EFL classrooms.

EFL learners at the college level face increasingly complex communicative demands: they must interact with multiple genres of writing, produce multimodal academic and professional texts, and engage in digitally mediated, collaborative writing (Fan, 2025). Yet in many EFL contexts, instruction remains largely grammar-based and text-centered, with limited attention to multimodal literacies or integrated skill development (Lim & Kessler, 2023). This mismatch between how students are taught and how they are expected to communicate is central to the problem this paper addresses. Research on multimodal pedagogy and technology-enhanced language instruction is well developed, but far less attention has been paid to how multimodal digital tasks specifically should be designed to cultivate integrated language skills. Existing work tends to emphasize either multimodality or technology-integrated task design without theorizing how the two relate in terms of task design, tool integration, skill integration, and assessment (Lim & Kessler, 2023; Jiang & Hafner, 2024). This gap is especially pronounced for digital multimodal composing (DMC) and integrated skill development, both considered essential twenty-first-century competencies (Cope & Kalantzis, 2023; Kang & Kim, 2023).

To bridge this gap, this conceptual article is designed to present a theoretical framework to design multimodal digital tasks for the development of integrated skills for EFL college-level learners. It brings together ideas and concepts from five theoretical backgrounds (Task-Based Language Teaching (TBLT), multiliteracies pedagogy, social semiotic theory, sociocultural theory, and multimedia learning theory) and offers five dimensions of multimodal digital task design that are interrelated. Peer-reviewed research on multimodal pedagogy and technology-mediated task design published between 2020 and 2025, identified through a systematic search of Google Scholar, ERIC, Scopus, and Web of Science (detailed in Methods and Procedures), is reviewed and synthesized, and thus, the article presents the latest research in the field

of multimodal language teaching. At the end of the article, implications for practice, policy, and future research are discussed.

Literature Review

This review synthesizes recent research across the five theoretical traditions underpinning the proposed framework: multimodality and language education, digital multimodal composing, task-based language teaching and technology, sociocultural theory, and multimedia learning theory. Each strand is examined in turn, and Methods and Procedures then describes how this review was conducted.

Multimodality and Language Education

Theoretically and pedagogically, multimodality has become a prominent phenomenon in language education over the last two decades. From a theoretical point of view, multimodality is the presence of more than one semiotic mode in the process of meaning-making and the communication of meaning, such as written language, spoken language, images, sound, gesture, and spatial design (Kress, 2010). The theory of multimodality is rooted in Halliday's systemic-functional linguistics and has been further developed in Kress and van Leeuwen's (2021) social semiotic approach to multimodality, which argues that meanings can be conveyed across all modes and that communication is inherently multimodal. Multimodality has significant meaning in the field of language education, especially in understanding and teaching literacy. The New London Group (1996) first proposed that literacy education should not and cannot only be taught in the context of print literacy, but should be taught to recognize the multiplicity of communication devices and the greater diversity of society in terms of language and culture.

Multiliteracies pedagogy has continued to expand well beyond its original scope, adapting to new technologies as they reshape how meaning is made and communicated. This expansion reflects a broader shift in literacy education: from treating print as the default mode of communication to treating it as just one option among many. This call has since been renewed and updated by Cope and Kalantzis (2023), who reconceptualize multiliteracies in light of how digital technologies and artificial intelligence have transformed meaning-making practices.

They are now focusing on "multisituational and multiform" meaning-making, meaning that literate people need to be able to produce and comprehend texts that integrate one or more modes in different situations. There has been extensive research on multimodality in the EFL classroom over the last few years. Lim et al. (2022) conducted a systematic literature review on multimodality in the English language classroom was conducted on articles published between 2010 and 2021. 98 articles were reviewed, and it was found that teachers use different multimodal texts, like digital videos, ads, and websites, and engage students in different multimodal receptive and productive activities. The review pointed out important gaps, especially regarding

explicit multimodal instruction, assessment of multimodal competence, and research on multimodality in EFL contexts. A more recent systematic review on multimodal immersion in EL education in higher education by Rahmanu and Molnár (2024) reviewed 34 studies published between 2013 and 2024. They concluded that multimodal pedagogies are advantageous for language learning but stressed the necessity to further explore their impact in higher education contexts and to design models that offer a principled approach to integrating multimodality into curricula. This recurring call echoed across the multimodality literature but is rarely answered with a concrete, theory-grounded design model is precisely the gap the present framework is intended to fill.

Digital Multimodal Composing in Second Language Contexts

Digital multimodal composing (DMC): writing that draws on multiple modes (image, sound, video, animation) together with digital technology to produce texts was developed as a research focus primarily through work such as Hafner and Ho's (2020) process-based model, and has since become a fruitful area of research in multimodal and language education. Digital Multimodal Composition (DMC) is a writing process that makes use of multiple modes of language (images, sound, video, animation, and more) and digital technology to produce texts. DMC is increasingly used in second language (L2) writing research and is an effective tool for L2 writing skills, engagement, and competence. Zhang and Yu (2022) conducted a detailed research study in the journal 'Language Teaching' and came up with some salient findings. The study predicts a greater effectiveness of students' learning in the four domains of language when dealing with the four language areas as opposed to the traditional monomodal writing task, in which students' learning is focused on four language areas (Cho & Kim, 2024). Secondly, DMC has been proven to be an effective tool to improve the engagement, motivation, and creativity of the learners (Kang & Kim, 2023; Usmani et al., 2025).

Finally, the DMC activities co-created were found to have a positive influence on the ability to learn from peers (negotiate) and the digital literacy skills (Cheung, 2022). Nevertheless, there are some questions and problems that are not covered in the literature. From the results of this study, it can be concluded that there are some gaps in the field of DMC that need to be explored in more detail, e.g., pedagogical design of the tasks in DMC, teacher training in DMC, assessment of multimodal texts, and collaboration and translanguaging in DMC processes. From the 7-month longitudinal study, Kang and Kim (2023) positively concluded that the overall attitude of EFL adolescent learners toward DMC use was positive with a different degree of perception of the benefits of using DMC. The results confirm the importance of task design, including elements of catering for the diversity of learners and assisting them to access the multimodal digital tasks.

Task-based Language Teaching and Technology

Task-Based Language Teaching (TBLT) is a language teaching methodology

that is based on sound pedagogical principles to create meaningful and communicative language teaching tasks. TBLT was originally developed in the 1980s to enable teachers to introduce a more learner-centred approach to language teaching, to use the language to be taught for real tasks, and to put the language into use in real communicative situations (Ellis et al., 2020; Jackson, 2022). Based on the above, technology is an innovative way of TBLT because it would offer students contexts for their L2 tasks and would increase the opportunities for L2 meaningful communication (González-Lloret & Ziegler, 2022).

The relationship between TBLT and technology has grown more complex over the past decade, as the sheer number of available tools keeps expanding the questions worth asking about how technology shapes task performance and language development. This growing complexity is not simply a matter of more tools becoming available, but of technology increasingly reshaping what a "task" itself can look like and how learners engage with it. This trajectory has been mapped by East (2024), who reviewed a decade of TBLT research and practice and organized its technology-related developments into four categories. González-Lloret and Ziegler (2022) suggested that technology and TBLT can complement each other; TBLT can be used as a pedagogical method to help implement the use of technology in tasks.

Further, there are a few recent systematic reviews that have been conducted, indicating an increasing synergy between TBLT and technology. The literature review of Xie and Lan (2025) on TBLT and speaking competence in different settings of EFL showed that between 2014 and 2023, 38 research papers were published, indicating that TBLT in the context of EFL has a positive influence on the students' oral competence. Pankeaw and Satayaban (2025) examined the potential of digital tools in supporting interaction and collaboration in the TBLT pedagogical practices and presented some issues and possibilities of digital literacy and access to digital tools in post-pandemic education. It is worth mentioning a systematic review of the methodology of 'TBLT' research using educational technology for the Annual Review of Applied Linguistics by Kim and Namkung (2024), which talks about methodological characteristics of TBLT research with educational technology and that methodological gaps need to be tackled in future studies.

Addressing these methodological gaps, particularly the need for research designs that link technology-mediated tasks to specific, measurable integrated-skill outcomes, is one of the motivations for the design-oriented framework proposed in this article.

Sociocultural Theory and Mediated Learning

The Sociocultural theory (SCT) is one of the critical theories of learning founded on the work of Vygotsky (1978), and it is a social-institutional theory of learning. A key principle in SCT is that of Zone of Proximal Development (ZPD), which refers to the difference between what the learner can do alone and what he or she can do

with support from an "other who is more knowledgeable" (Lantolf & Poehner, 2014). A context in which scaffolding is seen to be widely applied in language education is the context of temporary or structured scaffolding that is gradually phased out as the learner becomes competent (Walqui, 2006).

SCT, however, can serve as a foundation for exploring how Digital technology can be applied to help students move forward in their ZPD related to Digital language learning. Alkhudiry (2022) highlighted the theories of Vygotsky and their significance in the establishment and growth of a learning environment where technology can aid children's development and learning in the realm of technology-enhanced education. Sarmiento-Campos (2022) in his research on effective scaffolding technique of ZPD to improve the oral skill development of EFL students revealed that applying the scaffolding technique of EFL students could be effective to improve the oral skills of students significantly by using the scaffolding technique of ZPD technique. Implementing SCT using a multimodal digital task design implies that tasks should be well sequenced, multiple modes should be used to access the task, and opportunities should be provided for making meaning together using digital media.

Multimedia Learning Theory

Multimedia learning theory offers a cognitive account of how learners process information presented in both verbal and pictorial form. This perspective bears directly on the cognitive design of multimodal digital tasks (Mayer, 2021). This theory assumes that meaningful learning is fostered when information is presented in both verbal and pictorial form and that the optimal design of the multimedia will facilitate the processing of information by decreasing the unnecessary cognitive load and increasing the generative processing. The use of well-designed multimodal tasks that integrate the modalities of text, image, sound, and video in a principled manner will likely improve the language comprehension and retention of the EFL teaching and learning context (Pellicer-Sánchez et al., 2020).

The principles of multimedia learning have also been verified in recent years through empirical research in the context of EFL. In his study entitled The Impact of Digital Storytelling as a Multimodal Composing Approach on EFL Learners' Writing Development, Ajabshir wanted to see the effect of a multimodal composing approach, which combines text, images, narration in audio format, and video, on the writing development of EFL learners. The results of the quasi-experimental study showed that there was a significant difference between the students who performed digital story tasks and the control group in the improvement of syntactic complexity, accuracy, and lexical diversity. The researchers hypothesized that this enhancement was because of the multimodal character of the tasks, which incorporated multiple sensory modalities and boosted cognitive handling of the linguistic input. This finding lends empirical support to Mayer's (2021) claim that well-designed multimodal input reduces cognitive load and increases generative processing. It is this mechanism, rather than novelty alone,

that the present framework treats as the operative one in Dimension 5's assessment design principles.

Methods and Procedures

Conceptual Methods

This article uses systematic narrative synthesis as its conceptual research method, developing a theory-based framework for multimodal digital task design at the EFL college level. Rather than drawing on empirical (experimental or observational) data, this approach relies on critical analysis and synthesis of existing scholarship to build theoretical frameworks that connect theory to practice (Jaakkola, 2020): a method with established precedent in applied linguistics for developing pedagogical tools and informing subsequent empirical study (Ellis et al., 2020; Jiang & Hafner, 2024).

The review draws on a systematic search of three databases (ERIC, Scopus, Web of Science) covering January 2020 to early 2025, a period chosen to ensure the framework reflects the most active era of multimodal digital pedagogy and language-teaching research; foundational studies published before 2020 are included only where they remain influential. Search terms were combined using Boolean operators across three concept clusters: multimodality/multiliteracies; EFL and task-based language teaching; and integrated skills/digital tool integration. Sources were included if they were peer-reviewed, directly relevant to one or more dimensions of the proposed framework, and situated in language learning and/or multimodal pedagogy; sources addressing only primary or secondary school contexts were excluded.

The five theoretical pillars: Task-Based Language Teaching, multiliteracies pedagogy, social semiotic theory, sociocultural theory, and multimedia learning theory were selected using two criteria: each is supported by a substantial evidence base, and each explains an aspect of multimodal digital task design not covered by the others. Other candidate traditions (e.g., complexity theory, genre-based pedagogy) were considered but not adopted as standalone pillars; where relevant, their contributions are absorbed into the five traditions retained.

The framework itself was built through four iterative steps: (1) thematic mapping of the literature to identify recurring design principles and theoretical constructs; (2) theoretical integration, examining convergences and complementarities across the five traditions; (3) elaboration of each dimension, translating abstract principles into concrete design guidance; and (4) a coherence review, checking that the five dimensions function as an interconnected whole rather than independent components. The illustrative task presented later in this article demonstrates this framework applied to one instructional design.

Results and Discussion

The Proposed Conceptual Framework

This section, based on the theories and empirical studies mentioned above, provides a comprehensive conceptual framework for designing multimodal digital tasks to develop integrated skills during EFL college-level learners' language learning. The framework consists of five dimensions that are interconnected: (a) theoretical grounding; (b) multimodal task design principles; (c) digital tool integration criteria; (d) integration of skills in the map; and (e) multimodal assessment design.

Dimension 1: Theoretical Grounding

The first dimension is the theoretical basis for all the following design decisions. The framework adopts an integrative approach that combines theories from various complementary fields, as no single theory can cover the multimodal digital task design that includes language learning, technology use, multimodal meaning-making, and social interaction.

It is based on five theoretical pillars. The first part of TBLT includes the general picture of the pedagogical approach, meaning of tasks, goal orientation in tasks, and communicative authenticity in tasks (Ellis et al., 2020; Jackson, 2022). Secondly, multiliteracies pedagogy (New London Group, 1996), more recently extended by Kalantzis and Cope (2025), moves beyond a print-based definition of literacy to encompass multiple modes of meaning-making. Thirdly, the application of social semiotic theory (Kress, 2010) is used to analyze the meaning-making process in different modes. Lastly, the sociocultural theory of Vygotsky (1978) is used, and concepts of ZPD, scaffolding, and mediated learning are applied to sequence and scaffold activities.

These angles complement each other. The pedagogical architecture is set forth by TBLT, it is engagement with situated practice, overt instruction, critical framing and transformed practice with the help of multiliteracies pedagogy; there is the use of social semiotic theory to guide the decision making process of modes; there is the use of social semiotic theory to inform the scaffolding and collaborative arrangements, and there is the use of multimedia learning theory to reduce the cognitive overload and effective multimodal processing.

Dimension 2: Multimodal Task Design Principles

The second dimension is grounded in seven key principles derived from theoretical foundations and recent empirical studies on DMC and technology-mediated TBLT. The first principle is that communication must be truly multimodal, i.e., communication must be multimodal. Tasks should involve students' interaction with and creation of multimodal texts that are authentic in terms of academic, professional, and social communicative practices (González-Lloret & Ziegler, 2022). The task will be for the learner to produce a video presentation in which he or she takes a stand

on a social issue; it involves all three modes (visual, auditory, and linguistic) in a way similar to that expected in authentic academic and professional communication. The second principle is "deliberate skill integration." Tasks should also focus on developing multiple languages simultaneously, since natural language use involves multiple language skills (Rahmanu & Molnár, 2024). A good task could start with reading and viewing tasks, involve joint discussions, and end with the production of a multimodal text.

The third principle is "Progressive Scaffolding. Tasks should offer a progressive and structured level of support to learners as they become more competent and confident, including teacher modelling, graphic organizers, cooperative learning, and support for automated feedback. Structured supports should be incorporated that will be reduced as learners reach a more competent and confident level in completing tasks, including teacher modelling, graphic organizers, peer collaborations, and automatic feedback. Structured supports should be incorporated that will be reduced as learners reach a more competent and confident level in completing tasks, including teacher modelling, graphic organizers, cooperative learning, and support for automated feedback. Generative AI (GenAI) tools, such as writing assistants and conversational chatbots, can extend this scaffolding by offering learners on-demand, adaptive feedback and modelling at the point of need; however, their use should be paired with explicit instruction in critical AI literacy, so that learners evaluate and revise AI-generated suggestions rather than adopt them uncritically. The fourth one is called "modal awareness". Tasks should be made explicit to make learners more aware of the modes; have them think about and say which one they have selected. Fan (2025) showed that explicit engagement with multimodal design was an effective means to support students in constructing and conveying academic discourse in their first year of EFL study.

The fifth rule is called 'Engagement together'. Because DMC tasks work best in group settings to improve linguistic and digital literacy outcomes (Cheung, 2023), there should be opportunities to provide for interaction and negotiation of meaning among learners as well as for co-construction of multimodal texts (Cheung, 2022).

The 6th principle of critical digital literacy is at the core. Tasks should encourage students to consider the meaning, power, and ideology within multimodal texts, and to remember that reading, writing, and interacting with multimodal texts is a learning capacity – not a technical skill (Kalantzis & Cope, 2025; Yap & Gurney, 2023). The seventh principle is 'Iterative process orientation'. Tasks need to stress planning, drafting, revising, and reflecting, not only the product, and allow for repeated versions of the text to help the student make semiotic choices and refine the text.

Dimension 3: Digital Tool Integration Criteria

The third dimension offers the criteria for selecting and using digital tools, and based on the principle of 'pedagogy before technology' - the selection of digital tools is based on pedagogical objectives rather than their novelty (González-Lloret, 2023)

The five criteria proposed in the framework are as follows: (1) Modal Affordance Alignment tools that will align with the specific modes required for the task; (2) Accessibility and Equity tools that will not create new inequalities, (3) Collaborative Functionality – that will support real-time co-editing, commenting, and peer feedback; (4) Learner Agency – tools that will provide learners with creative control over multimodal compositions; and (5) Institutional Sustainability: cost, technical support, and compatibility with existing systems. There is still plenty of flexibility and context when choosing tools, such as collaborative writing platforms, video creation and editing tools, podcasting software, presentation tools, and social media, to reach authentic audiences (Hasumi & Chiu, 2024). Generative AI tools warrant particular attention within this dimension, since they can support several criteria simultaneously: as drafting or brainstorming aids (Learner Agency), as scaffolds that model multimodal composition (Modal Affordance Alignment), and as low-cost alternatives to specialized software in under-resourced settings (Institutional Sustainability). Selecting GenAI tools should follow the same pedagogy-before-technology principle applied to other tools in this framework, with explicit attention to transparency (disclosing AI use), academic integrity, and the risk of homogenizing student voice if AI output is adopted without critical revision.

Dimension 4: Skill Integration Mapping

The fourth dimension adds to the systematic representation of multimodal digital tasks, which involve multiple language skills throughout the TBLT task cycle and thus provide intentional and systematic development of language skills. Pre-task activities involve learners in receptive multimodal input (including viewing documentary videos or reading infographics) and guided group discussions, which will prepare them to perform the main task in the target language, using the target language and modes. Scaffolding can be done using pre-teaching of vocabulary, graphic Organizers, and discussion guides.

In the task phase, learners plan, write a text, narrate, choose the visual elements, and coordinate the multimodal design. Group scripting, peer recording, and collaborative editing are all collaborative activities that provide rich opportunities for discussion and negotiation of meaning through speech. Post-task: In the post-task phase, learners share their multimodal texts, provide peer feedback, discuss the class about an effective multimodal design, and write reflective journals to help them remember what they learned and to develop metacognitive understanding of the composing process.

Dimension 5: Multimodal Assessment Design

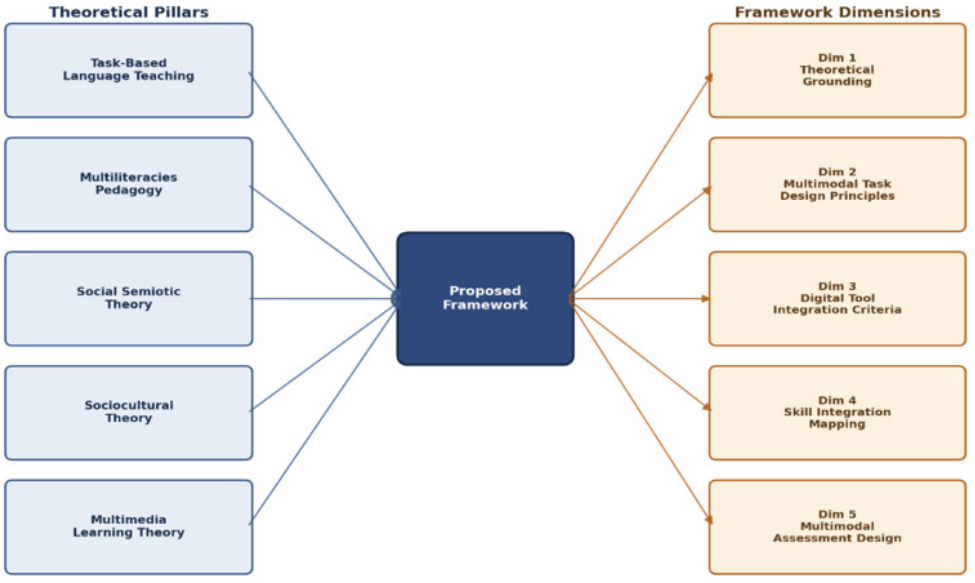
The 5th dimension is related to evaluating the results and operations of a multimodal digital task. A difficulty that arises in running the multimodal approach is the conflict between multimodal instruction and the traditional monomodal assessment; it is suggested here to use both product- and process-oriented criteria in the framework.

The assessment adopts product-oriented assessment as per Jiang et al. (2022), which focuses on five assessment criteria, namely linguistic quality, multimodal coherence, visual quality, design quality, communicative effectiveness, and critical awareness of the multimodal texts. Based on the work of Zhang and Yu (2022) and Yu et al. (2024), process-oriented assessment is made up of four categories: planning, collaborative interaction, revision practices, and reflective engagement, which are measured through digital portfolios, process journals, screen recordings, and rubrics. Further, there are suggestions to develop students' learning through self- and peer-assessment. It further recommends that the self-regulated learning (SLL) skills of the learners could be assessed by self- and peer-assessment (Fan,2025).

Figure 1 summarizes how the five theoretical pillars converge into the proposed framework and radiate outward into its five design dimensions.

Figure 1

Hub-and-spoke Conceptual Framework Linking Theoretical Pillars to Task-design Dimensions



Illustrative Task Design: A Multimodal Documentary Project

To show how the framework can be implemented in practice, this section includes a mini case study of a multimodal documentary project, which involves a team of four to five college-level EFL students researching, writing, filming, editing, and presenting a very short documentary video on a socially relevant topic within the space of about four weeks.

In the pre-task phase (Week 1), learners will watch model documentaries and discuss how these use narration, interviews, background music, text overlaid, and visual imagery to create meaning. They read academic texts, discuss and/or negotiate selection of topics, and are scaffolded by analytical frameworks, vocabulary lists, and discussion protocols. During the task phase (Weeks 2–3), the students engage in intensive work in composing in multimodal forms. Learners research information, develop narration and set up questions for an interview, record video, and edit with easy-to-use tools. The instructor provides continuous support through checkpoint conferences, model scripts, technical support, and co-peer support. There is a post-task phase (Week 4) in which students analyze the videos in written reflection papers and participate in discussions of the videos in small groups with their peers. In Assessment, the multimodal rubric outlined in Dimension 5 is used to assess the documentary product and the composing process through portfolio documentation. This task design exemplifies a task that integrates all five dimensions of the task design framework into a coherent instructional design.

Implications

Theoretical Contribution

The proposed model makes several contributions to the theory of multimodal digital task design in EFL education. First, it provides a theoretical framework that integrates the five theoretical traditions mentioned above, stepping in to fill the gap in multimodal language pedagogy regarding the need for a more comprehensive theoretical model (Lim & Kessler, 2023; Jiang & Hafner, 2024). The previous frameworks have tended to emphasize either task-based approaches or multimodal literacy approaches, with less attention given to articulating the relationship between these approaches. The current model illustrates how these views can be fruitfully combined to give a more comprehensive view of multimodal digital task design.

Second, it also addresses the identified gap in principled approaches to integrating skills into multimodal tasks. Although it has been well recognized in the literature that integrated skill development is the most desirable approach, few frameworks have offered a systematic way to develop and/or map out skill integration throughout a multimodal task cycle. The mapping dimension of skill integration, part of the present skill integration framework, provides a structured approach that can help educators go beyond intuitive, ad hoc approaches.

Thirdly, the framework builds on the extensive literature on multimodal assessment by suggesting an assessment model in line with the multimodal and integrated nature of the tasks. This study tackled the assessment challenges pointed out in the previous studies (Cheung, 2023; Fan, 2025) through the use of dual attention for process and product assessment, genre-based multimodal assessment rubrics, and self- and peer-assessment strategies.

Practical Implications

The framework has several implications in practice, all relating to different stakeholders in EFL education. The framework provides the groundwork for curriculum designers in developing curriculum-informed, pedagogically valid, and practically feasible multimodal digital tasks, and for language teachers in developing language-informed digital tasks, respectively. The five dimensions of the framework can be used as a checklist to make sure that the educators' tasks address the following: theoretical foundations, multimodal design principles, digital tool selection, skill integration, and assessment.

The multimodal digital task design is emphasized in teacher education programs with regard to in-service teachers' and pre-service teachers' comprehensive professional development. Teachers need to be mindful of the technical problems involved in multimodal composing and of relevant theories to create suitable pedagogy for teaching L2 multimodal composing. As Yu et al. (2024) argue, although there has been much research and practice in multimodal literacy, the majority of educational contexts tend to consider literacy mainly as text-based reading and writing, which limits teachers' ability to implement innovative solutions through these multimodal approaches. The framework is very much focused on the institutional and policy support needed so that educational policymakers can develop some pedagogical modes. Despite the numerous studies and practices of multimodal literacy, there is still a widespread misunderstanding that literacy is primarily a text-oriented process of reading and writing in most educational contexts, making it challenging for teachers to integrate new, innovative approaches to literacy in these multimodal ways.

Challenges and Contextual Considerations

The proposed framework presents some implementation challenges, and the contextual factors that can enable and/or limit its use should be considered. The digital divide – in terms of students' access to the technologies and internet connections needed for multimodal digital composing (Pankeaw & Satayaban, 2025)- is a major problem. Access to digital resources is not equal in many EFL contexts, particularly in developing countries, and continues to be an issue in TMP in the classroom. This concern is addressed within the framework via the digital tool integration criterion of accessibility and equity; however, it is important to note that this will have to be accompanied by institutional commitments to tackle resource inequality.

The other challenge is the preparedness of teachers. Multimodal assessment (Akhmetzadina et al., 2023). Most EFL teachers do not have training in multimodal pedagogy and digital tools. To be effective, there must be continuous professional development on the theoretical foundations of and practical skills for the multimodal design of digital tasks. The framework may serve as a tool to support professional development and as a blueprint for the new teacher(s) to this multimodal pedagogy.

Assessment is one of the areas that poses a special difficulty. The tasks in this framework will be used to evaluate multimodal and integrated language skills, while traditional assessment in many EFL contexts is still geared towards discrete language skills and standardized testing formats, which are not suited for the purpose of evaluating the integrated and multimodal language skills developed from the tasks in this framework (Cheung, 2023). Assessment policies should be flexible to allow the use of multimodal approaches, such as portfolios, peer assessment, and performance-based assessment, within institutional assessment policies. The assessment dimension of the framework is the beginning of the adaptation, and more institutional and policy support will be required for a system-level change.

Limitations

The framework is theoretically sound and is relevant to the subject in practice, but has some inherent limitations that need to be recognized. It is a conceptual framework and has not yet been tested empirically; the effectiveness of this framework in actual EFL college-level classrooms needs to be tested through experimental, quasi-experimental, or ethnographic studies. Despite the literature being current and extensive, it was largely drawn from Western and East Asian EFL contexts, which may affect the immediate transferability of the framework to under-resourced and/or linguistically diverse contexts such as those in South and Southeast Asia. Furthermore, it assumes that there is a minimum level of digital infrastructure and technological skills among teachers, which may not be the case in many EFL institutions worldwide. While based on theory, the choice of the five theoretical pillars also inevitably emphasizes some aspects of the task design of multimodal tasks and does not give equal weight to other aspects, such as genre-based pedagogy and complexity theory. Empirical research on the framework is required in the future to improve and validate it across different institutional and cultural contexts.

Conclusion

The present article proposes a comprehensive conceptual framework for designing multimodal digital tasks to develop EFL college students' integrated language skills. It combines five theoretical traditions, namely Task-Based Language Teaching (TBLT), multiliteracies pedagogy, social semiotic theory, sociocultural theory, and multimedia learning theory, into five interconnected dimensions of task design: theoretical grounding, multimodal task design principles, digital tool integration criteria, skill integration mapping, and multimodal assessment design.

It fills an existing gap in the literature by offering a systematic, principled approach to designing digital tasks focused on integrated skill development, where no detailed design framework has previously guided practice. The proposed framework gives educators, curriculum designers, teacher educators, and policymakers a basis for designing tasks for twenty-first-century college-level EFL learners. It also addresses key challenges of multimodal digital pedagogy, including the digital divide, teacher preparedness, assessment limitations, and cognitive load, through its focus on accessibility, progressive scaffolding, process-oriented design, and aligned assessment.

The framework will ultimately only be put into practice with institutional support, policy reform, and continued investment in teacher professional development. As communication continues to evolve through new technologies, norms, and modalities, well-defined frameworks like this one will become increasingly necessary for EFL didactics, offering both a theoretical and practical foundation for the next generation of multimodal digital language education.

Several avenues for future research follow from this framework. Empirical validation is the most immediate priority: quasi-experimental and mixed-methods studies could test the framework's tasks against traditional approaches, and longitudinal designs could examine how sustained engagement shapes learners' language development and multimodal competence over time. A second priority is exploring how generative AI might support task design, including as a scaffolding or co-composing partner, and the ethical questions this raises. Third, research on teacher cognition and professional learning, including participatory action research letting teachers adapt the framework to their own contexts, would clarify obstacles to implementation. Finally, the framework's assessment dimension remains under-tested empirically, and studies validating tools such as digital portfolios and technology-mediated peer assessment are needed across diverse EFL contexts.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98951

Role of Training and Teaching Experience on Teachers' Assessment Literacy

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Abstract

Teaching and assessment go hand in hand at school. Teachers need pedagogical knowledge as well as assessment literacy for effective teaching. This study aims to examine the role of teacher training programmes and teaching experience in developing assessment literacy among teachers working in public schools in Nepal. Following a quantitative survey design, the sample (n=202) was selected from teachers working in Pakhribas Municipality of Dhankuta District (N=406). A questionnaire was developed in Microsoft Forms to collect data. The questionnaire was administered via email, and data were analysed using IBM SPSS. The results indicate that teacher training and teaching experience play a significant role in the use of government-prepared assessment standards, in providing feedback to students, in assessing colleagues, and in communicating with parents. This study has implications for policymakers, administrators, and teachers in designing appropriate measures to develop teachers' assessment literacy.

***Keywords*:** Learning achievement, novice teacher, parental communication, student assessment, feedback

Introduction

Assessment is now widely recognised as playing a significant role in enhancing learning, rather than merely testing students' performance. Traditionally, assessment has often prioritised validity and reliability. However, in recent years, motivation and deeper learning have also been recognised as integral aspects of assessment. Assessment is supposed to be learner-centred, like teaching (Popkova, 2020). Student assessment is supposed to have pedagogical implications in addition to collecting evidence of learning. This pedagogical implication of assessment is often termed the washback effect (Bailey, 1999). That is why, assessment is now considered an integral aspect of the teaching-learning process.

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Assessments are categorised into different dichotomies. The most famous categorisation of assessment is summative assessment, where information on students' learning achievement is utilised for grading purposes, and formative assessment, where information on students' learning achievement is used to improve their learning (McMillan, 2013). The use of formative assessment is also known as classroom formative assessment, and is becoming very popular and benchmarked these days. Popham (2009) introduces a categorisation of classroom assessment and accountability assessment. Classroom assessments include all formal and informal methods used by teachers to improve instructional programs. Classroom assessment is designed and conducted by the teachers themselves and sometimes used for summative purposes as well. Accountability assessments, on the other hand, are standardised by governmental agencies to assess the effectiveness of educational programs. The present Nepalese assessment system at the school level also maintains a categorisation similar to McMillan's categorisation of formative and summative assessment (McMillan, 2013). The National Curriculum Framework for School Education maintains that formative assessment (internal assessment) is applied for the purpose of enhancing students' learning; hence, assessment for learning (Curriculum Development Centre, 2019). Summative assessment (external assessment) is generally conducted at the end of the term and is carried out for the purpose of grading the students' performance. Using appropriate assessment tools, analysing the results, and utilising them to ensure continuous student learning is incorporated as teacher competence in Nepal (National Centre for Education Development, 2015). Hence, sound knowledge of assessment policy, practice and the tools for assessment is invaluable for teachers.

Teachers are not confined to the role of instructors at present; their role is to assess the students as well. This dual role requires teachers to have assessment literacy. The term assessment literacy refers to a basic knowledge of educational assessment and related skills to apply such knowledge to various measures of student achievement, and it is considered one of the key parts of the teachers' profession (Xu & Brown, 2016). The skills in assessment literacy include the ability to design, select, interpret and use assessment for adequate educational purposes (Kaden & Patterson, 2014). Assessment literacy is a dynamic and contextual social practice, which includes classroom activities and cultural knowledge of the learners (Willis et al., 2013). A similar contextual idea of assessment literacy is introduced by DeLuca (2012), who maintains that previous experiences of teachers and students shape the approaches to assessment.

It seems difficult to list the components that a teacher should possess to be literate in the assessment process Xu and Brown (2016) propose seven different assessment knowledge bases that a teacher should have to become literate in assessment. Teachers need disciplinary knowledge and pedagogical content knowledge to assess students. Likewise, a teacher should understand assessment purposes, content and methods as an assessment practitioner. Countries and institutions apply a specific grading system for students' achievement, which teachers in the respective institutions need to understand.

Teachers also need to know the importance and ways of providing feedback so that students' learning is strengthened. Teachers need to know the ways of interpreting evidence generated from assessment, and that should be properly communicated to the stakeholders. Similarly, teachers need to understand the benefits of involving students in assessment and know strategies for using self- and peer assessment for students' effective participation in the assessment process. Ethics in student assessment is another important aspect that teachers need to possess.

Several studies on EFL teachers' understanding and practice of assessment literacy in classroom assessment have been carried out. For example, Aria et al. (2021) found that teachers in Indonesian secondary schools had an understanding of the concepts of the classroom-based assessment principles and used their knowledge in practice. If the teachers don't have proper assessment literacy, continuing professional development (CPD) programmes can be a significant strategy to develop assessment literacy (Li & Gu, 2023). Popham (2009) presents a comprehensive list of what the continuing professional development of assessment literacy should contain. These consist of the ability to maintain reliability, validity, and fairness in the assessment tools. He further adds that a typical CPD training should include the knowledge of the fundamental function of educational assessment, scoring the performance (both formal and informal) of the students, collecting and interpreting evidence of students' attitude and interest, and assessing students with disabilities.

Centre for Education and Human Resource Development (2025) aims to strengthen teachers' pedagogical and assessment skills for the effective implementation of the school-level curriculum in Nepal. It emphasises practice teaching, lesson planning, test item design, rubrics and school-based activities such as action research and lesson study to develop the assessment literacy of teachers. Out of forty-five training sessions on the Face-to-Face mode of the training, the curriculum allocates only six sessions for student assessment. This clearly shows that the CPD framework in Nepal has emphasised assessment literacy.

Several studies on assessment in EFL classrooms show a lack of consistency among assessment policy, perception and teachers' practice. Poerwanti et al. (2023) reveal that student assessment in primary schools in Indonesia and Malaysia incorporates formative and summative assessment systems, but teachers in both nations lack sufficient competence and creativity in implementing classroom-based assessment (CBA). Iranian EFL teachers are moderately literate in CBA, and they need a specific course or training (Tajeddin et al., 2022). Zhang et al. (2022) investigated EFL teachers' beliefs and practices of CBA in a study entitled "Exploring classroom-based assessment for young EFL learners in the Chinese context: Teachers' beliefs and practices", which reveals that EFL teachers understood the importance of CBA; however, in practice, teachers use teacher-centred formal assessment tests rather than student-centred approaches. Rahman et al. (2021) found that EFL teachers in Bangladesh fail to implement policies and the concept of school-based assessment

(SBA) in practice due to insufficient orientation towards it. Likewise, many teachers, at present, lack adequate knowledge of educational assessment because most teacher-education programs do not require formal training in assessment literacy and practice, resulting in only limited exposure through general psychology or methods courses (Popham, 2009). Hence, student assessment practices are contextual and vary in local contexts.

Studies in Nepal also reveal that there lies a notable gap in policy, conception and practice in assessment literacy. Saud et al. (2024), for example, found that teachers in community schools do not properly implement the procedures prescribed by government policy, resulting in a focus on summative assessment. Similarly, Khatiwada (2019) reveals that there is a notable gap in CBA practice at the secondary level. The study found that some secondary-level teachers regard CBA as an extra burden and rely on paper-and-pencil tests rather than continuous assessment. Kadel (2024) reveals that teachers in community schools have an understanding of higher-order thinking skills, classroom-based assessment, and posing questions in language teaching; in practice, they are found to be more concerned with completing the course rather than applying the provisions of the assessment policy. Sigdel and Sherpa (2024) also found that the practical examination has lacked trustworthiness, validity, and consistency in secondary-level community schools in Nepal. Although students have experienced some assessment tools as friendly, engaging, and goal-oriented, they have weak decisive roles in the grading of their performance.

The assessment system from grades one to three is classroom-based, continuous and formative in Nepal. There is no provision for a separate summative assessment in these classes. Likewise, the student assessment system from grade four to grade eight allocates fifty per cent of the weight for formative assessment (i.e., classroom-based assessment) and fifty percent weightage for summative assessment (Curriculum Development Centre, 2021). This shows that it is necessary to develop assessment literacy among teachers to implement the assessment policy properly. Additionally, there should be a teacher support mechanism to implement the policy into practice. However, a review of the literature indicates that most studies have focused on teachers' assessment practices in general. These studies do not explicitly mention how teachers in Nepal develop assessment literacy. Developing teachers' assessment literacy is necessary for improving teachers' assessment practice. In this context, teachers' strategies for developing assessment literacy are important aspects of inquiry. This study seeks to fill this gap by examining teachers' strategies to develop assessment literacy. This study aims to find out the effect of teacher training programs and teaching experiences on developing teachers' assessment literacy. To fulfil the objective, the following research questions are determined to be answered.

1. What are the effects of training in developing teachers' assessment literacy?
2. What is the relationship between the teacher's experience and their assessment literacy?

The alternative hypothesis (H1) for the first research question was 'Teacher training affects in developing teachers' assessment literacy'. Conversely, the null hypothesis for the first research question was 'Teacher training doesn't affect teachers' assessment literacy'. Likewise, the alternative hypothesis (H_1) for the second research question is 'There is a relationship between teachers' experience and assessment literacy', and its null hypothesis (H_0) is 'There is no relationship between teachers' experience and their assessment literacy'.

The study has certain limitations which should be acknowledged. It relies on teachers' self-reported data through questionnaires, which may be subject to bias. The findings may not be generalised to all teachers in Nepal because the study is limited to Pakhribas municipality of Dhankuta district only. Only classroom-based assessment practices are examined, excluding summative examination. The study focuses on teachers' exposure to professional development activities related to assessment literacy, not on students' outcomes. The research uses a quantitative survey design, deliberately excluding interviews, classroom observations, or other qualitative methods.

Methods and Procedures

Pakhribas municipality is one of the local levels situated in Dhankuta district of Nepal. There are 32 public schools where 406 teachers are working. Among them, 42 teachers are appointed for ECED level, 210 teachers are appointed for Primary level, 56 teachers are appointed for Lower Secondary level, 64 teachers are appointed for Secondary level (9-10), and 14 teachers are appointed for Secondary level grades 11 and12 (Pakhribas Municipality, n.d.). Teachers working in rural settings have limited opportunities for professional development, and they need special focus from concerned authorities for their capacity development (Şahin et al., 2024). Hence, Pakhribas Municipality has been chosen as the research site, constituting all the teachers working in Pakhribas Municipality as the target population of the study (Kumar, 2011).

The researcher adopted a quantitative survey design to complete the study. A survey is the most commonly adopted design in social research, which involves data collection through standardised questionnaires or interviews from a sample that represents a large population (Rauteda, 2025; Trochim, 2001). The target population of the study is limited, consisting of 406 teachers. The sample size is estimated by the method prescribed by Yamane (1967) . To determine the sample size, the formula n= $\frac{N}{1+Ne^2}$ was applied. Setting the significance level e=0.05, the sample size is determined to be 202 teachers.

The sampling frame consisted of all the teachers working in Phakhribas Municipality, which was received from the Office of Municipal Executive in a spreadsheet. The population was divided into strata based on appointment level. Then their proportion in the sample was determined by adopting a formula $n_i = \frac{nN_i}{N}$. Thirty-one teachers from the ECED level, 28 teachers from the lower secondary level, 104 teachers from the primary level, 32 teachers from the secondary level

(9-10), and 7 teachers from the secondary level (11-12) were selected as sampling units. Then, the teachers working in each level were separately coded by serial numbers ($n_i = 1,2,3 \ldots n_i$) in the spreadsheet. The sampling unit from each cluster was selected randomly using Microsoft Excel software.

The data were collected using a self-reporting questionnaire. The questionnaire was developed in MS Forms and administered via email, which was accessed from Pakhribas municipality. The researcher was facilitated to collect the data by the education officer working in Pakhribas municipality. With the officer's help, the researcher could collect the data in a single day, on 20th December, 2025. The collected data were analysed using the computer software IBM SPSS. Bivariate and multivariate analyses were done using statistical tools.

Results and Discussion

Role of Training on Teachers' Assessment Literacy

The role of teacher training was found in the application of evaluation standards set by the curriculum and other education policies, and in providing feedback for the students. These findings are analysed separately.

Use of Assessment Standards

To represent the role of training on teachers' knowledge and skills to implement the strategy determined by the curriculum and internal assessment standards, the following cross-table is presented.

Table 1

Teacher Training and Use of Assessment Standards

Question	Response		Teachers follow the curriculum and internal assessment standards while assessing the students			Total
			Mostly follow	Normally follow	Rarely follow	
Have you attended any workshops or training after your appointment?	Yes	Count	29	101	6	136
		Percentage(%)	21.30%	74.30%	4.40%	100.00%
	No	Count	9	31	26	66
		Percentage(%)	13.60%	47.00%	39.40%	100.00%
Total		Count	38	132	32	202
		Percentage(%)	18.80%	65.30%	15.80%	100.00%

The table shows that 136 of 202 teachers had participated in a workshop or training before. Among them, 4.4% (n=6) of teachers still rarely follow the assessment procedures prescribed by the curriculum and internal assessment standards. Likewise, 74.3% (n=101) of teachers normally follow the prescribed assessment standards. Similarly, 21.3% (n=29) of the teachers reported that they mostly followed the assessment standards.

In the same way, 66 teachers out of 202 had reported that they had not received any training or participated in workshops. Out of those numbers, a larger portion of the teachers (n=26) had still rarely followed the assessment provisions set by the curriculum and evaluation standards. Similarly, 47.0% (n=31) of the teachers were found to normally follow these provisions. Likewise, 13.6% (n=9) of the teachers reported mostly following the evaluation standards.

The majority of trained teachers (21.3%+74.3% = 95.6%) mostly or normally followed the evaluation standards; however, 60.6% (13.6%+47.0%) of the untrained teachers adopted these strategies. The chi-square (χ^2) test revealed for training χ^2 (2, N=202) = 40.788, p<.001 and $\varphi = .449$. The calculated p<0.05, so the H_0, there is no relationship between teacher training and use of assessment standards, was rejected. Additionally, $\varphi = .449$ showed a moderate relationship between the training and the use of assessment standards.

The findings indicate that effective teacher training is necessary for implementing the government policies for student assessment (Centre for Education and Human Resource Development, 2023). The findings also conform with Zhorova et al. (2022) who conclude that relevant teacher training promotes teachers' ability to assess students effectively. The finding indicates that teacher training on student assessment is a prerequisite to develop assessment literacy among teachers. Teacher training in Nepal focuses less on student assessment in comparison to classroom instruction (Centre for Education and Human Resource Development, 2023) which indicates that the Government of Nepal has not properly realised the importance of developing assessment literacy among teachers. The finding suggests a need for a well-developed teacher training curriculum that aims to develop balanced teacher competency in teaching and assessment skills.

Providing Feedback

Teachers' strategies for providing feedback to the students are compared with their training in the following cross-table.

Table 2

Teachers' Training and Their Feedback to Students

Question	Response		Teachers provide feedback to students			Total
			After every major task	Regularly, but not always	Only during report card distribution	
Have you attended any workshops or training after your appointment?	Yes	Count	49	85	2	136
		Percentage(%)	36.00%	62.50%	1.50%	100.00%
	No	Count	5	53	8	66
		Percentage(%)	7.60%	80.30%	12.10%	100.00%
Total		Count	54	138	10	202
		Percentage(%)	26.70%	68.30%	5.00%	100.00%

The table shows that among trained teachers (n=136), 36% (n=49) reported that they provided feedback after every major task. Similarly, 62.5% (n=85) of the trained teachers provided feedback regularly. Only a minority of the trained teachers (n=2) reported that they provided feedback during report card time. On the other hand, 7.6% (n=5) of the untrained teachers provided feedback after every major task, 80.3% (n=53) of them provided feedback regularly, but not always, and 12.1% (n=10) of them provided feedback during report card time.

The majority of the trained teachers (36%+62.5%=98.5%) provided feedback for the students either after every major task or regularly, but not always, with a marginal number (n=2) providing late feedback. The majority of the untrained teachers (7.6+80.3=87.9%) also provided feedback for the students either after every major task or regularly, but not always. However, a difference in the percentage is found there. The chi-square (χ^2) test has been applied to ensure the association between these two variables. The test revealed that for training on feedback χ^2 (2, N=202) =25.701, p<.001 and $\varphi = .357$. The calculated p<0.05, so the H_0 , there is no relationship between teacher training and feedback to students, was rejected. Additionally,$\varphi = .357$ showed a moderate relationship between teacher training and providing feedback for the students.

Studies have found that the significance of providing feedback has an impact on the future learning of the students. Teachers' feedback influences the course satisfaction and the course exam results of the students (Gan et al., 2021; Leung et al.,

2022). That is why providing feedback is sine qua non of teaching. Immediate student feedback is preferred to delayed feedback. Ajogbeje (2023) finds that immediate feedback is effective in addressing student confusion, correcting errors, identifying learning gaps, bridging gender differences in student learning outcomes, and inspiring students to learn well. The importance of feedback for students has been focused in Nepal and included in teacher training curriculum as well (Centre for Education and Human Resource Development, 2023; National Centre for Education Development, 2015). The findings suggested that teachers need training immediately after their job induction. This is because teachers need to provide feedback from the very first day of teaching. This also implies that preservice teachers should be prepared to provide effective feedback during teacher education courses.

Effects of Teachers' Experience on Assessment Literacy

Assisting Colleagues

Teachers' experience and their assistance to other colleagues are cross-tabulated and described below.

Table 3

Teachers' Experience and Their Assistance to Colleagues

Question	Response		Teachers' experience in years					Total
			< 5 years	5 to <10 years	10 to<15 years	15 to <20 years	≥ 20 years	
Have you ever helped other teachers with student assessment?	Yes	Count	14	42	28	15	30	129
		Percentage (%)	10.90%	32.60%	21.70%	11.60%	23.30%	100.00%
	No	Count	42	20	4	3	4	73
		Percentage (%)	57.50%	27.40%	5.50%	4.10%	5.50%	100.00%
Total		Count	56	62	32	18	34	202
		Percentage (%)	27.70%	30.70%	15.80%	8.90%	16.80%	100.00%

The table shows that 129 teachers out of 202 reported assisting their colleagues, and 73 teachers reported not assisting their colleagues. In total (n=202), 27% (n=56) of the teachers had experience below 5 years, 30.7% (n=30.7) of the teachers had experience from 5 to below 10 years, 15.8% (n=32) of the teachers had experience from 10 to below 15 years, 8.9% (n=18) of the teachers had experience from15 to below 20 years, 16.8%(n=34) of the teachers had experience of 20 and more than 20 years. Similarly, 129 teachers had assisted their colleagues in the student evaluation process. Among the teachers who helped others (n=129), 10.9%(n=14) had experience below 5 years, 32.6%(n=42) of them had experience from 5 to below 10 years, 21.7%

(n=28) of them had experience from 10 to below 15 years, 11.6%(n=15) of them had experience from 15 to below 20 years, 23.3% (n=30) of them had experience from 20 and more than 20 years. Among the teachers who did not help their colleagues (n=73), 57.5%(n=42) had experience below 5 years, 27.04% (n=20) of them had experience from 5 to below 10 years, 5.5% (n=4) of them had experience from 10 to below 15 years, 4.1% (n=3) of them had experience from 15 to below 20 years, 5.5% (n=4) of them had experience from 20 and more than 20 years. The table reveals that, comparatively, teachers with less experience tend not to help their colleagues as much as more experienced teachers.

To test the second null hypothesis (H_0), the chi-square (χ^2) test was done to test the association between teachers' experience and their assistance to colleagues. The test revealed that for teachers' experience with feedback χ^2 (4, N=202) =56.507, p<0.001 and $\varphi = .529$. The calculated p<0.05, so the H_0, there is no relationship between teachers' experience and assistance to colleagues, was rejected. Additionally, $\varphi = .529$ showed a strong relationship between teacher training and providing feedback for the students.

Yan et al. (2021) found that the difference between assessment beliefs and practices results from teachers' lack of experience with alternative assessment tools. This study also reveals similar findings that novice teachers help colleagues less frequently than experienced teachers. Experienced teachers appeared to be more knowledgeable than the novice teachers in student assessment (Fitriyah et al., 2022). Teachers' experience has received emphasis in teacher mentoring in Nepal, where only teachers having at least 5 years of experience can be appointed as mentors, who help the novice teacher in the student assessment procedure (Centre for Education and Human Resource Development, 2023). The experienced teachers at school can mentor the novice ones at schools because the culture of collaboration benefits both the novice and experienced teachers (Kardos & Johnson, 2007). The collaboration among experienced and novice teachers also lessens teachers' dependence on formal training to develop assessment literacy.

Communication with Parents

Teachers' teaching experience and their communication patterns with students' parents are presented in the following table.

Table 4

Teachers' Experience and Communication with Parents

Question	Response		Teachers' experience in years					Total
			< 5 years	5 to <10 years	10 to<15 years	15 to <20 years	≥ 20 years	
Have you ever communicated with parents about the students' learning achievement?	Yes	Count	20	41	22	13	24	120
		Percentage (%)	16.70%	34.20%	18.30%	10.80%	20.00%	100.00%
	No	Count	36	21	10	5	10	82
		Percentage (%)	43.90%	25.60%	12.20%	6.10%	12.20%	100.00%
Total		Count	56	56	62	32	18	34
		Percentage (%)	27.70%	27.70%	30.70%	15.80%	8.90%	16.80%

The table displays that 120 teachers out of 202 reported that they communicate the students' achievement with their parents, even if parents did not contact them. Similarly, 82 teachers out of 202 reported not communicating with parents without the parents' prior query.

The table shows that 27.7% (n=56) of the total teachers had experience below 5 years; among them, 36 teachers did not properly communicate with parents and 20 teachers communicated properly. Likewise, 30.7% (n=62) of the total teachers (n=202) had experience from 5 to below 10 years; among them, 21 teachers did not communicate, and 41 teachers communicated with parents properly. Similarly, 15.8% (n=32) of the total teachers (n=202) had experience from 10 to below 15 years; among them, 10 teachers did not communicate, and 22 teachers communicated with parents properly. The table reveals that 8.9% (n=18) of the total teachers (n=202) had experience from 15 to below 20 years; among them, 5 teachers did not communicate, and 13 teachers communicated with parents properly. Finally, 16.8% (n=34) of the total teachers (n=202) had experience of 20 or more years; among them, 10 teachers did not communicate, and 24 teachers communicated with parents properly.

To determine whether the relationship between teachers' experience and their strategy of communication with parents had significance, the chi-square (χ^2) test was done. The test revealed that for teachers' experience with communication with parents, χ^2 (4, N=202) =18.344, p<0.001 and $\varphi = .301$. The calculated p<0.05, so the H_0, there is no relationship between teachers' experience and their communication with parents, was rejected. Additionally, $\varphi = .301$ showed a moderate relationship between teacher training and communication with parents.

Studies have emphasised the importance of an effective teacher-parent relationship for the academic success of the student, and a lack of such communication

contributes to negative impacts on student learning (Gisewhite et al., 2019). Agreeing with these findings, effective communication with students and their parents has been accepted as a teacher's competency in Nepal (National Centre for Education Development, 2015). Additionally, effective parental communication affects students' learning motivation, and frequent communication between teachers and parents increases the impact on student learning discipline (Amin et al., 2021). Hence, effective parental communication of students' learning achievement is one of the assessment literacy skills that teachers have to develop. Due to the advancement of digital technology, such communications are possible even without physical meetings as well (Chen & Rivera-Vernazza, 2022). As a result, it is possible to have regular teacher-parent communication at present.

Conclusion

The study found that teacher training had a positive and strong role in developing teachers' assessment literacy. The teachers who had received prior training frequently applied the provisions of the curriculum and student evaluation standards in their practice. Chi-square test further showed a moderate relationship ($\varphi = 0.449$) between the teacher training and their use of assessment standards in practice. Similarly, teacher training showed a moderate relationship ($\varphi = 0.357$) with their practice of providing feedback to the students. The study also found that teachers' experience affected the development of their assessment literacy. Teachers with relatively longer teaching experience were found to assist their colleagues (d = 1.006) while assessing their students. Teachers' experiences also affected their engagement in parental communication. Teachers with more teaching experience tend to initiate communication (d = 0.484) with the parents of their students. In general, both teacher training and teachers' experience affected assessment literacy among teachers.

Teacher training and teaching experience are important facets of developing classroom-based assessment literacy among teachers. In this context, the study has implications for policymakers, teacher educators and school administrators. The findings of the study imply that policymakers incorporate the content and practice of classroom-based assessment in all types of teacher training courses. This inclusion makes assessment a continuous and teaching-embedded process, which enhances students' learning achievement (Irons & Elkington, 2021). Since teaching experience has a significant role in developing assessment literacy, the formation of a community of practice, including novice and experienced teachers, will be an implication for school administrators. Teachers cannot be made experienced overnight; however, the implementation of the policy provisions by providing prior training on student assessment to novice teachers enhances classroom-based assessment (Centre for Education and Human Resource Development, 2023). The study has implications for educational administrators in setting up a mechanism for teachers' professional support in student assessment at the school level (Hontvedt et al., 2019). Finally, preservice and

in-service teacher training, and collaboration among novice and experienced teachers are found to be key tenets of developing assessment literacy. Further research is necessary to explore the emic perspectives of teachers on classroom-based continuous assessment systems. The fastest-growing technology and artificial intelligence have influenced student assessment. Thus, the role of technology and artificial intelligence in developing teachers' assessment literacy is another area to be explored.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98953

Secondary Level English Language Teachers' Experiences of Digital Professional Development in Nepal

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Abstract

Digital technologies have been introduced into teacher professional development to offer more flexible teaching opportunities and enhance teachers' access to professional development experiences. But the reality of digital professional development in the daily professional lives of secondary-level English language teachers in geographically distant areas of Nepal remains obscure. Guided by Vygotsky's Sociocultural Theory, this phenomenological study explores lived experiences of four English language teachers at the secondary level from Sudurpaschim Province, Nepal. In-depth interviews and field notes were used to collect data, and Braun and Clarke's thematic analysis was used to analyse them. Three major themes emerged from the findings: affordances and benefits of digital professional development, barriers and contextual constraints, and adaptive strategies for sustaining professional development. The findings add to the body of knowledge of digital teacher professional development with context-specific information from an under-researched rural area of Nepal. The study underscores the importance of creating sustainable digital professional development policies, enhancing technological support, and strengthening institutional resources and support for teachers, while also emphasising the need for professional learning opportunities that are both contextually relevant and flexible.

***Keywords*:** teacher professional development, digital professional learning, English language teaching, rural education

Introduction

Education has undergone a rapid digitalisation process that has changed teacher professional development (TPD) by increasing access to webinars, online courses, learning management platforms, social media and virtual communities of practice. These technologies have transformed professional learning from traditional professional learning to a more flexible, collaborative and continuous approach. Teachers' access to digital professional development is still low despite the government's efforts due to the

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lack of adequate internet connection, ICT facilities, institutional support, and digital literacy in geographically remote areas of Nepal (Dhakal, 2023). These constraints hinder equitable access to sustainable professional learning and demands for context responsive professional development initiatives.

Several recent studies have focused on the increasing importance of digital technologies in teachers' professional learning in Nepal. In the major cities, teachers actively utilised online platforms and social media during professional learning. Kadel and Tiwari (2025) observed that providing institutional support leads to enhanced instructional innovation and digital competence. The use of ICTs and digital pedagogy has also been explored; however, they have tended to take place in urban and semi-urban contexts, and to focus on the integration of technology, digital competence or online learning, but not on teachers' experiences of digital professional development (British Council, 2023; Parajuli, 2024; Sharma, 2023). Thus, the experiences and sustainability of digital professional learning for secondary-level teachers of English in geographically remote areas remain largely unknown.

To fill the gap, the present phenomenological study explores the lived experiences of secondary-level English language teachers who participate in digital professional development. It explores how teachers use webinars, online training, YouTube materials, learning management systems, mobile apps, social media, and virtual professional learning networks to develop their pedagogical knowledge and English language teaching, and to consider the opportunities, challenges, and adaptive responses for digital professional learning.

Literature Review

Teacher professional development has shifted from a one-off, centrally planned experience to ongoing and embedded, context-relevant, collaborative learning with teachers (Darling-Hammond et al., 2017). Digital technologies have helped to enhance this transformation, enabling teachers to access professional knowledge, connect with other teachers, and engage in reflective practice using webinars, online professional development courses, mobile apps, virtual communities of practice, and social media (Gyawali & Mehndroo, 2024). As a result, digital professional learning is seen more as a social process and less as a technical innovation.

Although there is recognition of the potential for digital PD, its effectiveness is still a question that has been debated. Although some studies evidence gains in teachers' pedagogical knowledge, innovation in teaching practices, collaboration, and professional confidence (Bhandari et al., 2026; Karki et al., 2024), some believe that technology cannot guarantee meaningful professional learning. On the contrary, the engagement of teachers is influenced by institutional support, technological infrastructure, digital competence, workload, leadership and collaborative reflection opportunities (Gyawali & Mehndroo, 2025; Saud & Mahara, 2024). The opposing views imply that digital professional development is a product of the complex interplay

between the affordances of technology and teachers' social, cultural, and institutional environments.

This is especially important in English language teaching where teachers have to constantly adjust to new pedagogies, resources and materials, multilingual classes, and changing assessment systems. Research indicates that digital PD allows English language teachers to access authentic teaching materials, to join professional networks, to use new teaching methods and to reflect on their practices (Tamang et al., 2025). But it will take institutional support, professional dialogue, and learning to be responsive to local classroom realities, not generic online training, to make it effective (Acharya, 2025). Hence, PD must be context-responsive, flexible and ongoing.

As the investment in ICT integration and teacher education reform has been growing, research on digital professional development has been gaining momentum in Nepal. Research has been carried out primarily in urban and semi-urban settings, which show increasing adoption of webinars, online learning platforms, social media, and mobile technologies in professional learning (Diyal & Malla, 2025). While the research points to increased access to professional resources for teachers, as well as enhanced collaboration with peers, they also reveal ongoing challenges stemming from inequities in institutional support, technological infrastructure, and teachers' digital literacy.

While these studies have contributed to the knowledge of digital professional learning in Nepal, there are gaps to be noted. Existing research on the subject has been predominantly related to technology integration, digital competence, online teaching, or implementation of an ICT policy in relatively easy and accessible contexts, while there is little focused on the teachers' lived experiences of digital professional development in resource-constrained settings. Furthermore, participants have often been recruited from diverse disciplines, and therefore have limited background to offer the unique experiences of English language teachers. As such, these results are unable to fully account for how teachers in geographically isolated areas engage with digital professional learning in other contexts.

The internet is not stable, ICT infrastructure is lacking, institutional support is limited, teachers are isolated from other professionals, and there are fewer opportunities for sustained professional learning, which all continue to impact teachers' development in Sudurpashchim Province (Saud, 2025). While such structural issues have been documented in previous research, there is limited empirical evidence that offers insight into the lived experiences of digital professional development through the lens of secondary-level English language teachers.

This study is underpinned by Vygotsky's (1978) Sociocultural Theory, which defines learning as a socially mediated process, developing through interactions, culturally mediated tools and participation in communities of practice (Vygotsky, 1978). In this way, digital technologies such as webinars, mobile apps, learning management

systems, social media and online professional networks serve as mediational devices to facilitate collaboration, reflection and construction of knowledge. The theory thus offers a suitable lens for examining the factors that affect teacher professional learning, including technological affordances, institutional contexts, professional relationships and teacher agency.

The literature shows that digital professional development is emerging as a field of interest in Nepal, but there are still many gaps. There is a dearth of research that has a phenomenological approach and focuses on how English language teachers at the secondary level in geographically distant areas understand and maintain their digital professional learning in their daily professional lives. To fill this gap, the present study explores the experiences of English language teachers in Sudurpashchim Province and the role of digital technologies in their professional learning in the context of social, institutional, and contextual realities, providing context-specific evidence from one of the least studied educational contexts in Nepal.

Methods and Procedures

The study used a qualitative phenomenological research design that aimed to capture the experiences of English language teachers in digital professional learning in public secondary schools in Darchula District, Sudurpashchim Province, Nepal. Interpretive phenomenology was used as a research method because it provides an understanding of how individuals construct meaning and interpretation of their lived experiences (Creswell & Poth, 2018). Darchula was intentionally chosen due to its challenging mountainous landscape, weak ICT resources, extended power outages, and unstable internet connection, which continue to limit teachers' ability to access regular, continuous professional development despite the national digital education initiatives in the country. The English language teachers who participated in the study were purposively selected and comprised four teachers, aged 30-45 years and having 5-15 years of experience in teaching English, who volunteered to participate in the study. To reach data saturation, eight face-to-face, in-depth interviews (two interviews with each participant), lasting 60-75 minutes, were conducted. To enhance depth and credibility of findings, interview findings were triangulated with field notes that captured non-verbal responses of participants and contextual observations.

The interviews were transcribed word for word, translated from Nepali to English and analysed through the six phases of Braun and Clarke's (2006) thematic analysis: familiarisation, coding, category development, theme generation, review, and refinement. Data were further interpreted using Vygotsky's (1978) Sociocultural Theory to explore how digital technologies were used as a mediational resource, the role of social interaction in professional learning, and the role of contextual conditions in teacher agency. Data triangulation, member checking, researcher reflexivity and an audit trail helped to increase trustworthiness and to ensure credibility, dependability, confirmability and transferability. All subjects were informed of the study and

voluntarily participated, and confidentiality and anonymity through pseudonyms were protected, and data were managed securely throughout the study.

Results and Discussion

This study explores the experience of English language teachers of Sudurpaschim Province, Nepal, in terms of digital professional development. Data analysis based on the in-depth interviews and field notes showed that there are three overarching themes, namely, the affordances and benefits of digital professional development, barriers and contextual constraints, and adaptive strategies to maintain professional learning.

Affordances and Benefits of Digital Professional Development

The findings show that digital professional development has facilitated continuous professional development of secondary-level English language teachers, in a flexible, accessible and continuous way, instead of the usual infrequent centrally organised face-to-face PD. But the experiences of the participants were not similar. Their involvement differed depending on their digital competence, access to technological resources, and confidence in digital learning environments. Teachers who had higher digital skills took advantage of a wider variety of professional learning opportunities, while those with lower digital skills relied more heavily on peer and institutional guidance. The findings show that the interaction between the individual agency of the teacher and contextual realities in which they work mediated digital professional development.

Among the most seasoned participants, mobile technologies had fundamentally changed Ram's opportunities for professional learning. He stated:

> *In the past I had to wait for there to be a district-level training programme, and that was typically once a year. The overwhelming majority of the time we went back to our schools with no follow-up support. Now, I use my mobile phone to attend webinars, view YouTube demonstrations, download training materials, and review training videos when I have free time, even late at night after school. With this flexibility, I can learn on an ongoing basis, not just through official learning structures that are set up by the authorities.*

Ram's story highlights the role of digital technologies as a medium for teacher learning that transcended the time and space of traditional teacher development programs. In line with Vygotsky's (1978) Sociocultural Theory, digital platforms facilitated teachers' engagement with culturally situated tools for accessing professional learning, reflection, and pedagogical creativity. While teachers in urban areas often see digital learning as a supplement to their current professional development avenues (Diyal & Malla, 2025), teachers in Darchula felt that digital learning was their main source of professional development, due to fewer opportunities for face-to-face learning. This finding builds on existing Nepalese evidence, demonstrating

that digital professional development not only serves as a substitute learning tool, but also as a necessary instrument to alleviate professional isolation and promote ongoing professional development.

This was corroborated by field observations during interviews. During the interview, Ram showed the educational apps and channels on his phone and explained that he often downloaded educational content to watch without an internet connection due to unreliable internet facilities. The interview narratives and field notes indicated that the digital technologies were not just sources of information but mediational tools teachers could use to continue their professional learning in the context of resource-constrained settings.

Yet another major affordance that arose from the data was the increase in collaborative professional networks. In addition to engaging with colleagues in their own schools, participants mentioned enthusiastically that digital platforms supported relationships with colleagues in other districts, provinces, and sometimes abroad and in other professional communities. Their involvement, however, was not the same. While Hari and Sita were very active in the online discussions, sharing their lesson plans and experiences, Gita was more passive, observing and downloading lessons and resources because she did not feel confident expressing her thoughts in public. These differences are attributable to the different degrees of professional agency in digital communities. Hari explained:

> *Before joining Facebook groups and online workshops, my job conversations would be with other teachers in my school, and often the same thoughts would be shared. Now, I share lesson plans, have problems discussed, get useful inputs, constructive feedback, etc. with teachers from all over Nepal and beyond via online communities and learn other teaching approaches from other teachers. Through these encounters, my knowledge of how to teach English has been enriched, and my thinking about my own teaching has become more critical.*

This is an example of Vygotsky's (1978) theory that knowledge emerges from social interaction and a process of joint discussion. Online professional communities were not just places to store digital materials but communities of practice in which teachers negotiated meanings, shared experiences, and jointly found solutions to instructional problems. These benefits have been reported in other countries around the world (Darling-Hammond et al., 2017; Zubizarreta Pagaldai et al., 2026). The findings of the present study, however, build upon the existing knowledge by demonstrating that online communities also serve as a means of bridging geographical distance, especially in remote areas like Darchula, in the process providing opportunities for the formation of professional connections which would not otherwise be easily achievable. In this sense, digital collaboration not only promoted pedagogical learning, but also decreased the teachers' sense of professional marginalisation.

The participants also explained how digital PD positively affected their

pedagogy and boosted their pedagogical confidence. All the participants recognised teaching improvements, but with varying approaches to digital learning. Following these online workshops, Gita often tried out blending storytelling approaches, engaging in cooperative learning, and implementing formative assessment methods. Ram, on the other hand, applied innovations more cautiously, only those which he felt could be implemented in large classes and in the face of limited technology. Such divergent responses indicate that teachers did not uncritically adopt new concepts but rather actively negotiated with digital knowledge. Gita reflected:

> *I was inspired to get away from lecturing when I saw demonstration lessons and watched online workshops. I started to integrate storytelling, group work, educational games and interactive questioning into my English lessons over time. At first, I didn't know if students would be interested, but with them getting more involved, I felt compelled to try more of this. I feel more confident as I am not teaching my students just one way, but several.*

This story shows that digital professional development not only led to the acquisition of knowledge but also to pedagogical reflection. Teachers didn't blindly follow the practices that were laid out for them by the external provider, but took a selective approach to digital learning in their own classrooms. The result builds on previous studies conducted in Nepal, which indicated that teachers' digital competence has improved (Dhakal, 2023; Diyal & Malla, 2025), while in this study, it showed that they actively interpreted and contextualised online learning to meet local instructional needs. In a sociocultural sense, digital technologies enabled teachers' professional thinking; in terms of experimenting in the classroom, it was a process of making meaning that was not technologically determined, but rather was influenced by the context.

Finally, digital professional development was consistently reported as positively contributing to their professional identity and motivation, though the sources of motivation varied. Sita highlighted the factor of enhanced confidence due to interaction with national experts, while Hari attributed it to being motivated by peers' recognition via online communities. These differences indicate that being a professional was not just the result of personal success, but was influenced by several types of social engagement. Sita explained:

> *When I join in webinars or online professional development, I feel at home in a larger community of English teachers. Despite being in a remote district, I don't feel professionally alone in our school. Hearing from experienced teachers encourages me to keep learning to teach better all the time, and that teachers in the bush can also have great ideas.*

The results show that digital professional development doesn't just help teachers become more competent in digital technology; it also helps them develop their professional identity, sense of belonging, and interest in lifelong learning. In terms

of Vygotsky's (1978) Sociocultural Theory, these outcomes are produced in socially mediated interactions where digital technologies are used as culturally mediated sources of collaboration, dialogue and reflective practice. The findings of this study differ from those in urban Nepal where teachers often use digital technologies to augment their current professional learning activities, as teachers in Sudurpashchim are primarily using digital technologies to address geographical isolation, lack of institutional support, and professional learning without the assistance of others. They demonstrate a great degree of professional agency in using technologies that they can access, joining online professional communities, and applying new knowledge to their local classroom situations.

Overall, the results indicate that the affordances of digital professional development extend beyond just enhancing access to learning, but also in the complex interplay between the digital technologies, social dynamics, context, and teacher agency. Although there have been numerous studies in Nepal focusing on digital competence and technology integration, this study shows that digital professional development is a socially mediated process that involves lessening the sense of isolation among professionals, building a sense of professional identity, and supporting ongoing pedagogical innovation in Darchula, a geographically remote region.

Barriers and Contextual Constraints

Participants reiterated the opportunities that digital PD presents, but they also pointed to the complex set of barriers they faced in engaging in digital PD within their contexts, institutions, and technologies. Limited Internet access, voltage issues, inadequate IT infrastructure, high workloads, and lack of high-level digital skills often affected participation in webinars, online training and virtual professional communities. But these difficulties differed among participants. School teachers more than 20 km away from district headquarters had more constraints in terms of infrastructure, and younger teachers tended to exhibit greater digital confidence compared to their more experienced peers. These findings indicate that structural inequalities, individual digital competence, professional experience and institutional support influence engagement in digital professional development. In geographic contexts that are distant, therefore, digital professional learning is not a comparable learning experience, but is rather socially and digitally mediated.

The lack of reliable internet connectivity was one of the biggest challenges mentioned by participants, with frequent power outages adding to the issue. Unstable digital infrastructure was reported to have impacted synchronous learning, the ability to participate in online discussions and the effectiveness of professional development programmes by participants. As for Ram, his school was situated in an isolated village in the mountains; he explained:

> *I am always excited when there is a live webinar or online training programme, as that is a rare occurrence for us. While participating in the session, however,*

the internet often disconnects, videos freeze, or audio becomes garbled. I sometimes dial up a few times and still don't catch the conversation. Despite my keen interest in learning, I still miss out on crucial explanations and demonstrations due to poor connectivity. As a result, I believe that the teachers in remote regions are at a disadvantage to those in urban regions where the internet is far more reliable.

Likewise, Hari emphasised that internet connectivity was not enough as online learning was often hampered by power outages:

When the internet is more or less functional, power failures pose another obstacle. I have attended a few online training sessions, but each time the electricity went off before the training was over. Interruptions make us feel demoralised because we've planned our schedules to attend, and then there are factors we cannot control that prevent us from completing the learning activity.

The stories show that the technological infrastructure is an essential mediational condition that influences teachers' professional learning. Teachers' access to digital professional development opportunities was hampered by the lack of access to the internet and poor power supply, which prevented them from interacting, collaborating, and building knowledge. In contrast to urban municipalities, where the availability of the internet is predominantly considered an enabler for teachers' professional learning (Diyal & Malla, 2025), it is observed that digital exclusion of teachers in Darchula is mainly due to geographic isolation and not due to their lack of motivation for professional learning.

The other important constraint was the lack of institutional technological resources. Participants reported that schools had few working computers, poor Internet access, and inadequate technical support, forcing teachers to primarily use their own phones to access the Internet for professional learning. But participants narrated varying experiences in relation to this dependence. Though mobile learning was useful in small ways due to small screens, storage space and mobile data charges, Sita was frustrated seeing that online learning was not as effective as she thought it should be, while Gita felt her smartphone was an essential professional learning tool, yet had its drawbacks. Gita explained:

The school has very limited computers, some of the older or have malfunctioned. So, nearly all aspects of digital professional learning rely on my own mobile phone. I use it for webinars, downloading teaching resources, watching demonstration lessons and communicating with professional groups. At times, my phone space is filled up, or the screen is too small to comfortably read presentation slides, which makes learning difficult to sustain.

Sita, however, did see a need for institutional support:

I am not so fond of bringing my own cell phone to work, but professional development should not be based exclusively on individual teacher supplies. Internet access, computers and technical support should be made available at school to enable teachers to be involved without straining their resources or personal computers.

These contrasting experiences highlight teachers' commitment to professional learning and that institutional inequalities played a major role in how teachers engage with the digital tools. Inadequate ICT infrastructure in public schools has also been found in past studies conducted in Nepal (Dhakal, 2023). However, the present results contribute to this literature, showing how a reliance on personal devices turns digital professional development from an institutional into a personal responsibility, reinforcing existing educational inequalities.

Workload was also cited by teachers as a major obstacle to PD. Teaching students in more than six classes, creating lesson plans, grading assignments, attending school admin meetings, and other duties left little time or energy for participants to be involved in online learning. However, there were differences in how workload impacted participants. Some of the younger teachers attended webinars in the evenings or weekends, while others, who were more experienced, were more likely to have other family commitments after school and hence not attend the optional webinar programmes. Sita reflected:

Teaching is just one of the things we do. We plan lessons, monitor pupils' work in exercise books, attend meetings, organise school programmes and complete administrative records. Once these tasks are completed, it's hard to focus on another two-hour online training programme, although I am aware that I would benefit from it in my teaching.

These are not stories of specific issues with managing time but are markers of structural conditions in under-resourced schools that require teachers to carry out several roles simultaneously. Workload is also cited as a significant predictor of teachers' involvement in continuous professional learning in several studies (Darling-Hammond et al., 2017; Gu et al., 2025). But the current research indicates that workload and geographical and technological factors have a multiplicative effect that creates a combined disadvantage for teachers in a remote education setting.

Last but not least, participants recognised that inadequate digital competence can sometimes lead to not being able to actively engage in knowledge building in the digital world. All teachers had at least basic technological skills, yet a few teachers reported problems with the use of new programs introduced in the online training programmes. Hari explained:

Occasionally trainers implement new applications or digital platforms without explaining how they function. They are new programmes, and it's hard to follow the demonstrations. We spend most of our time learning about technology, rather than ideas for using it.

Younger participants tended to be more flexible with new technologies, and senior teachers tended to be more comfortable with technologies they were already familiar with. The teachers' capacity to make use of new technologies was related to the mediation and scaffolding they provided, as described in the Sociocultural Theory of Vygotsky (1978). This is what was demonstrated in Hari's interview, where he often used younger colleagues to set up or operate new software he had never used before, before he joined in online training. Overall, the results demonstrate that, in addition to technological access, there are also structural issues related to digital skills that hinder access to digital professional development in geographically distant settings.

Adaptive Strategies for Sustaining Digital Professional Learning

Participants exhibited a high level of professional agency in designing adaptive strategies to ensure digital professional learning in low-resource settings, despite ongoing infrastructure, institutional and technological challenges. Instead of giving up on professional development, they restructured the resources they had, increased peer collaboration, practised reflecting on their work, and tailored digital knowledge to their own classrooms. These strategies ranged from using mostly self-directed offline learning to focusing on collaborative learning and peer mentoring depending on the teacher's professional experience, digital confidence and school context. This variation indicates that teacher agency is influenced by the dynamic between personal agency and the social, cultural and institutional environment.

A common approach was to download professional learning materials to use offline to work with an unreliable internet connection. Participants reported that they intentionally downloaded webinars, teaching demonstrations, research articles, PowerPoint presentations, and YouTube videos when they had access to the internet, and when they did not, they revisited the downloads to make use of them. In his village, he often had to deal with a lack of internet connectivity; he explained:

> *In our area, there is no guarantee of a good internet connection, and so when I get one, I try to download as many webinar recordings, teaching videos, and reading materials as I can. Later, if I cannot connect to the internet for a few days, I can still learn from the videos that I have downloaded and watched repeatedly. The more I see them again, the more I find and the more I wonder about how I can adapt them in my English classes. I am constrained by the internet, but not stopped in my professional learning.*

Unlike simply adapting to the limitations of infrastructure, Ram's approach is a conscientious use of digital technology to facilitate self-regulated learning. The participants of the study leveraged digital technologies to advance asynchronous, reflective and context-responsive learning, whereas their rural partners in urban settings are more dependent on ongoing online engagement to design professional learning opportunities (Baral, 2022). Like in other resource-constrained settings, this study builds on this scholarship by showing how offline digital learning is an output of teacher agency, not just a reaction to a lack of technology.

Ram demonstrated a few folders, such as Teaching Videos, Webinars, and Lesson Ideas, on his mobile phone during the interview. When he had internet access, the materials would be downloaded, and this had become a routine for his profession. These field observations during interviews are also a reflection of the interview narratives to show that teachers actively reconfigured what they had to achieve continuity in the professional learning process, while the infrastructure was unstable.

Collaborative professional learning using informal peer networks was another key adaptation strategy. Participants regularly shared that working with other English language teachers helped them make up for the lack of institutional support and decreased their sense of isolation. However, the cooperation experienced by the participants was different. After an online training session, Hari was keen to ensure informal teacher discussions were coordinated, while Gita preferred to speak with a smaller group of trusted colleagues before testing out new teaching approaches. The differences indicate a type of collaborative learning that involved various social relations and not professional development in a strictly defined format. Hari explained:

> *Nearby schools have only a few English teachers, and we keep in regular communication. One teacher may attend an online workshop, but other teachers cannot for some reason (internet or school responsibilities); we then share the presentation, discuss the key ideas, and sometimes meet after school to think about how the activities might be implemented in our classrooms. When we learn together, we understand the ideas much better than when we learn alone.*

This finding is strongly related to Vygotsky (1978), who believed that learning takes place as a result of social interaction and collaborative mediation. Instead of operating as individual learners, teachers developed informal communities of learning where the knowledge of the profession was collectively reinterpreted, assessed, and transformed to fit local educational contexts. Collaborative professional learning has also been shown to have a positive effect on teacher professional learning and instructional innovation (Richards & Farrell, 2005). In contrast to better-resourced educational systems in which collaboration is formally arranged, the participants in this study created their own professional learning networks, with little formal support. This finding builds on existing knowledge by revealing that collaboration becomes an adaptive strategy in which teachers make up for structural constraints.

Another key strategy identified as important to digital knowledge for contextually appropriate classroom practice was referred to as reflective practice. Instead of taking teaching concepts online without considering them, participants explained that it was an ongoing process of experimentation, assessment and adjustment in response to students' learning needs. There was great variation in reflective practice, though. While Sita kept written minutes after each class, Gita kept notes regularly after applying them in class and changed her teaching methods based on her notes. This juxtaposition

of experiences shows that reflection took place as both a solitary and a communal activity. Gita reflected:

> *I never use some online training digital teaching idea as it is. When I try out something new in my classroom, I reflect on whether students learned the material, engaged in the activity, and whether it was appropriate for my classroom. When something doesn't work out, I alter it before I use it once more. Reflection is a way for me to learn from things that have gone well and things that have not gone well.*

This narrative illustrates not only learning from practice and learning new things, but also critically reflecting on the relevance of what was learned in the local context. Reflection, from a Sociocultural point of view, is a process of mediation that involves internalisation and transformation of external professional knowledge based on contextual realities. This finding adds to previous studies that showed reflective practice is a tool that enhances teacher learning (Morina et al., 2025; Morze et al., 2022), but extends the notion of how reflection can help teachers in some remote settings become more reflective as they work to close the disconnect between global digital knowledge and local classroom situations.

Participants also emphasised the need for the contextualization of digital materials before using them in the classrooms. While online professional development often included examples of educational systems with advanced technology, teachers were aware that many examples needed significant modification to be relevant in Darchula. Sita explained:

> *Many online training sessions employ scenarios based on schools with computers, projectors or other high-level classroom settings. Our learners are taught in very different circumstances. Hence, I simplify activities, substitute unfamiliar examples with local situations and redesign tasks, which can be carried out using materials available in the classroom. It's only after these changes that the activities are useful for my students.*

These contextualisations of digital resources were not a restriction, but pedagogical decisions that have been made with a high degree of sophistication. They translated and adapted online content for their students' linguistic, cultural, and socioeconomic context instead of copying or duplicating practices that had been created externally. This finding aligns with research that suggests a contextual approach is needed for effective professional development, rather than a straightforward transfer of teaching models (Langset et al., 2018; Li & Zhang, 2025). It also emphasises that the teacher is an active participant in the design of the curriculum, who validates global pedagogical knowledge by operating in the local classroom context.

These adaptive strategies illustrate that teacher agency is more than a desire to learn and is manifested in intentional actions that involve ongoing development

in the face of context. While some past studies have concentrated on technological access or digital competence (Chia et al., 2025; Sharma, 2023), the present findings reveal that continuous professional learning continues to be enabled by the capability of teachers to reorganise the available resources, work with their peers, reflect on digital knowledge, and customise it for local classrooms. The findings in this study, then, refocus attention from technological availability to teacher adaptive capacity as a primary factor that drives meaningful digital professional development in geographically remote settings.

The overall findings reveal that adaptive strategies are more than just ways of adapting to contextual barriers; they are also manifestations of professional agency. Offline learning minimised the reliance on the prevailing situation of poor internet connectivity, collaborative networks helped to make up for inadequate institutional support, reflective learning resulted in the transfer of external knowledge to pedagogically meaningful actions, and contextualisation ensured that external resources were relevant to the students' lived experiences. These practices, as seen through the lens of Vygotsky's (1978) Sociocultural Theory, demonstrate the ways teachers engaged in and utilised digital technologies as mediational tools whilst simultaneously engaging in social interaction, collaboration, and reflective meaning-making processes to facilitate ongoing professional learning. The study highlights that resilient learning for teachers in Darchula was mostly shaped by their ability to adapt to the context and through their collective agency, thus providing a context-sensitive perspective on digital professional learning in resource-constrained contexts, in contrast to studies from urban and semi-urban Nepal, which focus on the adoption of technology and on digital competence.

Conclusion

The findings of this study add to the body of research on digital teacher professional learning by showing that digital technology availability is not enough to ensure meaningful professional learning; rather, technological infrastructure, institutional support, social collaboration, and teacher agency are all crucial aspects to consider in geographically remote settings. It builds on the previous research of English teachers at the secondary level in public schools in Darchula District, Sudurpashchim Province, Nepal, to demonstrate how teachers negotiate issues of structure to enable ongoing professional learning. The results of this study are understood based on Vygotsky's (1978) Sociocultural Theory, which posits that digital technology would perform its role as an effective mediational tool when accompanied by collaborative learning, reflective practice, and pedagogical adaptation that considers the context of learning. The study's contribution to the field of digital professional development is to provide evidence from a resource-constrained setting, which has implications for leveraging digital professional development through better ICT infrastructure, access to reliable internet and electricity, low bandwidth and mobile learning resources, and the development of structured peer learning networks, as well as the development of digital literacy in teacher education programmes.

The study is not statistically generalisable as it focuses on the lived experiences of four purposively selected secondary level English language teachers from public schools in Darchula district and offers an in-depth contextual understanding of the study. It only considers the viewpoints of teachers, and no other school stakeholders such as teacher educators, school leaders, policy makers or students. Further research may explore the differences or similarities among digital professional learning experiences in different provinces, school types, levels of education, and subject specialisations from a qualitative, quantitative, or mixed-methods perspective. There is a need for further research on digital professional development, such as studies of its impact on classroom practice and student learning over time, as well as studies of institutional leadership, professional learning communities, educational policy, and emerging technologies, including the use of artificial intelligence, to inform the development of more inclusive, context-responsive, and sustainable digital professional development systems in Nepal and other resource-constrained contexts.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98955

Ugratara *Jatra*: Aspiring Cultural Identity via Sacrificial Performativity

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Abstract

This study examines Ugratara *Jatra*, a festival celebrated in Dadeldhura District, Nepal, to explore how its sacrificial rituals and performative practices contribute to the construction and expression of the cultural identity of the local community. The animal sacrifice at Ugratara temple during *Mahaasthami,* the eighth day of the *Bada Dashain* festival, is a dominant ritual tradition that strengthens regional cultural identity and promotes collective participation, social unity, and continuity of local cultural legacy, where devotees collectively sacrifice he-buffaloes. This ritual is believed to honor Goddess *Kaali* and mediate relationship between the community and the divine. The multifaceted performativity of this ritual explores how it functions as a mechanism for executing vows and interpreting natural or accidental occurrences via a deeply rooted belief system. To analyze the ritual performances of Ugratara *Jatra*, this study draws on Victor Turner's concept of *social drama* to examine how ritual processes negotiate social tensions, reinforce collective values, and restore communal order. It also employs Richard Schechner's concept of *restored behavior* to interpret sacrificial rituals as culturally transmitted, repeatedly enacted performances through which participants reproduce, reinterpret, and legitimize shared meanings. Together, these theoretical perspectives enable an examination of sacrificial performativity as a dynamic cultural process through which the community negotiates identity, continuity, and social unity amid changing social conditions. Drawing on qualitative data from observations and interviews with practitioners, the findings reveal that the sacrifice is a complex socio-cultural performance that shapes distinct cultural identities, maintains communal harmony, and reveals social reality.

Keywords: Animal sacrifice, performativity, cultural identity, social drama, restored behavior

Introduction

This study examines the sacrificial performativity of animals, especially he-buffaloes, at Ugratara temple to showcase it as a strategic religious-cultural festival for the continuity of regional tradition. On the eighth day of *Bada Dashain*, devotees gather before dawn at the Ugratara temple on *Mahaasthami*. The he-buffaloes are brought

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in to the temple premises as offerings to Goddess *Kaali* after being ritually purified and prayed by the temple priests. The priests conduct the prescribed rituals such as chanting the sacred mantras and making the ceremonial offerings before sacrificing the animals as per the established ritual procedures. The sacrificial rites are followed by prayers and blessings and the sharing of the meat of the sacrifice with the devotees and the members of the community. These successive ritual actions are transmitted through the generations and constitute the core performance of the Ugratara *Jatra*.

Although Ugratara *Jatra* is one of the significant religious-cultural festivals celebrated in the Dadeldhura District, the sacrificial rituals performed during the event have been interpreted mainly in religious and ethnographic contexts. However, the performative aspects of such rituals and their role in the creation of the region's cultural identity have not drawn much research and analysis. It should be noted that in most studies, the emphasis is made on the historical development, religious importance, and cultural values of the festival which, however, neglects a performative perspective. Therefore, this study aims to review Ugratara *Jatra* from the viewpoint of performance studies to explore how the sacrificed rituals shape and express the cultural identity of the local community, as well as to examine the role of performance in such rituals.

Since the study examines the performative role of sacrificial rituals and their impact on the cultural identity of the local community, it is essential to formulate a few key research questions. First, the study attempts to answer how the sacrificial rituals shape the performativity of Ugratara *Jatra.* Second, the research explores how the festival's rituals express the cultural identity of the local community through performance. Third, it analyzes how Turner's *social drama* and Richard Schechner's *restored behavior* concepts interpret the performative aspects of Ugratara *Jatra*. Thus, these research questions help further understand the role of performance in the sacrificial rituals of Ugratara *Jatra.*

The festival of *Mahaasthami* at Ugratara temple in Dadeldhura represents a reflective convergence of ritualized violence, communal identity, and existential security. As the foremost religious festival of Far Western Province, it portrays multifaceted performativity of animal sacrifice, specifically the offering of he-buffaloes to the Goddess, *Kaali,* satisfying her for mediating between human beings and supernatural powers to avoid catastrophe. For the people in that region, especially the Hindus, this annual ritual is not merely a symbolic gesture but a vital meaning-making performance used to guide the devotees the complexities of life. Relating to the vows and sacrificial offerings to the goddesses, practitioners connect the volatile repercussions of natural and accidental happenings seemingly caused by the supernatural forces, reflecting a deep-rooted belief system that explains superpower and its control over fallible creatures of this world.

Bali Jatra, as observed and analyzed by Chitrasen Pasayat (2003) depicts individual skepticism regarding supernatural power that may exist as "one cannot

ignore the fact that, a belief system on power superior to human being that has always played a vital role in society's survival and growth since the time immemorial"(p. 18). This statement implies that believing in the superior power creates strong bonds between people. These communal rituals in the forms of festivals, ceremonies integrate people culturally fostering them face challenges, maintain order, and grow stronger to overcome the disasters people may encounter. People are not likely to believe in the existence of god merely for comfort; their belief system seems to have managed fear, explain the uncertainty and mystery, and create rules for coexistence or living together. This idea can be linked to Schechner's (2003) perspective of *restored behavior* that is enacted via the repetitive act of sacrificial performativity that functions to mitigate communal fear and anxiety and maintain social harmony and balance.

Employing Victor Turner's (1969) concepts of *social drama*, this study argues that the *Mahaasthami* ritual functions as a redressive action, a repair tool for the welfare of the society that revitalizes communitas, a feeling of togetherness, for solidifying regional identity through performativity. The *Mahaashtami* festival at Dadeldhura functions as a redressive action, using symbolic animal sacrifice for the promotion communitas, an egalitarian community bonds that solidifies regional cultural identity via a shared liminal act, a transformative and in-between state. Through the performativity of this social drama, the community resolves disaster, tension and thus restores a distinct identity and sorts out various social, cultural, and religious issues for maintaining social balance.

Methods and Procedures

` The study adopts a qualitative research design informed by ethnographic inquiry to explore the complex relationship between animal sacrifice, performativity and identity formation in Dadeldhura. This study uses the concept of *social drama* by Victor Turner as an analytical tool for the analysis of the way ritual performance reflects the processes of social conflict, negotiation and reintegration in the community. It also draws on Richard Schechner's idea of *restored behavior*, which views performance as culturally learned and repeatedly performed behavior that acquires meaning through its repetition and re-enactment. These theoretical perspectives inform the analysis of sacrificial performativity in Ugratara *Jatra* and its function in articulating cultural identity and collective ritual practice. Victor Turner also sees *liminality* as the transitional phase of a ritual in which participants are temporarily outside their normal social roles and hierarchies and experience a sense of equality and collective experience before returning to everyday social life. This idea offers a useful model in thinking about the ritual dynamics of Ugratara *Jatra.*

Study Site and Context

The researcher selected the Ugratara temple as study site in Dadeldhura district of Far Western Province, Nepal, to conduct this research work. It serves as the primary site

for the *Mahaasthami* rituals, the temple acts as a performative arena where regional identity is publicly enacted via sacrificial performativity.

Data Collection Methods

The primary data for this research paper were garnered via three distinct methods. One method was participant observation. The researcher attended Ugratara *Jatra* as *Mahaasthami* festival to observe the ritualized sacrifice of he-buffaloes. This event allowed for the documentation of the social drama (Turner, 1982), extending and focusing on the sensory details, the movement and sensitization of the crowds, and the transitions into liminal states during the climax of the sacrificial performativity. Another method was interviews. To understand the internalized belief system and the logic of survival strategies, the researcher studied the interviews of the local senior citizens to carry out the project. These included ritual performers (priests and those performing the sacrifice), local experts on Far Western culture, and devotees who were executing personal vows. The next method was archival and textual review. To contextualize the performance events, historical records and previous scholarly works on Nepali ritual traditions, the researcher reviewed to compare contemporary practices with ancestral templates.

Data Analysis

Thematically analyzed data were garnered from the site in the form of field notes and interview transcriptions. The researcher categorized the data into three primary themes: the mechanics of ritual performativity, the markers of regional and social identity, and the function of sacrifice as a survival strategy for communal and existential security. Triangulating observations with interview data, this paper promotes a comprehensive understanding of the performative nature of the Ugratara *Jatra* as the *Mahaasthami* festival.

Results and Discussion

On *Mahaasthami*, devotees of Dadeldhura and its surrounding areas go for the ritual sacrifice of he-buffaloes as the offering to Goddess *Kaali* at the Ugratara temple. The ritual is performed by temple priests with active participation of devotees and the members of the community, following prescribed religious practices and communal ceremonies. These repeated ritual actions turn the sacrifice into a public performance that reaffirms shared beliefs, collective participation and cultural traditions. The ritual is far from a static religious custom; it is a dynamic form of sacrificial performativity, through which the community expresses and negotiates its regional cultural identity.

Ugratara Temple is located nearly four kilometers north from district headquarter of Dadeldhura. It is constructed in pagoda style as shown in Fig. 1.

Figure 1

Ugratara Temple



Ugratara is believed to be the goddess of fertility, protection, power, success and wealth. The main festivals celebrated are *Mahaasthami* of *Navratri, Deijant* of *Kartik Sukla Purnima* and *Chaitra Ashtami*. Each of them incorporates continuation of conventional religious rituals and performance. The ritual sequence at Ugratara is an example of what Schechner (2003) calls *restored behavior*, where culturally learned actions are performed repeatedly according to conventions. Interviews with temple priests and community practitioners suggest that the ritual is conducted in a prescribed sequence, beginning with ritual purification and prayers, followed by ceremonial sacrifice of he-buffaloes and concluding with distribution of sacrificial meat. The repetition of these ritual practices over many generations makes individual acts into a performance that is recognized by the community, in which religious beliefs, cultural values and communal identity are constantly re-affirmed.

This repetition ensures that the legendary emergence of the Goddess is perpetually made present, allowing the community to remake itself every *Mahaasthami* and reinforcing the idea that identity is an active process of doing rather than a static state of being (Butler, 2006). This implies that the community acts out their traditions to keep their tradition alive and to constantly define who they are together, showing that cultural identity is built through actions.

The observations at the Ugratara temple show Turners (1969) idea of *liminality*. At the height of the ritual people from different social groups take part in the same acts of worship and sacrifice briefly putting aside usual social differences. This part of the ritual creates a feeling of working together and emotional support strengthening the connections, between people through a shared religious moment. The most visible expression of this community occurs during the collective witnessing of the event, as individual boundaries blur into one religious-cultural community. Furthermore, the sacrifice is the redressive phase of a larger social drama (Turner, 1982). Buffaloes are

sacrificed by devotees in honor of vows taken in personal or community crises. The sacrifice thus offers a performative response to these anxieties, attributing natural and accidental events to a divine ruling power, and converting uncertainty into collective spiritual security.

Likewise, the practice of sacrifice reinforces the notion that solidified belief systems are important for the survival and expansion of a society (Pasayat, 2003, p. 18). In the case of Ugratara, this survival is multi-faceted, as it is both the cultural survival of regional traditions, and the existential survival of practitioners. Participants view the sacrifice as an act of pleasing the Goddess and preventing future calamities, establishing a symbolic contract where the sacrifice of the animal is a survival strategy to ensure divine protection. Also, the distribution of the slaughtered meat among some groups upholds the traditional social fabric and interdependence in the locality. Moreover, the Ugratara *Jatra* at *Mahaasthami* functions as a theatrical display of regional identity, using the specific ritual of buffalo sacrifice denotes symbolic anchor that distinguishes the Far Western Province and creates a lasting sense of communal togetherness.

Prominent attribution to perpetuating tradition in order to please the deities rather than ascribing importance to human efforts through the intervention of modern science to achieve the goal cannot be out ruled easily terming it unreasonable. The general attitude is resembled in the remark of Schechner (2002), as he asserts "performances are ritualized…Rituals emphasize efficacy: healing the sick ...forming and cementing social relations, maintaining (or overthrowing) the status quo, remembering the past, propitiating the gods, exorcising the demonic, maintaining cosmic order" (p.613). The performance conducted as chain of activities in slaughtering the animal at temple basically aspires favorable outcome defeating evil. People's belief on superior power may play vital role to direct and shape their activities even stimulating them for sacrifice.

The perpetuating psyche of the locality may lead them to shape their activities more in relation to supreme power rather than utilizing the faculty of reasoning in line with natural science that focus on cause and effect since they are continuously motivated to follow the rule of divine instead. According to Hindu disciple of the locality, the extreme interrogation to the existence of divine power and post-modernist skepticism on it can be refuted through the presentation of observable surprising phenomenon like protection from evil during the pandemic, enabling the barren lady to be pregnant, bringing success in and curing the fatal illness. People participate in the festivals of temples worshipping either on the basis of the calculation of *tithi* in pursuant to the locally approved and practiced *Toyanath Panchang* or customary execution focusing the counting of days commencing from the first day of the particular *pakshya*s. They worship with determined customary rituals directed by *pujari* along with performance of the recognized and authorized participants to maintain peace and order both in the community, in individual and family life. In this article the researcher encompasses the

animal sacrifice in connection with the theoretical perspective of performativity and identity in relation to celebration of *Mahaasthami* of Ugratara temple.

Articulating the local point of view, Goddess Ugratara is granted to be miraculous incarnation, though there is dearth in the availability of literature offering concrete evidence. The failure in expected result even with the rigorous attempt of the subject along with appropriate manipulation may be interpreted in relation to disregard to the eternal power of the Goddess, whereas the vows of animal sacrifice are ascertained to bring success. The expectations for the fulfillment of desires motivate the people to the persistence practice of traditional rituals and performativity. Therefore, making the narration of the mentioned Goddess explicitly, the exposure of the auspicious festivals along with the performances and rituals conducted within and beyond the premise of Ugratara temple is considered to be relevant.

Although, much cannot be explicated on the historicity of festivals and relevant tradition, Tiwari (2001) remarked that the current generation exists to "play its role in the cycle of time" and noted that he does not agree that "traditions are static or that festivities are still enacted entirely as they had when they first started" (p. 10). While communal celebrations are periodically organized as mechanisms for sociocultural renewal, they may also serve latent interests or political agendas, making it difficult to establish an authentic point of origin. There is possibility of certain modification on the way of implementation in harmony with time and place. The origin of the traditions and festivals is not accorded as the matter of greater significance in comparison with performativity.

Besides other annual festivals, *Mahaasthami* exhibits one peculiarity of performativity with animal sacrifice. However, goddesses Ugratara is considered to be the incarnation of *Bhagwati* and people believe that she does not permit animal sacrifice, within the premise of the temple, there is the holy shrine of *Mahakali* that prefers animal sacrifice. Mostly, he buffalos are sacrificed at the site on the very day of *Mahaasthami* of *Navratri*. The connection of sacrificing the he buffalo in Hindu religion has acquired rationalization in pursuant to the provision of the *Markandeya Purana* (1904), Canto LXXXII under the title of 'Slaughter of the army of the *Asura Mahisha* portrays:

> *The gods were defeated in great battle formerly by the Asuras and driven from heaven, and the Asura Mahisha became supreme. All the gods gave forth their special energies, which combined and formed the goddess C'andika. They gave her their weapons, and she fought with and destroyed the Asuras.* (p. 473)

The destructive and arbitrary performance of *Mahisha* has broken peace and order in the society and even the powerful gods and goddesses are compelled to bear injustice. Such act of cruelty might have led the gods to design a particular strategy to destroy the Asuras. They have empowered the goddess *C'andika* with necessary weapons and strengths that has enabled her to kill *Mahisha*. From the day the tradition

of sacrifice of the animal has been initiated as a symbol of victory of good over evil along with experiencing expected results pleasing the goddesses through sacrifice. The instance has been extended to the connection of benevolent consequences in community and individual life.

The interpretation of and association to sacrifice consists multiplicity, Chitrasen Pasayat (1998) in his article *Bali Jatra* of Sonepur opines ". . . the sacrifice brings gain to the sacrificers and their community. What is sacrificed loses itself by being slain. The loss of the sacrificed victim is somehow seen as bringing gain to sacrificers" (p. 19). The quote represents the general way of thinking of people that dare to neither be extreme materialistic nor possess the responsibility to respect the rights of animals rather prefer slaughter animals to satisfy deities. It gives validity to the perpetuation of tradition that accepts to slain animals safeguarding the misfortune against an individual or community and brings better result as well. It is widely recognized that the loss to the life of metaphorically regarded *Mahisashur*, he buffalo, may bestow longevity, prosperity and success to ones or the entire community of the persons that vow. The affirmation to offering animal sacrifice to get favorable result or success is still popular and getting expansion in Far west province including at Ugratara Temple.

As Ray (2017) argues "Nothing can remain purely religious in its rendition" (p. 1129). The religious events do not exclude expanding interpretation in the context. It allows individual participation in various purposes that may be more or less imposed by the particular society. As the author tries to connect many activities with *Durga Puja*, there are many perspectives of the festivals to observe. It is restricted to purely religious purpose. Similarly, there is abundance in perspectives of the animal sacrifice conducted at Ugratara Temple on occasion of *Mahaasthami*. The performance commences at the courtyard of the person that has made a vow to offer sacrifice of the he buffalo, representation of *Mahisashur*. The act incorporates certain rituals including sprinkling water on the body of the animal with an idea to purify, putting *tika* on the forehead, worshipping the entire body and wearing garland on the neck of the he buffalo selected for sacrifice along with the recitation of *mantras* by the priest.

The sacrifice related activities incorporate the requirement of performance as explicated by Schechner (2020), "Performance mark identities, bend time, reshape and adorn the body and tell the stories" (p. 28). The deed resumes differentiated identity created on the ground of birth in enlisted family. Mostly, the elites are likely to offer animal sacrifice since it appears to be expensive and present evidences for their dominance over the poor. It indicates that the dominance overtly or covertly pervades not only in political scenario, but also in religious or cultural practices. The people joining the procession from the courtyard to the temple until the formal accomplishment of sacrifice appears to be subjugated since they are participating with the temporary purpose of pleasure and with the ultimate one of the expectations of winning support from the sacrifice in case of facing potential difficulty. The procession accompanies musical instruments exclusively played by the *dalits* are expected to create sensation to

both the victim and participants with their acquired skills, yet they do not deserve the entrance to holy shrine only because of the taboos administered to *dalit* community. The discrimination can be noticed in the removal of carcass of sacrificed animal and eating the meat as blessing of goddess as these all are assigned to *Kaini,* the *dalit* caste recognized as untouchable and the skilled maker of bamboo baskets.

The person comprising the family members that offer sacrifice join the rituals expecting to gain blessing or fulfillment of presaged deeds and avoiding the occurrence of potential sinister. The rituals are accompanied with *damaha* and *narshingha* traditional types of musical instruments along with shouting hailing the goddess *Ugratara, Mahakali* and local deities. The participants attending the procession rush and slap the he buffaloes with extreme excitement.

However, they desire to gratify the goddess through offering, the participants engage in delight and enthusiasm rather than the consolidation of pious purpose of the main agent on the way to temple. Their intention is not exclusively limited to perform religious act, but also to resume the hierarchy in positioning unwillingly expressing their approval to entrenched belief system. The arrival of the procession in the territory of temple is made auspicious with the reception by *dhami* and *pujari.* The scrutiny of the selected he buffalo and the intention of the person making spiritual offering undergoes testing during the performance of sacrifice rituals. The quality of unfitness of animal and mal-intention of the person fail to conduct further rituals and performance. In certain situation, the collective praying urging to approve leads to acceptance with the manifestation of shaking head by the animal, but lacking the same impels the sacrificer to offer the appropriate and qualitative one with good intention during the next festival of *Mahaasthami*.



(Kanchanpur Channel, 2018) Screenshot from *Ugratara Jatra, Dadeldhura Video 1*

Video 1*: Animal Sacrifice Performance*

However, the pros and cons may prevail concerning to animal sacrifice, National Penal Code 2017 has legitimized the tradition of sacrificing animal or birds. In the exceptional clause of the section 291 states ". . . Provided that nothing shall bar the killing of any animal or bird in a fair, feast, exhibition or event or place where there is a tradition of slaughtering animals or birds being practiced from time immemorial" (p.190). However, the constitution has approved Nepal as a secular country, the code has prohibited only the cruelty against and killing of the animals or birds at public places but legitimized the traditional slaughtering mostly practiced in Hindu religion. It may be interpreted in terms of preserving the dominant religious identity.

Goffman (1959) has used performance "to refer to all the capacity of an individual which occurs during a period marked by his continuous presence before a particular set of observers and which has some influence on the observers" (p. 13). The performer imposes certain influence to the spectators in his/her continuous presence when he tries to use full capacity. It can be noticed during the sacrificing or slaughtering the offered animal with conventional rituals that follows the pulling away of the carcass and as taking home as the oblation of goddess. The person that slaughters the animal tries to impress the audience with his skillful act to kill the animal with a single attempt. He conjures all his might at the moment in order to win the heart of the observers through commendation. The actual act of sacrifice at the temple may be attributed to variation of interpretation. The success of the slaughterer follows clapping, shouting with appreciation along with hailing goddess *Mahakali* and *Ugratara*, whereas his failure on single attempt to kill the victim leads his embarrassment through condemnation. Though, there is neither authentic inscription nor available literature concerning the justification of animal sacrifice at the Ugratara temple, the continuation may be attributed to appeasing the aforementioned Goddess along with religious attachment to the practice.

The people belonging to *dalit* community addressed as *Kaini*' are predetermined to take away the carcass and use the material for edible purpose. Though, they all participate in performance, the obvious discrimination on the ground of caste is administered. As the people belonging to *Kshyatria* called *Shanki* involve in the act of slaughtering attributed as the act of bravery appropriate to higher caste, but they abstain themselves from cleaning the site and eating the meat qualifying that as impure and assign these to *dalits*. The same is not true if the case is the sacrifice of the he goats. Its meat is eaten as oblation of goddess by the person that has offered sacrifice, whereas the meat of the he buffalo is referred as impure and handed over to *dalits*.

The social division is marked from the very beginning of the act of making vows to sacrifice, during the procession, sacrificing and finally using the meat in connection with identity. The tradition may have historical foundation on identity. Baker et al. (2011) have quoted Gleason (1983: 918) to define identity as "In one sense, identity . . . comes from within, is fixed and stable . . . they talk about 'who we really are,'" and in other, "identity can be acquired in that it is a conscious or internalized adoption of socially imposed or socially constructed roles" (p. 58). It proposes variety of identity; one is perceived by the individual self that is fixed and the other gained through social norms and values. However, the *dalits* are not interested in involving the degraded and disrespected actions, their social identity compels them to do so. The authors also refer Woodward (1997, pp.1–2) who says "identity 'gives us an idea of who we are and of how we relate to others and to the world in which we live" (p. 58). The individuals compare themselves with others concerning the position in society. That may be interpreted in terms of holding and lacking power.

In the similar vein, Norton (1997) puts forward his view on the subject, "I use the term identity to refer to how people understand their relationship to the world, how that relationship is constructed across time and space, and how people understand their possibilities for the future" (p. 410). Our society has formed and accepted stratification not on the basis of the capacity to perform, but on the basis of birth. People evaluate their current position comparing with others within and beyond the society, and historic situation to perceive or recognize them. It resides on differentiation and efforts made to shape the future. Gee(2011) states 'Situated identities', "different identities or social positions we enact and recognize in different settings" (p. 12) and further elaborates "for the multiple identities we take on in different practices and contexts and would use the term core identity for whatever continuous and relatively fixed sense of self underlies our contextually shifting multiple identities" (p. 39). A person may have different identity determined on the basis of the contexts referred. The *dalits* are the co-participants and significant entity of the procession, the segregation is concretized during and after slaughtering. The failure in transformation of *dalits'* identity can be noticed obviously even in the holy acts.

Although the tradition is connected to religious belief system, there are many contrary views that prohibit the tradition of slaughtering. The adherents of animal rights oppose it. Luke (2007) portrays his opinion on stopping animal sacrifices "Sacrifice is not a morally neutral act. . . . animals, like us, struggle against death, . . . in order to sacrifice animals our inclinations towards protection and against inflicting harm must be managed, quelled, or overridden" (p 21). The act of sacrifice needs abandoned through the alternative measures since it does not sound moral. Animal sacrifice in the name of satisfying the deities along with the connection of creating and maintaining safer environment for human beings must be avoided. The alternatives are also in practice to some extent, for example, the tradition of using coconut, cucumbers and gourds for the same purpose at home. The people that possess religious conviction regarding sacrifice do not seem convinced on the matter so far.

Conclusion

The findings of this study indicate that human sacrifice during *Mahaasthami* at the Ugratara *Jatra* is a significant ritualistic performance that embodies regional cultural identity and communal participation. Interpreted through the frameworks of *social drama* by Victor Turner and *restored behavior* by Richard Schechner, the ritual is culturally transmitted performance that effectively integrates historical mythical and religious beliefs and practices into present society. This study confirms its essentiality as a ritual that is performed to appease religious beliefs and strengthen communal cultural-historical continuity. Furthermore, this paper demonstrates the connection between ritual performance, cultural identity, and legality. The fact that the law recognizes the validity of some religious practices, including animal sacrifice during Ugratara *Jatra*, indicates the significance of such rites in regional culture. Nevertheless, this study does not confirm the assumption that legality is the pivotal factor in the continuous performance of the ritual. Instead, the researcher identified the

community's engagement in the preservation of this practice as the most significant factor in its continuation.

This study also addresses the ethical concerns related to animal sacrifice and indicates its controversial nature. Nevertheless, following the arguments of this study, such ethical concerns may be resolved by engaging in ritualistic substitutions for animals, such as coconuts, gourds, cucumbers, and other religious symbols, if possible. Overall, the study proves that Ugratara *Jatra* is a vital ritualistic performance that effectively channels cultural-historical continuity, religious faith, and communal participation. Overall, the present study indicates the crucial role of ritual performance in satisfying religious and cultural beliefs and promoting social cohesion. As a result, this paper also contributes to performance studies by demonstrating that sacrificial rituals are dynamic forms of performance that continuously acquire new meanings within different social, cultural, and legal contexts.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98957

Critical Reflection as a Pedagogical Process for Teacher Professional Development through Participatory Action Research

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Abstract

Reflective practice is widely promoted in teacher professional development and theorized as an individual and technical activity with limited pedagogical process and consequences. This study conceptualizes critical reflection as a pedagogical process rooted within collaborative and participatory professional learning. Drawing on a qualitative participatory action research, this study was conducted with basic and secondary level school teachers in the institutional school located in Koshi Province, Nepal. It examines how critical reflection considers teachers' curriculum engagement, pedagogical improvement, and professional agency through collaborative engagement. Data were collected through focus group discussions, semi-structured interviews, and reflective notes and analyzed through narrative analysis. The findings show that critical reflection fosters reflective engagement for curriculum understanding, collaborative commitment to exploring innovative pedagogical practices, shifts from traditional to student-centered teaching-learning, and robust connections between students' learning and teachers'' professional growth. The study extends transformative learning theory by demonstrating critical reflection as a dialogic and socially mediated process for teachers' professional development. The findings suggest that teachers' professional learning can be strengthened when critical reflection is positioned as a pedagogical process rather than technical instrument.

Keywords: Critical reflection, teacher professional development, pedagogical improvement, professional agency

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Introduction

Critical reflection has increasingly been acknowledged as a fundamental pedagogical process which encourages teachers to critically examine their professional beliefs, values, perspectives, and practices to reconstruct professional knowledge and skills to improve classroom practices (Schon, 1983; Brookfield, 2017). It enables teachers to transform their daily classroom experiences into professional learning through self-questioning, inquiry, dialogue, and evidence-based decision making. Schon (1983) forwarded the concept of reflection-in-action and reflection-on-action. He argued that teachers develop professional knowledge through continuous engagement with uncertain and complex classroom situations rather routine implementation of same instructional approach. Critical reflection act as a catalyst for continuous Teachers' Professional Development (TPD) through transformative learning which engages teachers to reevaluates deeply held professional assumptions and reconstruct new frame of references (Mezirow, 1991). TPD strengthen teachers' professional learning by enhancing their curriculum understanding, pedagogical competencies, instructional effectiveness, and students' learning outcomes (Opfer & Pedder, 2011). Continuous teacher professional development includes both formal and informal learning which enhances their knowledge, skills, values, and professional identity. It inspires teacher to refine their pedagogical practices, collaborate with colleagues, and cultivate the habit of critical inquiry for lifelong learning (Poudel, 2022). However, professional development becomes meaningful when teachers critically examine their professional assumptions, beliefs, and instructional practices from multiple perspectives i.e., self, colleagues, students, and other educational stakeholders (Brookfield, 2017; Larrivee, 2000). Critical reflection inspires teachers to question, generate, and transform professional knowledge and skills conceptualizing it as a pedagogical process.

Although concerned stakeholders invested more on teacher professional development, empirical evidences showed that knowledge and skills acquired in workshops and training does not automatically translate into meaningful classroom practices (Opfer & Pedder, 2007; Timperley et al., 2007). However, professional learning become effective when teachers engage in critical examination of their everyday classroom teaching, deep-rooted professional assumptions and beliefs (Brrokfield, 2017; Schon, 1983). It makes critical reflection as a pedagogical process that enables teachers to connect professional knowledge and skills with sociocultural realities of classrooms. The pedagogical strategies become more effective when teachers reflect critically on their daily practices and assumptions. Reflective practices provide opportunities for teachers to examine their long-held beliefs, assumptions, and practices through self-evaluation and collaborative dialogue (Davis & McDonald, 2019). Exploring their own and colleagues' practices through different lenses teachers improve their pedagogical approaches.

Collaborative critical reflection enhances teachers' pedagogical decision-making and adaptability. It enables them to challenges assumptions, negotiate meanings,

and co-construct context-responsive pedagogical knowledge and skills (Segal, 2024). Critical inquiries enhance teachers' self-evaluation, self-reflection, and skills to identify learners' needs (Poudel, 2022). Collaborative reflective inquires develop teachers' deeper professional understanding through dialogue, colleagues critiques, shared interpretation of classroom practices. Critical reflection and professional development are interconnected to improve teachers' knowledge, skills, confidence, and expertise. The integration of these two makes professional development more contextual, collaborative, and appropriate to solve real-world problems (Pant et al., 2020). The evolving concept of critical reflection has challenged the assumptions that professional development occurs primarily from structured workshops and short-term training. Therefore, reflective practices should be understood as collaborative pedagogical process where teachers deconstruct, reconstruct, and transform professional values and practices an iterative process of plan, implement, and reflect.

The global discourse on reflective inquiry influences teachers' professional development practices in Nepal. The guidelines and polices advocated for continuous professional development, reflective practice, classroom-based inquiry, context-based pedagogies, and competency-based learning for educational improvement (MoEST, 2019; 2022). It emphasizes school based collaborated professional learning rooted in teachers' everyday classroom practices instead of conventional training models. The revised teachers' competency framework highlighted reflective practice, classroom inquiry, collaboration and continuous learning as core professional competencies. It aims to strengthen teachers' capacity to critically examine and improve pedagogical practices through the process of critical inquiry and self-reflection. However, teacher professional development programs limited in short-term trainings, externally prescribed contents, and fragmented which provided less spaces for collaborative inquiry (Khanal, 2022). It makes professional development as administrative requirement instead of continuous professional growth for sustained pedagogical transformation. Collaborative reflection improves teachers' professional agency and shared responsibility for pedagogical improvement (Rana et al., 2022; Subedi & Ghaju, 2022). It shows that teacher as active knowledge creators instead of informer. Though it explore the importance of action research for professional development hardly examine how critical reflection works as pedagogical process.

In Current educational practices, Participatory Action Research (PAR) is recognized as a good approach for teachers' professional development. It promotes collaboration, democratic participation, and context-responsive pedagogical innovation (Kemmis et al., 2014). However, we hardly find the integration of critical reflection and PAR to develop, examine, and reconstruct professional knowledge and skills by conceptualizing critical reflection as pedagogical process. The studies (Pokhrel & Behera, 2016; Poudel, 2022) showed that many TPD programs in Nepal are designed without considering, collaborating, and identifying the needs of real classroom issues. It failed to translate the knowledge, skills, and values acquired by teachers during

trainings/workshop into meaningful classroom practices. It shows the needs to engage teachers in self-questioning on their classroom experiences, reconstruct professional practices, and transform pedagogies.

The purpose of this study is to explore how critical reflection function as a pedagogical process for teacher professional development by engaging teachers as co-researchers in questioning their pedagogical practices, designing student-engaged pedagogies, implementing them in classrooms, and reflecting for further improvement. It focuses to examine how teachers collaboratively engage in reflective inquiry, negotiate professional learning, and reconstruct pedagogical practices through iterative cycles of plan, action, observation, and reflection within the school context in Nepal. Thus, this study dedicates to answer the emerging question: How do teachers employ critical reflection as a pedagogical process for professional development through PAR? Critically reflecting on classroom experiences and practices helps teachers to innovate their instructional approaches to meet the needs of learners. The practice of self-reflection and critical inquiry make teachers self-regulated and autonomous, which is essential to improve their pedagogical strategies. This study involves the teachers in participatory professional development from one institutional school only. It focuses on teachers' experiences on critical reflection and collaborative professional learning instead of measuring the effectiveness of teachers' professional development programs and improvement in students' learning performances.

Literature Review

Critical Reflection as a Pedagogical Process

Critical reflection is "the sustained and intentional process of identifying and checking the accuracy and validity of our teaching assumptions" (Brookfield, 2017, p. 3). It develops teachers' professional competencies as they evaluate their activities and consequences related to classroom teaching (Smith, 2011). It enhances teachers' knowledge and skills as they make plans based on their experiences at their own pace and taste. Critical reflection enhances their professionalism and makes them capable of enduring a condition of mental unrest and disturbance (Lysberg & Ronning, 2021). It helps to solve problems by describing teachers' everyday classroom challenges in logical sequences. Schon (1983) defined reflection as a cognitive process to analyze teaching perspectives and practices to improve professional judgment. However, critical reflection is a socially mediated and transformative pedagogical process which enables teachers to examine assumptions and negotiate meanings for context-based professional learning (Brookfield, 2000). This practice helps them to review different approaches to knowledge construction based on the context. Critical self-reflection and dialectical discourse of teachers help to set the transformation (Mezirow, 1997) in teaching and learning. It enables teachers to assess the source, nature, and consequences of their habits of mind in the profession (Larrivee, 2000). It is instrumental to change our deep-rooted assumptions and beliefs.

Critical reflection changes teachers' professional engagement and act as an active pedagogical process. It supports them to re-conceptualize teaching approaches, interact with students, and modify teaching strategies (Lefebvre et al., 2023). It helps teachers to assess teaching experiences and instructional plans to improve students learning achievements. Reflection is not an isolated cognitive exercise but a sustained engagement with practice, theory integration, and continuous professional development. Teledahl et al. (2025) argued that collaborative inquiry on teachers' professional practices is effective for professional development rather than individual questioning. However, it is necessary to explore how critical reflection activates pedagogically to enhance teachers' professional development.

Participatory Action Research for Teacher Professional Development

The relationship between Participatory Action Research (PAR) and TPD is emerging in the educational research and practices. PAR is a collaborative pedagogical approach that engages teachers to generate context-based professional knowledge and skills to improve their instructional practices (Kemmis & McTaggart, 2014). It focuses on transforming teachers' professional beliefs and practices by empowering them through collaborative involvement and engagement for their emancipation (Upreti et al., 2024). It acknowledges teachers as active co-creators of knowledge and professional development as ongoing process of collaborative critical inquiry. PAR aims to bring practical improvement, innovative change (Cook, 2004), and development in teachers' understanding on professional growth. In PAR teachers as co-researchers critically examine the social, cultural, and political dimensions of their professional beliefs and pedagogical practices (Brookfield, 2017). It enables teachers' to address real classroom challenges by promoting collaboration, evidence-based decision-making, and innovative pedagogical practices (Borozan et al., 2025). However, transformative potential of PAR depends upon the participatory planning, collective implementation, and collaborative reflection rather than procedural completion of research cycles.

TPD is a way to increase teachers' accountability, enhance their values, and encourage them to participate in professional debates, thereby developing flexibility and informed decision-making skills (Ghimire, 2019). Teachers update their professional skills and values by attending various trainings, seminars, and workshops. TPD is a collaborative and continuing course grounded on a constructivist approach (Pokhrel & Behera, 2016). It involves teachers in all phases, from designing programs or training schedules to implementing outcomes in the classroom. According to Poudel (2022), TPD is a basis for meaningful teaching and learning that offers both opportunities and challenges for teachers. It enhances teachers' competencies by analyzing their strengths and weaknesses through the integration of art-based and technology-based pedagogies to make classrooms engaging and motivating (Pant et al., 2020). Integration of critical reflection with TPD offer teachers professional autonomy and transformative practices, enhancing their knowledge, skills, and attitudes (Kennedy, 2005) through inner realization. According to Johnson (2019), PAR is an effective

and efficient method for developing teachers' professionalism by involving them in new strategies and practices. Although teachers update and refresh their professional knowledge and skills in trainings and workshops, they often find it challenging to systematically apply in real classroom settings (Ghimire, 2019; Khanal, 2022, Pokhrel & Behera, 2016, Poudel, 2022; Reynolds & Rose, 2006). In such condition, we needs collaborative and context-based professional development where teachers engage together to find classroom needs, develop plans, implement pedagogical strategies, and reflect critically on their beliefs and practices by refining them through iterative practices (Darling-Hammond et al., 2017). Thus, it is necessary to incorporate critical reflection as a pedagogical process through participatory and collaborative approach for the professional development of teachers.

Transformative Learning Theory

Transformative learning theory focuses on bringing deep changes in teachers' existing beliefs, assumptions, and practices through critical self-reflection and self-questioning (Mezirow, 2003). It inspires teachers to scrutinize their own beliefs, assumptions, and experiences, which motivates them to transform their perspectives (Misawa, 2024). It prompts teachers to go beyond acquiring new professional knowledge and skills, leading to a substantial change in their understanding of the social, cultural, and power dynamics of the classroom. Being transformative learners, teachers develop a new frame of reference by integrating experiences with the context, which is more inclusive, discriminating, and self-reflective (Mezirow, 1997). It motivates teachers to engage in deep self-reflection and critical analysis of their teaching and learning beliefs and practices. It prepares them to incorporate the dialogue and discourse into the learning process. It encourages school leaders and teachers to assess different sources for effective professional practices (Raut & Pant, 2024). It promotes teachers to adopt the process of unlearning as they examine and question their professional assumptions and perspectives. It also develops their critical consciousness and fosters cognitive, affective, and psychomotor domains for holistic learning. As a dialogic learning, they seek suitability for when and where their new learning fits to meet the needs of the classroom and professional upgradation.

Methods and Procedures

PAR as a Research Methodology

This study employed PAR, which is a collaborative, democratic, and inclusive approach that encourages shared ownership among research participants (Upreti et al., 2024). PAR enables co-researchers to understand professional development as collaborative critical process in which they construct knowledge and develop context-responsive pedagogical strategies (Kemmis & McTaggart, 2014). It is a practical approach to upgrade the instructional practices by engaging teachers as co-researchers in collaboratively identifying classroom issues, design interventions, implement pedagogical plans, observe classroom performance, and critically reflect on practices

in iterative cycles of inquiry. PAR positions research participants as active agents in constructing contextually relevant professional knowledge through collaborative inquiry and informed action (McNiff & Whitehead, 2002) for their professional agency and empowerment. In this way, PAR functions as the pedagogical process and promotes a collaborative learning culture by fostering autonomy, collegial dialogue, and meaningful engagement.

This PAR was conducted at the institutional school located in Koshi Province, Nepal from 10 March to 12 August 2024 in two cycles. The first cycle of this PAR was conducted from 10 March to 03 June 2024 and second cycle from 04 June to 12 August 2024. At first, the first author conducted meetings with eighteen teachers, of whom seven were female and eleven were male. They were teaching at basic (Grade 4 to 8) and secondary (grade 9 and 10) levels. During these meetings, the lead researcher shared the concept, application, and implications of this study in relation to their professional development and students' learning. He proposed them to become a part of this study, as it is an opportunity for collaborative professional development in the continuous process of learning, unlearning, and relearning. They expressed willingness to be a part of this research and shared their curiosity to learn new pedagogical approaches. After regular discussion and dialogue twelve teachers-five female and seven male were joined this PAR as co-researchers and six teachers-two female and four male participated as research participants. All twelve co-researchers and the lead researcher engaged collaboratively to identify the areas of improvement, design the plan, implement new strategies, and reflect experiences.

The field texts were generated through interviews, focus group discussions, and reflective notes. The reflective lens were used to understand co-researchers' professional lives and practices of critical reflection as pedagogical process. Narrative analysis was used to understand and making meaning of experience through conversations, dialogue, and participation in the ongoing lives of research participants (Clandinin & Caine, 2008). The first author carefully analyzed his and co-researchers' reflective notes, and conversation without omitting any words and clues at first. Being a responsible researcher, he relates the field texts with context to make the meaning (Riessman, 2008). Narrative analysis of each event helped to develop the meanings from actions and reflections. In this PAR, co-researchers' stories are central; narrative writing enabled us to analyze meaning, context, and power dynamics (Richardson, 2000). Their narratives provided rich and reflexive data to describe human actions in subjective manner (Polkinghorne, 1995). In this study, the first author contributed as lead researcher collaboratively engaging with co-researchers and second author provided the mentorship and guidance.

The data were generated through prolonged engagement with co-researchers and applied different techniques such as interviews, FGDs, reflective notes, theoretical, thematic, and empirical triangulation to maintain the trustworthiness. The use of collaborative critical inquiry enabled to construct context-responsive pedagogies

through co-researchers' lived experiences (Hamati-Ataya, 2020). We adopted praxis by continuously reflecting and acting for pedagogical innovation. Pedagogical thoughtfulness reveals our consciousness and awareness of classroom teaching and learning. We obtained prior consent from the school and teachers and used pseudonyms to ensure confidentiality. All co-researchers and research participants were duly respected and valued equally with the right to quit their participation at any stage and activities (Davison et al., 2022). We analyze our assumptions, listen to different perspectives with patience, value each other's ideas and opinions, and respect diverse voices for pedagogical improvement.

Results

The stories of co-researchers were used to describe their actions for professional development. Based on the narrative analysis, the following four themes were derived: collaborative reflection for curriculum understanding, collaboration for exploration of innovative pedagogies, shift from traditional to student-centered learning, and connecting teachers' professional learning with students' performance.

Collaborative Reflection for Curriculum Understanding

The collaborative need analysis made us to conduct a participatory workshop in which, we formed the groups based on the subjects. We collaboratively discussed on the curriculum including allocated working hours, learning outcomes, and content given in the curriculum by aligning with the school's working hours. Each participant interacted and discussed actively in their respective group and prepared a brief presentation of their discussion on the worksheet and chart papers. Each group presented in their turn and other group members provided feedback. The collaborative workshop seems very productive to improve teachers' pedagogical knowledge and skills. One of the participants, Ivana shared:

> *I found the workshop to be very useful. It will help me to develop my personal as well as professional skills. I understand the idea of curriculum mapping, but it seems a challenge to implement in the classroom.* (Reflective notes)

The participatory workshop empowers teachers, enabling them to critically reflect on the outcomes, what worked well, and what did not. Sharing ideas with colleagues, discussing various aspects of the curriculum, and preparing academic plans aligned with the school's academic framework fosters an interactive and participatory learning environment among teachers. Involving and engaging teachers in critical reflection on their subject curricula, working hours, learning outcomes, and course breakdowns for the four terms according to the school's academic calendar develops their planning and execution skills. However, their doubts regarding effective classroom implementation require additional support and collaboration. Josna added:

> *I knew the curriculum was available on the website of the Curriculum Development Center, but I had not downloaded it earlier. Now, I have printed*

a copy and broken it down according to the school calendar. I also discussed it with colleagues. (Interview with Josna on 29 May 2024)

Collaborative discussion inspired teacher to enhance their professional competencies as they downloaded the curriculum from the concerned websites and planned to implement it in classroom teaching and learning. During the interview, Rakesh shared:

> *As we discussed reflective practices at the beginning of this session, it encouraged me to explore more about curriculum. I realized that being a teacher, we must know about the curriculum of the subjects we teach. I downloaded the curriculum from the website of the Curriculum Development Center and printed it. Nowadays, before starting any chapter, I go through the curriculum, which helps me to think and plan how to perform well in the classroom.* (Interview with Rakesh on 26 May 2024)

Reflective practices helps teachers delve more deeply into the curriculum by downloading resources from the website of CDC, integrating them into daily routine, and planning lessons effectively. It increases their awareness and inspires them to share with fellow teachers, thereby improving their instructional practices. The use of reflective practices encourages teachers to explore new ideas and implement them in real classroom settings, which makes them more confident and purposeful in professional practices by transforming both their teaching and learning (Sunar et al., 2024). Involvement in curriculum mapping increases teachers' awareness and commitment to transformative practices, as it encourages critical reflection on what is actually occurring in the classroom compared to what is planned and presented in the curriculum (Benade, 2008).

It shows that reflective practices increase teachers' awareness level of curriculum and help to update their existing professional knowledge, skills, and values. It enables teachers to think more deeply about the different components of curriculum (Bintz & Dillard, 2007), which creates the space to link the theory with practice in the classroom. Critical reflection motivates them to use the internet and digital platforms to search and download the curriculum themselves. The use of a reflective approach enhances teachers' creativity and professional capabilities (Yuen et al., 2018), which helps to break down the curriculum according to the academic plan of the school.

Teachers' awareness of the curriculum further helps to design instructional plans to enhance learning outcomes (Taylor, 2016). Teachers are key mediators in transforming curriculum into a real classroom event (Tran & O'Connor, 2024). They should use diverse classroom instructions according to the context. Curriculum mapping becomes a dynamic tool that promotes dialogue and critical conversations (Benade, 2008). It further enables cross-disciplinary collaboration that is regarded as essential for meaningful teaching and learning.

Collaboration for Exploration of Innovative Pedagogies

In the participatory professional development workshop, teachers discussed about different innovative STEAM-based pedagogical approaches such as project-based learning (PBL), inquiry-based learning (IBL), and art-based pedagogy (ABL). Participation in training and workshops involves teachers in discussion and collaboration with other teachers (Poudel, 2022). They were actively involved in each activity and learned collaboratively, engaging their head, heart, and hands in the process. They formed different groups and each group discussed and shared on innovative pedagogical approaches. The orientation and practice of innovative pedagogies and reflective teaching helped them realize the possibilities for professional growth. It also encouraged them to think and manage the resources required to design and apply innovative pedagogies in the classroom. Kavya wrote:

> *I have learned an important skill of involving and engaging students as much as possible in classroom learning. The training was crucial for integrated learning. I learned a method of teaching students different subjects in an engaging way under a single theme.* (Kavya's reflective notes)

Teachers realized that they got the opportunity to discuss new approaches to involve and engage learners in the learning process during the workshop. They integrated the contents from different subjects and designed an innovative pedagogical approach for effective teaching and learning. Sophie reflected:

> *I had the opportunity to learn many valuable concepts and methods, which made me, realize the need for changes in teaching and learning approaches. I believed that both the teacher and the students found the learning process easier and more effective. The sound knowledge of pedagogies helps me to become a good teacher.* (Interview with Sophie on 30 May 2024)

The in-house teachers' professional development workshop, organized in a participatory approach, provided opportunities to learn many valuable concepts and methods. Involving and engaging in such workshop activities, teachers become active learners and co-construction of knowledge (Dahal et al., 2022), which helps to transform the classroom teaching and learning. This collaborative approach creates a space for a community of practice where teachers learn through mutual engagement and shared goals, as this teacher-driven learning process develops ownership among participants, which is vital for sustainable professional development among teachers. Teachers need continuous support and collaboration to implement innovative pedagogies in the classroom in a sustainable way, which is possible through a participatory approach. It helps teachers to update with evolving tendencies, improves their instructional practices, and nurtures a progressive mindset for lifelong learning (Al Hamad et al., 2024). The workshop was planned after analyzing the need for teachers to develop a sense of ownership in professional learning. It supports and empowers the teachers as they designed and presented sample plans with innovative approaches by integrating

multiple subjects to make changes in educational practices for better professional growth and effective student learning, which ultimately develops the collective agency (Kemmis et al., 2014) in the school.

Familiarity with multiple pedagogical approaches, such as art-based, inquiry-based, and project-based learning, helps teachers to use differential learning by understanding their prior knowledge and experiences with the content (Garland, 2008). Participatory learning promotes contextualized understanding and enables teachers to make positive changes in their professional practices (Francisco et al., 2024) to facilitate the content using innovative pedagogical approaches.

Shift from Traditional to Student-Centered Learning

Pedagogy plays a vital role in shaping the learners' future because classroom learning is the foundation of formal education. Our classroom learning is highly dominated by traditional pedagogical approaches, where teachers play the role of knowledge disseminator and students remain as passive listeners. Such practices rarely develop an interactive learning environment and often hinder the development of soft skills among learners. However, the practices of reflection-in-action support pedagogical shifts and positively impact the learning process. In this scenario, Kavya shared:

> *While teaching 'Swadkatha' in grade nine, I told students to read the paragraphs sequentially, assigning them the responsibility of presenting what they had read and encouraging them to ask about the meanings of difficult words. They began to willingly take turns presenting and assumed the responsibility of ensuring overall comprehension of the text.* (Interview with Kavya on 02 June 2024)

In the classroom teaching, teacher assigned tasks to each student to read and understand by switching the role from a traditional teacher to a facilitator, becoming ready to reach each student wherever they needed her help. As, she told them to present their understanding, it increases students' participation and interest in learning. Students presented in their turn, which showed overall understanding of the text.

In the same way, Sage narrated:

> *When some students were unable to understand, I instantly decided to use another approach to address this issue. I conducted group discussions and facilitated them in the middle as per the requirement. After I had finished explaining, one student asked, "What would have happened if there were no origin of society?" I did not give a direct answer to the question; instead, I asked everyone to think about it and write down their thoughts on a note copy.* (Sage's reflective note)

In the classroom, teacher adopted reflection-in-action and organized the group discussions. Such flexible and responsive action by the teacher helped to shift from a teacher-centered to a more interactive student-centered learning environment in the

classroom. The teacher's approach to the student's question reflected his commitment to foster critical thinking, problem-solving, and inquiry skills among students. Instead of providing a readymade answer, he encouraged all students to envision the question and communicate their ideas in writing by demonstrating their own action.

Furthermore, the next co-researcher Hiya, views that teachers can adopt an art-based approach to make learning effective:

> *While teaching the topic "Expressions" in grade six, I observed that two students were playing with pens. Without highlighting their activities, I gave them a situation and requested that they do role play by writing a conversation and act accordingly.* (Hiya's reflective note)

In the English language class, the teacher noticed two students were engaged in off-task behavior, and she strategically redirected their attention by assigning them a role-playing task. She involved students in the learning process by engaging them in writing a conversation based on the situation and acting it out in front of their classmates. In this way, by using reflection-in-action, she changed the teaching learning strategies to maintain the classroom learning environment and reinforced the lesson by providing practical engaging tasks.

While using traditional pedagogical approaches, teachers began to reflect critically on their practices after observing student disengagement. They acknowledged a gap between their teaching approaches and students' learning needs, which aligns with Schon's (1983) concept of reflective practice. It emphasizes reconsidering professional practices within the context to develop insights into students' perspectives. It encourages grounded decisions by adopting more interactive approaches. Acknowledging students' perspectives is central to critically reflective teaching (Brookfield, 2017). In the classroom teaching, teachers engaged in rapid reflection, which is a spontaneous adjustment method in real time. This aligns with Griffiths and Tann (1992) view of rapid reflection as key to responsive pedagogy. Teachers also used reflection-in-action to address emerging needs on the spot, which is consistent with Schon (1983) emphasis on real-time professional judgement. Collaborative learning further enabled teachers to scrutinize their methods and their impacts on students. These collaborative practices promote critical reflection and meaningful professional development. The probing questions, short presentations, group discussion, role-playing, demonstration, and other hands-on activities involved students in the knowledge construction process.

Connecting Teachers' Professional Learning with Students' Performance

The sharing of experiences among colleagues about the use of innovative pedagogies and critical reflection in teaching and learning plays a significant role in the professional development of teachers. Reflecting one's professional practices in the group empowers the individual as well as group members, as human beings learn more from experiences. Given that, the co-researchers of this study have diverse experiences and perspectives on using innovative pedagogies. Josna shared:

After the implementation of new pedagogies, such as art-based, project-based, and 5E instructional approaches, the teaching process has become easier. I am working as a guide or facilitator and encourage students to explore on their own to enhance their knowledge, skills, and abilities. (Interview with Josna on 29 May 2024)

In the process of their professional development teachers use art-based pedagogy, project-based learning, and the 5E instructional model in the classroom teaching and learning which have both benefits and challenges. It enabled teachers to shift their role from content deliverer to a facilitator, encouraging student-led collaborative learning. Exploring students' prior knowledge and engaging in group discussions have enriched classroom interactions, fostering curiosity and deepening engagement with the content. Anthony told:

Most of the time, we feel pressured by these innovative pedagogies as compared to the one-way method. However, the 5E instructional approach effectively engages every student and provides them with an equal opportunity to learn actively. (Interview with Anthony on 03 June 2024)

Although innovative pedagogy such as the 5E instructional method promoted student engagement and active participation in learning, it also created pressure on teachers. Teachers need to engage in extensive planning, hands-on activities, and continuous facilitation to make teaching more dynamic and contextual. Hands-on activities empower students to connect subject matter to the context more meaningfully.

Ivana added:

Overall, these innovative pedagogies are very effective, but sometimes I couldn't efficiently set students up with the tools and skills needed to participate positively due to a lack of time. I learned group learning, inquiry-based learning, collaborative learning, and the 5E instructional model in a workshop. (Ivana's reflective note)

Although the teacher acknowledged the importance of innovative pedagogies such as group learning, inquiry-based learning, collaborative learning, and the 5E instructional model, they faced challenges in classroom implementation due to time constraints, student behavior management, resource utilization, and classroom setup. She realized the complex interplay between pedagogical innovation and practical constraints in the learning process as teachers acquired new pedagogical skills through a professional development workshop. Kavya, a Nepali language teacher, shared:

By using the 5E instructional model and art-based methods in teaching, I experienced teaching quite easily and entertainingly, as students are learning happily. I observed a smile on their face in the classroom and noticed that their interest in learning had awakened. I presented the contents in various

ways according to the classroom context and students' interests. (Interview with Kavya on 02 June 2024)

The use of the 5E instructional method promotes collaborative and active learning in the classroom, where students learn together to find new concepts, resolve problems, and draw conclusions. Similarly, art-based pedagogy fosters students' creativity, imagination, and happiness in learning. It increases learning outcomes by cultivating verbal and written communication, collaboration, creativity, and critical thinking. In this way, the use of pedagogical approaches based on the classroom context and students' preferences has a positive impact on learning.

They reflected that critical reflection is an essential component of teaching and has helped to refine their teaching practices and adapt instructional strategies according to the needs of students. It serves as a tool for examining teachers' professional identities, beliefs, and particular perceptions towards their professional and institutional values (Smith, 2011). Peer collaboration, contextualized learning, and periodic reflective practices are important for teachers' professional growth. Developing a learner-centered environment in the classroom reinforces effective teaching practices, which ultimately enhances students' success and teachers' professional competencies. The use of progressive pedagogies by teachers challenges the traditional lecture method by involving learners actively building knowledge through sharing their prior knowledge and active engagement. It enables teachers to explore context-based pedagogical approaches.

Discussion

The on-site support and collaborative learning communities acts as a support mechanism to facilitate the content using innovative pedagogical approaches. Reflective practices in teaching and learning helped teachers to change their role from being knowledge transmitters to facilitators in the classroom. Teachers participating in this pedagogical transformation shared their evolving identities, moving away from being the central figure in the classroom to adopting a more supportive role and facilitating students in the learning process. The teachers started to recognize students' prior knowledge, learning aptitude, basic linguistic and numerical competencies, which influence the success of innovative pedagogies to set a lifelong learning aptitude. Identifying learners' needs, applying knowledge and skills, and evaluating resources developed the reflective and critical thinking skills among teachers (Williams, 2001). Their initiatives to question the existing social, cultural, and power structures of the school advocated for the foundational improvement of teaching and learning in the long run.

Such emancipatory approaches by teachers foster a democratic space for communication in the school by empowering and enhancing personal agency (Grundy, 1987). The acceptance of internal and external barriers within the classroom, such as insufficient resource materials, time constraints, lack of wide spaces in the classroom,

rigid curriculum structures, and the need for subject-specific training to deepen the disciplinary knowledge, as well as advocacy for social and economic upgradation, reflected the teachers' aspiration for professional transformation and institutional improvement. Teachers' critically examine their professional practices to make it contextual, dynamic, and evolving nature of collaborative learning. Although they enhance their pedagogical knowledge by participating in professional development workshops, it is necessary to integrate innovative pedagogies, teachers' professional development programs, and reflective practices into the schools' educational policy framework for long-term change. The practices of critical reflection help to refine pedagogical strategies through reflexivity.

In the process of professional development, teachers experience a complex interplay between pedagogical innovation, structural constraints, and professional agency. Teachers shared multiple benefits of innovative pedagogies and teaching in a student-centered classroom, which is clearly different from traditional classrooms. It is confirmed that innovative pedagogies enhance student engagement, foster active learning, and support teachers' professional growth, but their effectiveness depends on institutional support, resource availability, and teachers' ability to critically reflect and adapt for context-based learning. It is necessary to maintain the balance between pedagogical creativity and structural feasibility for sustainable educational transformation.

This pedagogical shift reflected the transformative process of teaching and learning practices of teachers. They moved from being knowledge transmitters to facilitators in the classroom teaching and learning. Teachers participating in this pedagogical transformation shared their evolving identities, moving away from being the central figure in the classroom to adopting a more supportive role, shifting from instructor to a facilitator, guiding students in the learning process (Keiler, 2018). Identifying learners' needs, applying knowledge and skills, and evaluating resources developed the reflective and critical thinking skills among teachers which changed their instructional practices.

Reflective practices change their perspectives and shift their teacher-centered teaching into student-centered learning. The use of reflection-in-action in the classroom instantly switched over teacher's role from knowledge disseminator to facilitator of learning. Instead of keeping students as passive listeners, they involved them in the learning process by making them do role play and share their ideas with their peers. It is realized that innovative pedagogies and reflective practices enhance students' engagement, active learning, and teacher professional growth. However, the effectiveness of all these depends on institutional support, resources, and the workload of teachers. Although writing a critical reflection of all classes is quite difficult for some teachers, it has a positive impact on their professional development. Sustainable use of critical reflection as a pedagogical process requires balancing workload and structural support from the institute, which ensures teachers' innovative pedagogical approaches and collaborative work for effective implementation.

Conclusion

The participatory based professional learning in the school helped to identify core areas for improvement. The prolonged engagement and active involvement from the needs assessment phase, planning, acting, and reflecting developed collegial relations among teachers. The participatory meetings and focus-group discussions enhance teachers' professional knowledge, skills, attitude, and values. Critical self-reflection and dialogic discourse enhance teachers' enthusiasm, active interaction, and participation to employ innovative pedagogies. The implementation of innovative pedagogies in the classroom and the use of reflective practices to critically analyze their teaching and learning have sharpened their professional competencies. Reflective practices change their perspectives and shift their teacher-centered teaching into student-centered learning. The use of reflection-in-action in the classroom instantly switched over teacher's role from knowledge disseminator to facilitator of learning. Instead of keeping students as passive listeners, they involved them in the learning process with engaged activities. It is realized that innovative pedagogies and reflective practices enhance students' engagement, active learning, and teacher professional growth. Although writing a critical reflection of all classes is quite difficult for some teachers, it has a positive impact on their professional development. Regular use of critical reflection as a pedagogical process requires balancing workload and structural support from the institute, which ensures teachers' innovative pedagogical approaches and collaborative work.

Acknowledgements

This article is a part of the first author's MPhil in STEAM Education dissertation and was supported by University Grants Commission, Nepal under the MPhil Fellowship award No.: Mphil-80/81-Edu-02.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98958

Experience of Visually Impaired Students with Educational Practices in Higher Education in Nepal

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Abstract

This qualitative descriptive study utilized the focus group discussion (FGD) among six visually impaired students studying at Bachelor's level. The participants were selected purposively. The experiences, recurring patterns, and unique insights were noted carefully. The discussion was based on background and environment, the curriculum and curricular materials, pedagogy of learning with strategies, teachers' perceptions and behavior, understanding of the content, learning of technical subjects, assessment techniques, classroom communication and peer support, and other factors. Data was analysed thematically. The results show that the shortage of compatible text and resources, accessibility of PDFs, pedagogically weak teachers, and one-size-fits-all pedagogy are the main issues and problems for learning. The teachers rarely implemented inclusive teaching methods and evaluation techniques. They exposed the absence of learning kits and means for technical subjects such as mathematics and science, which need sequential and spatial patterns and order for concept development. Sufficient physical and social spaces with adequate and friendly infrastructure and systematic peer support were indicated. The study critically finds the gaps between the policy of inclusive education of the nation and ground-level implementation, which is mandatory for faculty sensitization, investment in technologies, and a tiered support system to accommodate the full continuum of visually impaired students.

***Keywords*:** Visual impairment, higher education, inclusive education, qualitative research, classroom communication

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Introduction

School education is free and compulsory for every citizen of the nation. The Constitution of Nepal places education as a fundamental right and includes that differently abled students as well as visually impaired citizens shall have the right to get free education through Braille script (Nepal Law Commission [NLC], 2015). Each sense organ has its special function for human development. Out of all five sense organs, vision is most important not only for the individual but also for social and global life. Most of the information gained, validated, and shared is through sight. The person who loses sight or loses the function of his sense of sight, whether he/she can see light rays or cannot see at all, is called the visually impaired/blind person (Inayah et al., 2021). Blindness may be caused by birth or after birth. According to a 2018 project by the World Health Organization (WHO), 253 million individuals worldwide suffer from severe to moderate visual impairment or are blind. Over 90% of them belong to developing countries like Nepal. Visually impaired students have been facing significant access challenges although the constitution and commitments incorporated the special need education and rights (Niraula, 2024; Wilbur et al., 2024). Although some special schools, resource classes, and other integration into mainstream schools are run by the Government of Nepal, the enrollment of visually impaired children of school age is not satisfactory compared to the population of such children (Neupane, 2022). It is also indicated that the visually impaired students face substantial difficulties in higher education, including inaccessible supportive programs, an inaccessible instructional environment, economic crisis, and heavy reliance on sighted peers for daily coursework activities. Meanwhile, Neupane (2022) indicated some hindered factors such as insufficient budget, lack of accessible materials, and an inadequate number of qualified professionals for effective implementation of inclusive education.

The public image in Nepal is not so clear for students with visual impairments who want to study in university. It is doubtful whether blind people can achieve higher education properly or not in the Nepalese context. The Constitution of Nepal (2072 B.S.) incorporated education as a fundamental right with a distinct provision for the visually impaired, such as "The visually impaired person shall have the right to free education with medium of brail script (Dhakal, 2024). The reduced visual access altered reading speed, comprehension, and overall school performance although the methodological inconsistencies compare the outcomes directly (Loh et al., 2024). Najmee et al. (2025) explained that the physical arrangements and facilities with lightening conditions are most discussed for the equitable participation in leaning among visually impaired students. The digital readers and optical character recognition and refreshable braille displays are till insufficient for interpretation of graphical contents such as diagrams, images, flowcharts, and mathematical figures and expressions (Zhu et al., 2026).

According to Chang and Schaller (2002), the teachers listen to and support the VI students as sighted students. Different instructional strategies and technologies,

including facilitating, active learning, cooperative group tasks, and braille methods, were identified for betterment in education. The majority of the VI students had unsatisfactory support from the institution. There is no difference in reading comprehension compared to sighted students, with differences in speed and decoding (de Verdier & Ek, 2014). Sports, popularity, teachers, and parents' roles are main themes for better inclusive education. The students with VI face physical education and mathematics as most difficult, but the positive support of the teachers and family, along with personal effort and unreciprocated support of peers, helps to implement inclusive education effectively (George & Duquette, 2006; Jessup et al., 2017)). The environment of school/collage along with teachers' attitudes towards inclusion, was positive and had a significant correlation with VI students' achievement. Satisfaction with social relationships depends upon peer exclusion and rejection, homophiles, and inclusion with discrimination during the classroom activities and other activities (Jessup et al., 2018). Jobair and Plabon (2026) pointed the inconsistency and insufficient volunteer training on visually impaired students limited their critical thinking and emotional intelligence with cultural and communication awareness. The teachers teaching experiences and use of blackboard-based instruction are positively associated for adjustments go learning styles for VI students. There is persistent structural gap for visually impaired and blind students in interpretating diagrammatic and geometric questions and lack of accessible resources (BYAN, 2025).

The perception of VI students' experiences in relation to technology is that teachers had limited understanding, time, access to school work, and training in using technology (Opie, 2018). The peer groups' communication among teachers' aides and parents' understanding of equity are the main barriers to inclusive education, although equity, equality, and inclusive education are legal provisions (Opie, 2018; Opie et al., 2017).

The literature reviewed found that there are several research studies on inclusive education focusing on visually impaired students at the school level. Some of them are about the status of disabilities in the education system. We are unable to find research on what the visually impaired students perceive and how the classroom practice process and learning in total. So, we explored the visually impaired students' experience and practices during learning in higher education.

Methods and Procedures

Since the behavior, perception, motivation, actions, and experiences were investigated through qualitative methods, this study is qualitative and descriptive in nature (Guba & Lincoln, 1994; Shaw et al., 2007). Six visually impaired students were purposefully selected as participant who are studying a bachelor's degree in Sanothimi Campus, a constituent Campus of the Tribhuvan University where the Bachelors' degree and Masters' degree programs in Education. There are were about 12 blind student staying in campus hostel. Among them the selected participants were frequently

available with researchers to collect their experiences. The data were collected using a focus group discussion with guidelines. Also, some observation and informal talking were also regularly conducted during regular meeting on the way also and also observed their activities. The participants were provided with informed consent for the study, understanding that they might leave the study at any moment without facing any repercussions on their personal life. The study's participants were made aware that their involvement was completely optional and that they were free to decline answering any questions they did not want to. They were also given the assurance that the information collected from all participants would be examined collectively and utilized exclusively for the objectives of this study, and would remain anonymous and would never use individual data. The guidelines were prepared for the discussion. The information shared by participant were presented with classifying related to the theme. After collection of data from the discussion, the data were transcribed according to the guidelines and grouped according to the keywords of participants' views. Finally, the themes were generated, and the thematic analysis was conducted to analyze the data (Braun & Clarke, 2012).

Results and Discussion

The data from the participants were thematized and then linked them with the literatures and presented to address the purpose of the study. Themes were developed based on the data obtained from participants and then analyzed.

Background and Family Environment

The background refers to the socioeconomic status, cultural background, prior experiences, and knowledge that the students bring to the learning process. Regarding this theme, the students' views are as follows:

> *I have a medium level of study support, and for higher study I have requested my family to go to Kathmandu. My family fully supports my studies, and they help with whatever I need. My family members regularly ask for my needs and obstacles. That helps me to focus on my teaching and learning. Most of the time, my family members cover my expenditure. Sometimes I have to manage with friends and elders to support me. There are no obstacles for learning regarding the expenditure. Although my family members are regularly concerned about my condition. I have to manage my expenditure with supportive marketing with elders who are not visually defective. It is observed that some of our students are managing their expenditure with marketing of goods with helpers.*

The views provided by the participants reveal that the family environment is characterized by high emotional as well as proactive engagement. The families provide a medium level of support for higher study in cities in the current situation. Since students' needs and obstacles are directly facilitated in their teaching and learning, the proactive involvement of parents directly affects it. The proactive concern serves as a

psychological barrier, ensuring the students' physical and environmental barriers. The family environment with these backgrounds plays a main role in interacting with new materials for academic success (Bandura, 1986). Likewise, Epstein (2018) explained that parental involvement, communication about the school, motivation by the family members at home, and stimulation at home are the strong base points for the students' academic performance with love for learning and developing different skills necessary for a quality Life.

Financial support is an interdependent source model for such students. Sometimes the students rely on friends and elders to bridge gaps, although family remains the primary source of financial support. Some of the students have experiences of managing the expenditures by engaging in the market with assistance from people who are not visually impaired. The family background is one of nurturing advocacy where emotional and financial support helps in eliminating obstacles and necessities for the academic advancement of students.

Curriculum and Curricular Materials

The curriculum and curricular materials are crucial for the students for learning. Since the curriculum is a blueprint for teaching and learning, and it also assesses learning, a well-designed and relevant, contextual curriculum is necessary (Tyler, 2013). The curricular materials help to equip the students with all three aspects of knowledge, skills, and attitude of any content and context. Regarding this, students' views are:

> *Regarding the curriculum and curricular materials, the theoretical curriculum is suitable and is easy to use during classroom teaching. The curriculum with pronunciation, grammar, practical, calculation, and figures is more difficult for us, and we have been facing obstacles since we are unable to visualize them due to different teachers' different perceptions and practices during teaching and learning. The materials are not suitable for visually impaired students since they are not in the form of braille. The pdf of learning materials available in the market are not suitable for me. I am unable to read the figures and tables with mathematical calculations by scanning them with the help of electronic devices.*

The participants expressed that the theoretical curriculum is relatively compatible to navigate during classroom sessions. Students face significant obstacles in technical subjects like mathematics and science. During pronunciation, grammar, practical calculations, and figure observations, students face difficulties due to the nature of such subjects requires visualization for the pedagogical practice. These types of learning gaps are often addressed by the teachers because there is no any training for these teachers about inclusive and universally designed pedagogy. Furthermore, a critical deficiency occurs in accessible learning media. The physical formats of resources are frequently not in braille form, rendering them unsuitable for learners.

The books and PDF materials available are not visually impaired-friendly, and electronic devices are not properly used for them due to less accurate scanning and interpretation of figures, tables, and calculations in mathematics and the sciences. Since the curriculum aims to equip all learners with knowledge and skills, the lack of available analog and digital materials is preventing visually impaired students from independently engaging with non-routine and complex subject matters. The policy of education on higher education needs to review and provide the special need education with pedagogy those can address the theoretical as well as the technical problems of the students during teaching and learning.

Pedagogy of Learning with Strategies

The art and science of teaching, including the methods, practices, and strategies used during and after the teaching and learning process, lies in pedagogy. For successful teaching and learning for every learner, effective classroom strategies and universally designed strategies should be implemented for diversified classrooms with students with physical as well as other types of difficulties. This includes the classroom setting and physical facilities as well as the different methods and techniques and innovative skills used in the classroom. The students' experiences regarding this are:

> *Most of the teachers use the lecture method of teaching in our classroom instruction. Some of them take notes orally. Some of my teachers write on the whiteboard and ask us to copy. During the initial state of the classroom, the teachers write the topic and ideas on the whiteboard and focus on the general students. The teachers first write the notes on the board, and after requesting them, they tell and ask students to copy the main points. Most teachers don't give notes for all students. The teacher sometimes uses specific focus and strategies for the visually impaired students, and in most cases they use the same strategies for students of all types. We need some specially trained teachers to address all types of our obstacles in the teaching and learning process and can easily understand our needs and obstacles without requesting and asking them.*

Teaching methods are the most important for learning different concepts and content. The teaching methods may vary for different learners although the content matter is the same. Individual differences also seek different methods of teaching due to their interest, capabilities, capacities, and other learning and motivating factors (Subandiyah et al., 2025).

Regarding the methods, most of the students expressed that the lecture method is the dominant method used by teachers in classroom instruction. The writing of short notes on the board and one-size-fits-all techniques that the teachers use make the visually impaired learners unable to internalize the concept. Some of the teachers focus on the difficulties of visually impaired students, but this is low in frequency in the whole teaching process. Since some of the learners (Kumar & Rani, 2025). Grenier et al. (2025) pointed out that special needs education is essential for teachers

who are teaching visually impaired students and have to run special needs classes for the students, as their needs include identifying their capabilities and difficulties.

Teachers' Behavior and beliefs

Teachers are the main agents of learning, and the teachers' behavior and perceptions depend upon the learners' achievement and progress. The teachers' beliefs, attitudes, and interpretations regarding their learners, curriculum, and curricular implementation cover the teachers' perceptions. Also, the classroom strategies, students' participation, decision-making, teachers' actions and reactions with delivery of content and communicational styles, response with students' response, and classroom management are main aspects (Brophy, 1986). The respectful learning environment, fairness, enthusiasm, and positive thinking environment directly impact students' academic achievement with engagement, motivation, and active participation. The students experience regarding to this theme are;

> *They are helpful, and they help us when we ask them. Some of the teachers help us by providing extra support for learning. Some of them have been helping with making different groups on social media and providing the opportunity of sharing and learning. Although teachers help us regularly with different activities, fewer of them are trained in special needs education, and they help only physically inside and outside the classroom rather than the learning process and learning outcome.*

The students shared the positive and supportive behavior of teachers during the classroom instruction. According to (Schunk & Meece, 2012) the students' learning depends upon the teachers' behavior and strategies for assimilating them with content by connecting them to an appropriate context. Since students' reflected teachers support after their inquiry, and some of them help by providing extra time for learning, that shows the teachers have medium types of support. Some of the teachers practice the extra support by creating an extra supportive, specific group on social media for reflection on what they learned and what they have misconceptions about the subject matter (Firmansyah & Aslan, 2025). Trained teachers will help the visually impaired students in holistic development, but untrained teachers help with the physical case of walking and other subject-specific issues more preciously.

Understanding of the Content

Effective learning depends upon the deep understanding of the content. For conceptual understanding of the content, the learners should be able to connect the content matter with the context. The connection of the content with the context not only helps deep understanding of the subject matter but also helps in permanency of the learning. So, teachers should not only deliver factual knowledge and ideas for remembering the content matter but also have to possess the conceptual understanding of the subject matter, including the principles, connections to other disciplines, and

potential misconceptions of students, by contextualizing the given subject matter (Adipat et al., 2023; Shulman, 1987). The teachers' role is to make the content matter well known for students. Regarding this, the students express that:

> *We use PDF books for learning. We use the theories and theoretical books by rote memorizing them. The content which consists of complex grammatical structure, numerical calculation which needs a calculating machine, and the tabular and figurative content are difficult for us to learn. The devices that we use for scanning the content neither properly scan the content nor sequentially interpret the figures and the structures of grammar and other social phenomena and pictures of the context.*

The subjects with PDF learning are the main sources of learning for the visually impaired students. In the past, they listened to recorded audio for learn and improve their understanding of the content matter. In the present context, the PDF files of notes and books are scanned by electronic devices, and the text is directly listened to. Sihanita et al. (2024) explained that the learning of content matter through integrating technology in pedagogy provides conceptual and technological understanding in learners with different abilities.

Although the scanning devices scan textual content properly and convert it to voice, it is difficult for the devices to scan figures and complex structures. The students faced trouble not only in proper scanning of the complex structures and figures of different subjects but also in proper interpretation of them. The pictures presented in the text were sketched and constructed in a specific context and occasion. But the devices are not able to interpret with real context although they scan the figures.

Learning of Technical Subjects

The school curriculum includes both theoretical and technical subjects. Mathematics and science are not only the dominant subjects in the school curriculum but also the weighted subjects (Curriculum Development Center [CDC], 2021). The mathematical concepts and contents are more integrated into other disciplines, such as economics, population, etc. The technical subjects, mathematics and science, contain different formulas, figures, and structures that help for conceptual understanding. Regarding this, the students expressed that:

> *The mathematics and other tabular representative content are complex because we are unable to sketch our mental map while listening to them. The map thus created may not be correct for the content. Regarding learning mathematics at the school level, the teachers do not use specific methods and strategies since they are not trained for special needs; mostly geometry is hard, and algebra and arithmetic are comparatively easy to rote learn by listening. The topics of graphs and diagrams are not easy to learn for us. And they are not conceptual for us since the teacher uses general methods, but the concept map may not be*

correct. Most of the figures we can feel by touching them. We feel the shapes and figures if we have suitable materials. The contextualization and context-focused materials help us to internalize the content that will be suitable for listening text and can develop schema in our mind. For example, sir, if you say the rectangle has four sides and four corners, we are unable to make a sketch of where the corners are and what types of corners.

It is said that most technical skills require the development of skills together with the subject-specific knowledge. Teaching of technical subjects such as mathematics and science not only gives the subject-specific knowledge but also different skills for implementing them in daily problem solving. Regarding the learning of technical subjects, the participants expressed trouble in learning. Since they use PDF files and audio for concept development, they are unable to develop a mental sketch of the concept as they do in theoretical subjects. The students face difficulty in arranging the concepts of mathematics and science in sequential order since they scan the PDF file and audio. The technical skills with figures, tables, and diagrams cannot be properly scanned and interpreted sequentially for the visually impaired students (Muradyan, 2023).

Furthermore, the teaching method used by teachers in teaching mathematics is similar for all the students in the classroom. Special needs teachers should be provided for such information to understand their capabilities and level those that help with conceptual understanding and developing an accurate conceptual image in students' minds. The audio expression of the content matter and concept of any mathematical object cannot develop the schema in learners' minds since they cannot connect the content with the concept in sequential order during listening (Stone et al., 2019). Furthermore, they cannot tie up the knowledge with the interpretation and are unable to centralize the concept in a meaningful way. The use of highly effective audio and scanning and interpreting devices, along with the special needs teachers, makes the mathematics easy for conceptual understanding and interpretation of figures and facts.

Assessment and Evaluation

Assessment is the most important aspect of teaching and learning. Students' assessment not only determines their learning but also measures the effectiveness and implementation of curriculum and instruction. There are different methods and tools of assessment which are both formative and summative. During the teaching-learning process, we can use different informal and formal techniques during classroom instruction for assessing the students' learning (Acharya, 2023a; Dávila, 2017). Regarding the assessment technique, the students' views are;

I feel tension when the formal board exam is closed since we have to request many people for assistance for writing in the examination. The paper-and-pencil formal evaluation is becoming more complex for the students. If there is

an oral examination for formative evaluation, it will be more comfortable for me than written examinations. The alternative tools of students' assessment are crucial for the students who are facing different physical disabilities like visual loss, handicap, and others. I am very much worried about the administrative carelessness and unavailability of a supportive writer for the final board exam.

Assessment is one major part for teaching and learning. The student's achievement can be assessed by using different tools and techniques. A single tool cannot assess all types of capabilities and outcomes for all students. The participants expressed that the 'one-size-fits-all' approach is used in assessment both in the classroom and on the board. The practice of designing assessment tools that can assess learners of different capabilities and diverse learners, called universal learning design (UD) tools, should be constructed by the instructor to address them (Ketterlin-Geller, 2008). The supporting writers are not easily available, and there is an administrative barrier for the selection. The alternative tools of student assessment are crucial for students who have disabilities for assimilating and understanding the normal text properly.

Classroom Communication and Peer Support

The communication of the instructor and peers is a main component of learning for students. Communication not only fosters clear communication among the learners but also promotes the different types of life skills and hard skills with creative critical thinking, reflexive thinking, and decision making. A deep understanding of learners takes place through the use of proper language of instruction and engaging learners in questioning and dialogue that generates meaningful ideas and alternatives (Kausar, 2025). Peer groups play a crucial role not only in students' performance but also for teachers' professional development. Interaction and collaboration with peers not only provide opportunities for sharing ideas and practices but also help to identify different kinds of problems and identify the most suitable method (Wu & Li, 2020). Through the use of different classroom strategies including cooperative learning and critical thinking strategies, the students can better their ideas, develop the skills of listening and respecting others' ideas, and provide constructive feedback (Acharya, 2023b).

Regarding the classroom communication, the participants expressed that:

Most of the teachers use common vocabulary and instructions for all the students, even though there are different visually impaired students. During the teaching, most of the teachers write on the whiteboard and ask the students to watch the writing and explain the terms orally. One of my teachers frequently addresses and concerns me and asks what I understand or not and asks to listen to the words rather than copying from their peers. The peer groups help us copy the notes written on the board, and that sometimes makes the class noisy, and some part of the lesson is left for us. I faced a problem in shifting from one class to another class in the starting days of the campus, and after some time my friends helped me by taking me together.

The participants' views show that the students have been facing problems due to being taught by a single teacher while integrating them with other normal students. The teachers frequently using vocabulary not only affects the students' learning but also affects them psychologically. Particular and specific guidance and personal focus help them to address their issues and can learn perfectly. Peer teaching is not only a collaborative way of learning, but also helpful for students to assimilate knowledge and understanding among peers with sharing and caring (Jolliffe, 2007). The frequency of moving from one classroom to another classroom and physically unfriendly infrastructure also hurt the students of visually impaired students and burdened them with mental stress of transferring from one class to another.

Teaching Practice, Practical and Use of Technology

Along with the theoretical knowledge, the students have to gain practical knowledge and have to learn different soft and hard skills. So, practical and teaching practice are crucial for them. Dewey (1938) explained that teaching practice and practical tasks should be integrated into the teaching and learning process. Furthermore, these tasks are essential for authentic teaching and learning and allow the students to overcome rote memorization to deeper and conceptual understanding. Regarding the practical examination and teaching practice, the students expressed their experiences as:

> *The practical subject is very hard for us because we are unable to arrange the steps and apparatus in sequence. We take support from our normal peers, and we copy from them.*
>
> *In Higher secondary, especially for grade 12, we have not properly participated for the different practical exams, but we performed well in the final exam with peers, and we worked in groups with normal friends. The project and practical tasks which are included in school mathematics and science were not properly completed by our side, but we participated only. We face many problems in such technical and practical tasks due to insufficient facilities in each school for knowledge understanding and skill development. During the teaching practice in grade 12 of higher secondary school, we participated with our normal friends for the teaching and shared as they practiced in classroom.*

The above participants views shows that visually impaired students have been facing more problems in practical and project work other than the text reading. Although they completed their necessities, they have less chance to participate in such activities. Also, their expressions show that most of the practical and project work and content matters were out of their capabilities, and the people who are working on curriculum and curricular material development should take into account alternative and parallel tasks and activities for the visually impaired and diversified learners (Kumar & Rani, 2025). To complete the practical and project as well as the practice teaching examination by students the respective stakeholders should rethink about the criteria

and requirements with accessible and appropriate tasks which are compatible for the students who are unable to perform the academic specially technical and technological skills without support of second person.

Conclusion

This qualitative study explored the lived experiences and systematics challenges encountered by visually impaired students within the higher education. The researchers aimed to uncover the academic environment, family support, instructional materials, technological tool, teachers' and peer supports, classroom strategies and facilities for their learning. The persistent gap between the policy of inclusive education and realities was found. The inaccessibility of learning materials, untrained faculty for visually impaired students without knowledge of special needs regarding curriculum, methodology, and assessment, along with physical facilities, are major barriers for learning. Inclusive behavior, strategies, and supports for addressing their needs and capabilities are essential. The study concluded that for inclusive education, a policy-level framework with faculty training, sensitization with ICT integration are necessary for the students of visually impaired students. Also, parallel and alternative compatible tasks for the practical and project, and an adequate level of accessibility and provision of technologies are essential for them. The critical and cooperative learning strategies encourage them in sharing ideas among peers. The finding focused the critical disconnect between formal institutional policy on inclusion and the lived reality of visually impaired students especially in university level. This study expected reformation of curriculum, the pedagogical transformation, development of curricular material and evaluation items along with infrastructure development, and well management for the institution and policy level planning in higher studies.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98959

Harm or Heal: Rethinking Disciplinary Approaches in Early Childhood Development

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Abstract

Disciplinary approaches practised by Early Childhood Development (ECD) teachers is a crucial matter for shaping children's holistic development. Holistic development in this study refers to cognitive, socio-emotional, physical, creative and communication / language skill development. This qualitative study explores different forms of disciplinary approaches being practised by ECD teachers and impacts on children's holistic development. Data were collected through in-depth interviews with 6 ECD teachers, classroom observation and reflecting narratives from participants. The study revealed that ECD teachers are practising both violent and non-violent disciplinary approaches to manage classroom and behaviors of children. Further, the study revealed that non-violent disciplinary approaches enhance children's confidence, self-esteem, emotional-regulation and improved learning outcomes. In contrast, violent approaches are generating fear, anxiety, low self-esteem and reduced learning outcomes. The findings of the study have crucial implications for ECD teachers on need of replacing violent disciplinary approaches by non-violent disciplinary approaches. The study emphasized the requirement of ECD teacher trainings, awareness programmes, implementing and monitoring policies and strong institutional strategies regarding practice of non-violent disciplinary approaches essential for holistic development of children.

Keywords: Child behaviour, discipline, punishment, reinforcements, holistic development

Introduction

As an Early Childhood Development (ECD) specialist, I have been enthusiastically involved in this field for many years, achieving wide-ranging experiences in endorsing quality early childhood education and care. Throughout my proficient voyage, I have found that in day-to-day practice, ECD teachers are facing challenges in classroom management and managing behaviour of children such as jumping, running, shouting, scribbling on walls / tables, throwing objects, fighting

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with peers, spitting on faces, hitting their friends, tearing worksheets, pinching friends, crying all the time, avoid doing academic activities (Kumari, 2025). In order to manage these behaviors, ECD teachers are adopting different disciplinary approaches including violent disciplinary (VD) practices such as spanking, hitting with objects, raising voices, threatening, sit-ups, stand in or outside the classroom; and non-violent disciplinary (NVD) approaches such as positive reinforcements, communication-based approaches, redirection, reflection etc. (Heilmann et al., 2021). Thus, according to Visser et al. (2022), the practice of different disciplinary approaches at ECD settings are becoming a major concern in ECD settings as children are highly affected by the environment where they grow and learn.

The topic "Disciplinary Approaches at ECD settings" was chosen for this study because the types of disciplinary practices implemented during early childhood can have long lasting impact on holistic development of children (Black et al., 2017). Precisely, ECD is a period from birth to 8 years of age (Benavides, 2018). This time period is very crucial as children develop their foundational skills such as physical, cognitive, socio-emotional, communication, creativity, imaginative skill and constructive skill ensuring their holistic development (Purnell, 2011). All these skills are very important for their well-being in the future shaping their abilities, behavior and attitude during their adulthood (Villa & Toquero, 2024). Several components impact children's development during their early childhood including their family, family member's parenting style, surrounding environment, food & nutrition, health, safety & security, culture, teachers and educational experiences; shaping children's behavior and attitude (Zhenga et al., 2023). Among these components, teachers and school environment have an important role as children spend a significant amount of time with their teachers at ECD settings (Phajane, 2014; Subedi & Shrestha, 2020). ECD teachers become role model for them and influence their behavior and personality.

According to Mim and Masud (2025), violent discipline is generally defined as the use of physical force, causing discomfort, harm or pain to children or scolding and emotional abuse as a response to correct their behavior. If children experienced any kind of stress due to VD practices at preschools, that may hinder their holistic development and children may develop a long-lasting impact on them such as anxiety disorder, hypertension, depression and cardiovascular disease (Shonkof, 2007; Mim & Masud, 2025; Ali, 2026). Thus, disciplinary practices becoming concerning issue in ECD settings.

According to Thakuri (2024), in Nepal teachers are giving different kinds of punishments to children such as physical punishments (beating with a ruler, pen, or pencils; pulling and pinching ears, cheeks, or chin; making them stand holding their ears), emotional punishments (scolding, staring, giving nicknames like "donkey," "dog," "sheep," or "ox") and psychological punishments (standing outside the classroom, late meal, sending to the principal's room) to correct their wrong doings. The study conducted by Quail and Ward (2023) revealed that children who were exposed

to NVD learn kindness, empathy, and control their emotions; whereas children who experienced VD approaches have anger, fear, anxiety, and slower learning.

The purpose of this study are as follows:

1. To explore the most commonly practised violent and non-violent disciplinary approaches by ECD teachers
2. To identify the impacts of different disciplinary approaches on holistic development of children

Literature Review

Understanding Discipline and Disciplinary Approaches at ECD Settings

The word "discipline" is derived from the Latin word disciplina, which means "instruction and training". It is directly connected to two words "discere" which means "to learn" and "discipulus" which means "pupil" or "student" (2026). According to Jinot and Munirah (2021), discipline is the absence of misbehavior or wrong doings of the children and the child's responsibility to make the difference between good and bad or right and wrong; and what is acceptable and not acceptable at educational institutes. Despite worldwide advocacy against violent punishments to children, studies conducted by Islam (2024) and Cuartas (2021) showed that children are experiencing different forms of disciplinary approaches at ECD settings for their wrong doings and classroom discipline.

Violent Disciplinary (VD) Practices and Influence on Holistic development

Violent disciplinary practices refer the use of physical force causing physical pain and discomfort in order to correct or manage the wrong doings of children and manage classroom (Gershoff & Grogan-Kaylor, 2016). In ECD settings, VD practices may include slapping, hitting, spanking or forcing children to stay in uncomfortable positions, pinching, twisting, or any other physical forms of punishments. Although, physical punishments are banned in educational institutes in Nepal (The Constitution of Nepal, 2015; Mishra et al., 2010), it is continued being practiced by teachers may be due to lack of awareness, lack of professional development trainings, attitude or beliefs (UNICEF, 2025). The study conducted by Curtas et al. (2020) found that VD practices control the behavior of children temporarily but it negatively impacts on cognitive development, self-regulation and positive behavioral development in the long run; developing aggressions, anxiety, stress, fear and poor socio-emotional development.

VD practices can be categorized into two different types (Pandey, 2025; Mim & Masud, 2025; Ahmed et al., 2025): physical punishment and psychological aggressions. Physical punishments refer to use of physical energy to control the wrong doing of children and to manage the classroom which includes slapping, spanking, hitting, pinching, twisting, force children to stand in a corner or outside the classroom, sit-ups etc. resulting increased behavioral problems in children, decreased socio-

emotional regulation and weaker developmental outcomes (Curtas et al., 2020). Psychological punishment, also known as emotional or verbal punishment, is such violent disciplinary approach which cause fear, embracement, distress, scolding, threats, humiliating, labeling, bullying; used by teachers to control behavior of children at educational institutes (Guldeste et al., 2024). Even though psychological punishment doesn't involve any kind of physical forces, it could cause equally or even more harm to children's holistic development by affecting their confidence, self-esteem and socio-emotional security (Heilmann et al., 2021; Zha et al., 2024). It is less visible compared to physical punishment.

Non-Violent Discipline (NVD) Practices and Influence on Holistic development

NVD practices are the strategies practiced by teachers to manage classrooms and behavior of children without use of any kind of violent disciplinary approaches (Lee, 2023). A study conducted by Hosokawa et al. (2024) emphasized that NVD should be practiced in ECD settings to control the behavioral problems of children, enhance their socio-emotional skills and improve their learning outcomes. Prioritizing NVD strategies in ECD settings ensures long-term benefits for child development.

NVD approaches can be categorized into different categories (Tantu & Marina, 2023; Estiningsih et al., 2023) such as Positive reinforcements and Communication-based approaches. Positive reinforcement is widely practiced in ECD settings to manage classrooms by shaping the desirable behavior of children by praising (such as "well done", "very good", "good job", clapping, thumbs up), rewarding (such as token, stickers, stars, reward charts, star charts), redirecting, encouraging, acknowledging, motivating or other positive consequences; significantly improving children's holistic development (Prime et al., 2023). Communication-based approaches are widely practiced in ECD settings to manage classroom, support emotional regulation of children and guide children's behavior which strengthen the relationship between children and ECD teachers. As per Veen et al. (2018), NVD approach supports children's socio-emotional regulation, enhance language and communication skill development, classroom participation and social competencies.

Policy on Disciplinary Approaches at ECD Settings

In Nepal, there is a legal provision regarding protecting children and students from violent disciplinary approaches which are covered under the Act Relating to Children, 2075 (2018) and the Right to Free and Compulsory Education Act, 2075 (2018) under Article 39 and Article 31 of the Constitution of Nepal (2015). These laws enforce a strict and "zero tolerance" policy against all forms of violent disciplinary practices including physical punishments and psychological aggressions at home and schools. The Constitution of Nepal (2015) ensures every child's right to safety and security from any forms of violent disciplinary approaches including physical punishments and psychological aggressions. Article 39 clearly explained that no child should be subjected to violent disciplinary approaches in educational institutes or in

home or in any other settings. The Education Law in Nepal and Teachers' Code of Conduct (Education Law in Nepal, 2026) also ban teachers from imposing any form of violent disciplinary approaches on children or students.

Theoretical Framework: Social Learning Theory

Social Learning Theory is one of the most influencing theories which explains how children learn behaviors through observations, imitations, modeling and reinforcements (Bandura, 1977) and suggested that children learn behaviors, attitudes and emotions by observing their teachers, parents, grandparents, friends, neighbors and other caregivers. According to this theory, children not only learn certain behavior from direct experiencing them but they also develop their own knowledge by observing the actions and moments happened to others in their surrounding environments (Manik et al., 2022). They imitate those actions and implement them with their friends, parents, teachers as well.

Research Gap

In Nepal, while child rights frameworks for the eradication of VD approaches exist, its repetition continues in many preschool settings may be due to lack of awareness, class sizes, poor implementation of child protection policies and limited training among preschool teachers (WHO, 2021). Existing studies have largely focused on secondary students, corporal punishments, parent care, domestic violence with very little attention given to practice of different forms of disciplinary approaches in ECD settings and impacts on children's holistic development (Pandey, 2024). In our context, limited studies have been explored regarding disciplinary practices in ECD settings and impacts on children's holistic development. This study addressed this gap via ECD teachers' narratives, gaining deeper insights on how these approaches impacts children's holistic development.

Methods and Procedures

Research design is a road map for any research which helps to identify objectives and purpose of the study, research questions, data collection method and data analysis method (Khanday & Khanam, 2019). I have embraced a qualitative, narrative interpretative research paradigm focusing on various subjective reality from lived experiences of participants; exploring different types of disciplinary practices practiced by ECD teachers and impacts on children's holistic development rather than a single objective reality (Niure & Sapkota, 2025). In-depth interviews and covert observations were the major data collection method, implementing purposive sampling to guarantee the trustworthiness of this study (Tajik et al., 2024). Purposive sampling, as per Ahmad and Wilkins (2024), involves intentional choice of participants depending on their knowledge, experiences required to meet the goal of the study.

For this study, I choose 6 ECD teachers from 6 different preschools located at Bagmati province having more than 5 years of teaching experiences at ECD settings,

believing they could provide rich, applicable and varied information regarding disciplinary practices and its impacts on children's holistic development. Each interview lasted for 1 hour to one and half hour. Wide-ranging narrative data were generated. By the 6th interview, no new prospective was emerged. With this approach, in-depth and insightful result was derived from interviews which empowers researcher to understand and explain the complex context happening (Memon et al., 2025). I have used pseudonyms "CARE, LOVE, PRAISE, STAR, REWARD and GIFT" reflecting essence of this study to prevent their identification and safeguarding their personal and professional privacy. All the participants were female. Among them, LOVE is from public school and others are from private pre-schools. The participants had shared their experiences with some cases and stories regarding implementation of VD and NVD approaches and its impact.

Data were collected through open-ended and semi-structures questionnaires to encourage participants to share their experiences regarding disciplinary practices. Prior to data collection, ethical standards were strictly followed. Before interview, all the participants were provided with details of the study including purpose of the study, procedure and their rights as participants. A written informed consent was obtained from all 6 participants. Interviews were conducted at their respective school premises at their convenient time. Interviews were audio-recorded with permission. Those audio records were transcribed and coded to generate themes.

This study implemented thematic narrative analysis following Ahmed et al. (2025) six phase thematic analysis framework; understanding how participant ECD teachers developed meaning from their experiences at ECD settings while managing classroom and children's behavior. The process involved data familiarization, coding, theme generation, interpretation, authentication and reporting. All the audio-records were listened multiple times, transcribed the interviews and re-read to get insights. I searched for patterns, developed preliminary themes, reviewed those themes, named themes and made meaning.

Ethical approval was obtained from each participant before interview. The objectives and purpose of the study was shared with all participants. Anonymity and confidentiality were maintained throughout the study. A unique pseudo names were assigned during data entry and analysis purpose. All the interviews and observation were done in a kind and respectful way. Noone was judged. During the study, no participants and children were harmed. Judgmental languages were avoided during interviews.

Results

This section presents the findings derived from participants' narratives on disciplinary approaches and impacts on children's holistic development. The findings are organized into four themes which are emerged from data analysis.

Discipline: Connect or Correct

The difference between NVD and VD as a discipline in ECD settings was emerged as one of the major themes of this study. Although, participants used a single term "Discipline" for NVD approaches, the closer analysis reveled that all of them are viewing discipline as a process of teaching-learning, guiding, supporting and correcting children's behavior. Whereas they are using single term "Punishment" for VD approaches. Participants are describing punishment as their responses to stop unwanted and wrong doings of children through physical punishments, fear, threat or consequences.

Participant CARE shared - "Discipline is all about teaching children how to live their life, facing and solving problems. Violent Discipline is a punishment given to children to teach them what to do and what not to do". Likewise, LOVE shared - "Discipline seems to be about keeping children well in class. Children look at us as models and learn from us. Therefore, since they will do what we do, we ourselves must first be disciplined". Participant PRAISE shortly shared "Discipline is about teaching children what is right and wrong, supporting them, and helping them".

The participant STAR opened up and shared:

> *Either violent or non-volent discipline, both cannot be imposed by force. Self-regulation must come from within. Children learn by watching us adults. Being very quiet or calm is not discipline either. I think that being able to ask questions when necessary and being silent when necessary is also discipline. We are using term reinforcements more than punishment.*

The participant REWARD connected VD approaches as punishment and shared:

> *Teaching children what to do and what not to do is a discipline. For example, going in line, waiting your turn, raising your hand before speaking, not hitting your friends, not shouting, being able to speak your mind, all of these are discipline.* (Pause for few seconds) *Punishment, in my opinion, is the behavior that is used to stop children from behaving inappropriately, such as scolding them loudly, hitting them, shouting at them, making them stand up, sending them out of the classroom, not letting them play, etc.*

Agreeing with REWARD, GIFT shared "Discipline means having control over yourself, developing good habits and obeying. Whereas violent disciplinary approaches are tools that teachers use to punish children for bad behavior or disobedience."

After conversation with all the participants, it seems that in ECD settings, discipline means various strategies ECD teachers are being practiced in order to support and guide young children's behavior. Non-violent and violent disciplinary approaches are often mixed together to guide children. The coexistence of these prospectives showed the stiffness between child-centered practices and traditional punitive practices.

Seen Unseen Faces: Violent Disciplinary Practices

This theme explored the different forms of VD practices being practiced by teachers at ECD settings as shared by participants. The findings showed that teachers are practicing different forms of VD practices: Physical and Psychological Punishments

Participants shared they are practicing physical and psychological punishments such as spanking, hitting with objects, scolding, shouting, twisting ears, bitting in mouth, stand outside the classroom and threats to manage classroom and behavior.

Participant CARE shared:

> *We tell them that "We don't love you", "We won't give you lunch today". When we say this, they agree. We say "NO" to whatever interests them. If things get too difficult in class, we go to the principal. The principal maam talks with the children with love and asks him / her to do the tasks. But sometimes she also beats children on their bum with a loud bang.*

I interviewed LOVE in her classroom with the 14 children as it was their morning lunch time and children were enjoying their lunch "Chowmein" in a lunch box provided by the Government. I asked her "Is it OK now to do interview session?". The teacher agreed for the conversation as this lunch time was kind of break for her. During the interview, children finished their lunch and started playing with very less resources; some blocks and dolls. During the conversation, when I asked her about classroom and behavior management, she shared "(Ahhhh……) by encouraging and scolding. Sometimes, if it gets too much, we shout loudly. We don't use our hands". As the toys were not enough for all the students in the classroom, some were playing by their own in peers while some were arguing for same toys i.e. blocks. There was a lot of noise for our interview in a classroom (actually they were playing), though interview was continued. LOVE asked them to stay quiet. One of the children was playing blocks nearby her side and another child was asking same blocks for him. One is refusing to give and another is continuously asking same toys to play. Suddenly LOVE hits a child who was asking for toys in his head with a red pen which was in her hand and scolded "play together". I silently took this incident as a part of her classroom management besides encouraging and scolding. Later she shared:

> *We rarely beat children. But sometimes when it gets too much, even when we try to control it, we get physical with children. But when it comes to beating, we try our best, 99% of the time we don't beat them. We shout loudly. We have no other options either.*

Another participant PRAISE shared:

> *Sometimes children make a lot of noise. If they didn't obey me at all, I would scold them loudly and say that I would take them to the principal. Then they reduce the noise and even start writing in a copy* (she laughed) *But it's not that regular. One day, one of the children was spitting on his friend. The principal*

was absent. When he didn't stop, I slapped him in his mouth.

Likewise, REWARD share:

> *A boy bites a girl in her hand. So, I asked him to stand outside the classroom for some time*. (Laughing) *Sometimes I have to shout, sometimes I have to scream.* (Laughing loudly) *I also beat them. But I feel bad. I know it's not a good thing. But sometimes you know we have to do it for the sake of the children. It becomes a necessity in the class. Today's children are so stubborn, they're so wild.*

GIFT shared:

> *Sometimes, if we need to carry children as they don't obey, we pull their ears. We scold them lightly, not so harshly. Few days earlier, a child had a birthday at school. A cake was cut and given to all his classmates. One child after finishing his portion, he started licking other's plate. I scolded him for licking someone else's plate.*

After the conversation with all my participant ECD teachers, what I realized that all of them are practicing VD approaches i.e. physical punishments (bitting, spanking, stand outside the classroom) and psychological punishments (scolding, shouting, threats). As per Gershoff et al. (2019), these prospectives showed that violent disciplinary approaches are producing immediate obedience in children for short period of time by fear rather than understanding of appropriate behavior, increasing anxiety, fear, stress, lower self-esteem, reduced self-confidence and emotional insecurity in children. This context can be further explained by Albert Banduras' Social Learning Theory, where he explained that children can learn new behaviors by observing and imitating their teachers.

Building Minds, Not Gashes: Non-violent Disciplinary Practices

In contrast, some of the participants shared NVD approaches like communication, positive reinforcements, self-reflection, encouragement, love and respect. I asked them "What works best when it comes to manage behavior and classroom?". CARE shared the most effective approach is loving and praising them. Similarly, LOVE shared the most effective method is "Teaching through games, songs, and not wearing a sad face in class as much as possible. It is easier if we can teach children in a cheerful environment".

PRAISE shared "The most effective way is to engage children in various activities. But if children don't get involved, they start making noise and are stubborn. I try to settle them with love as much as possible". STAR shared:

> *Positive reinforcements are the most effective ones. We are making a reward chart (job chart) in the classroom. If children do well in class, they get a star on the star chart. They are motivated to do good work. If we punish them and force*

them to do something, they will do it today out of fear, they will do it tomorrow, but they will not always do it.

REWARD also agreed with STAR and shared the most effective approach is by giving them rewards, by praising them. Further she shared "Beating is only momentary".

Compared to other participants, GIFT shared different view. She shared:

The best effective disciplinary approach is to tell children not to be naughty, not to be restless. If they are naughty too much, they will fall, if they fall, they will break their arms and legs. We explain the real scenario of possibilities to go to the hospital.

Participants believed that the most effective way of handling children and manage classroom is not giving VD approaches but by loving them, praising them, giving rewards, explaining consequences, engaging them into various activities and practicing other positive reinforcements. Aligning with Okorn et al. (2021), they associated these practices with increase in trust, strong teacher-child relationship, self-regulation, emotional regulation and improvement in learning outcomes; promoting empathy, accountability and solve conflicts which enhance their holistic development. According to Bandura's Social Learning Theory, children learn appropriate behavior of their teachers' by observing and copying teacher's actions (Amsari et al., 2024). If teacher implements positive reinforcements like praise, rewards, love, attachment, respectful conversations, encouragements, peer learning environment; children learn empathy, self-regulation, peer learning and problem-solving skills rather than developing fear and anxiety.

Beyond Classroom and Behavior Management: Impacts on Holistic Development

This theme explored how different types of disciplinary approaches practiced by participants impact children's holistic development, encompassing their emotional regulation, social relationships, learning outcomes, confidence, self-esteem, moral values and psychological resilience. Participants narratives revealed that different disciplinary practices did not produce same outcomes. While NVD practices enhancing their holistic development (Sharma, 2025); VD practices resulted emotional disturbance and reduced self-confidence; negatively impacting children's holistic development (Bhote & Sherpa, 2026). Participants shared mixed experiences regarding practicing disciplinary approaches.

Participant PRAISE shared:

One day, one of the children was spitting on his friends in class. The principal was not at her office on that day. When he didn't stop even after being told not to do it, I slapped him in his mouth. Then he said "I won't repeat this again, sorry". After that he never repeated that behavior (she smiled).

As per her, the mild punishment corrected the misbehavior of children without hampering his holistic development. Continuing further, she recalled her last year experience and shared:

> *Last year, a 4 years old boy came to our school from another pre-school. Usually, when a child completes four years, he/she can speak well, can write, and express their feelings.* (Being sad…) *But that boy did not say anything in front of us, he urinated and defecated on his clothes. He can sit in one place and can urinate many times but hesitate to share. Even when we gestured him to come here, he would try to save his face with his hands as if we were about to beat him. Principal maam talked to his mother about this. His mother shared - "the teacher from the previous school used to beat him". It took more than a year for that boy to open up with us. But even when he spoke, he spoke in a very low voice. We hardly hear his voice and understand. It took us a long time to remove the fear of the punishment from his mind.*

This particular case showed that harsh and intense punishment impacts children on their socio-emotional growth, reduce their trusts with teachers, reduce self-confidence, lower self-esteem and lower academic performance.

Further, she added:

> *There is a child named "Mr. X"* (pseudo name) *in my class who needs what he says. Like he always wanted a blue chair and no one can sit in that chair, else he beats his friend. He likes to play all the time, no classwork, no writing. If he didn't get to do what he said, he used to cry louder. He even beats his friends while playing. He disturbs the class a lot either by crying or by beating up his friends. I complained to principal maam. In order to calm him, our principal ma'am has made a one seated sofa in her office as a "Peace Corner". She kept him in that "Peace corner" sofa for several minutes without doing anything for three consecutive days. First day, he slept in that sofa. Second day, he denied to stay there but principal maam didn't allow him to go back to classroom. He was not allowed to sleep as well. On third day, he cried badly covering his face with two hands. Seeing his emotional drainage, principal ma'am felt so bad and after that, she removed the concept of "Peace corner" (smiling…).*

Further, she shared:

> *After that day, whenever he makes noise in class and tries to hurt his friends, I threat him and act like I am taking him to the principal's room. Then he started shouting louder "nai, nai" (No, No) and started crying. Now I think that is a psychological impact on him. Fear is developed within him.*

The child was socio-emotionally affected, developed fear and anxiety whenever he hears about his principal. This caused weaker child-teacher relationship.

While having conversation with REWARD, she shared - "Today's children are so stubborn and wild. (Pointing to a boy in the class) He is even more…" (As she didn't want to share about that boy in his presence, she instructed the boy to go outside) "Go outside and play for a moment". (At first, the boy didn't obey the instruction. Then the teacher shouted:

> *Go ...* (Instantly the child closed his copy and left the classroom). She continued saying - *This is today's incident. This boy beat up two girls in the class and made them cry*. (Her face was down) *It is sad to see such behavior. I wonder where this child learned to beat up. I made the boy stand outside the classroom for a while. Later, I consulted another teacher and did role-play and taught them it's not good to beat up friends and others* (smile came back in her face).

REWARD implemented positive disciplinary approaches to explain the context and consequences which helped children to do self-reflection on their behavior. This helped on building strong teacher-child relationship, strong bonding and increased confidence among children.

Unlike other participants, STAR shared her childhood regarding punishment. She went back to her past when she was in class 3. I felt an excitement in her voice. She continued:

> *When I was in class 3, there was my school principal, I never liked him actually. From 3rd onwards I became poor in math. Looking back now, I wonder why I was like that. My math teacher was my own principal. He taught math. And when he taught, it seemed like he was threatening. He would hit me with a piece of chalk. He would discourage me. I feel so bad. I don't love him. I am still not good at math. Now how do I put this is that the principal played a big role in my math being bad. He demotivated me.* I realized anger and anxious in her voice.

Here we can see the direct impact on her learning outcome. She could not do better in Math due to punishments. Study showed that children in classrooms with child centered learning environment and nurturing discipline experience higher self-esteem, better emotional regulation, and stronger peer relationships (Denham, et al., 2012). In contrast, ECD teachers' practice of violent disciplinary practices develops fear, anxiety, aggression and lesser trust for their teachers. Research consistently indicates that physical and psychological punishments are associated with increased aggression, fear, anxiety, and reduced self-esteem among children, while failing to promote long-term behavioral change (Gershoff & Grogan-Kaylor, 2016). Overall, the participant's narratives showed that different disciplinary approaches had different impacts on children's holistic development.

Discussion

The thematic analysis of participant ECD teacher's narratives on different types of disciplinary practices exposed several insights regarding the ways discipline is understood, practiced and impacts on holistic development. The findings of this study showed that disciplinary approaches are not practiced for behavior and classroom management; but also, for significant influence on holistic development of children. Participants shared different types of disciplinary approaches being practiced including positive reinforcements, communication-based approaches, self-reflection, encouragement, motivation, and in some cases, physical punishments like spanking, bitting with objects, standing outside classroom and psychological punishments like scolding, shouting, threat and fear.

One of the major themes emerged from the narratives of participants is the impacts of different disciplinary approaches on children's holistic development. Participants highlighted that NVD approaches enhance children's self-confidence, emotional wellbeing, confidence and strong teacher child relationship. Participants emphasized the importance of creating nurturing and child-centered environment for enhancing their holistic development as well. In contrary, participants realized that violent disciplinary approaches produce anxiety, fear, decreased self-esteem, aggression and negative emotional outcomes. These findings suggested that violent disciplinary approaches might manage behavior of children immediately but rarely contributes for long-term self-discipline.

These findings are similar to the study conducted by McMullen et al. (2026), who argued that NVD approaches are effective approach on teaching children about empathy, self-regulation, self-expression and negotiation rather than managing their behavior through fear (psychological punishment) which reduce classroom conflicts and enhance children's holistic development. Similarly, a study conducted by Sharma (2025) reveled that ECD teachers practicing NVD strategies including storytelling, peer play, dialogues develop sympathy, empathy, confidence and conflict solving skill which significantly enhance socio-emotional development of children.

The study indicated that ECD teachers require continuous professional development regarding child-centered NVD approaches. ECD teachers are required to equip with practical skills in managing classroom, resolve conflicts among children and manage emotional regulation. The study further highlighted that clear institutional guidelines regarding safeguarding children and awareness programs can replace the practice of violent disciplinary approaches by NVD approaches which nurtures children's socio-emotional, physical, cognitive, language and creativity development. Overall, they study suggested that disciplinary approaches are not only a way managing classroom and behavior but a meaningful way enhancing holistic development of children.

Conclusion

This study revealed that different forms of disciplinary approaches practiced at ECD settings play a fundamental role in shaping holistic development of children, concentrating on their physical, cognitive, socio-emotional, communication and creative skill development. The participants narratives demonstrated that practice of violent disciplinary approaches is linked with opposing effects on children's self-esteem, confidence, well-being, social relationships, emotional regulations, learning outcomes and developmental outcomes. In contrast, NVD approaches contribute to the development of self-discipline, self-regulation, confidence, self-esteem, emotional wellbeing and moral responsibility; positively impacting holistic development of children. Hence, this study concludes that effective child disciplining practices move beyond violent disciplinary approaches towards non-violent disciplinary approaches for holistic development of children. It is crucial to identify and advocate for developmentally appropriate, child-centered non-violent disciplinary strategies in ECD settings. Policymakers, ECD teachers and educational institutes should emphasize non-violent disciplinary practices to ensure children's safety, security, supportive and developmentally appropriate learning environment. Such approaches not only address behavioral concerns but also enhance holistic development of children, ensuring that non-violent disciplinary approaches are foundation for lifelong well-being of individual children rather than merely a means of obeying instructions and being obedience.

This study highlighted the need of collaborative efforts among policymaker, school leaders, ECD teachers, and other educational stakeholders to promote non-violent disciplinary practices which supports children's holistic development. The study further suggested the need of professional development programs to ECD teachers regarding practice of effective child-centered disciplinary approaches. Educational institutes should develop clear and consistent policy regarding implementation of non-violent disciplinary practices by promoting safe, respectful and nurturing environment for children. At the policy level, the study highlighted the need of strong guidelines and monitoring mechanisms which discourage the use of violent practices and encouraged to practice non-violent approaches for holistic development.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98964

Factors Influencing Students' Academic Performance in Higher Education in Nepal: A Systematic Review

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Abstract

The higher education sector has played a crucial role in promoting social and economic progress. The academic achievement of students does not only affect individual progress but also helps to contribute to produce skilled human capital. This study reviews the existing empirical studies to identify and synthesize the key factors influencing students' academic performance in higher education in Nepal. The study employed the systematic review design based on PRISMA framework. The studies were searched in Google Scholar, NepJOL, ERIC and JSTOR to identify studies published between 2013 to 2025. The search strategy used Boolean combination of keywords such as "academic performant", "higher education" and "Nepal". Reference lists of selected paper were screened to identify additional relevant studies. Furthermore, official documents and policy reports published by the Ministry of Education, University Grants Commission were reviewed to strengthen the contextual understanding. Initially seventy five articles were identified out of which twenty articles met the inclusion criteria for detailed review. Data were analyzed to identify main factors affecting academic achievement. The key findings revealed that social-economic factors, institutional factors, pedagogical factors and psychological factors together influence student's outcomes. Psychological factors influence more than other factors in academic performance in higher education. The finding of the study highlighted the need for interventions to enhance institutional capacity, counseling system, support well-being and promote equitable access to organization resources. The findings provided evidence based insights for educators, policymaker, university administrators and researcher to improve academic output and overall education quality and students success in Nepal.

Keywords: Education equality, psychological factors, pedagogical, academic achievement

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Introduction

Higher education emphasizes critical thinking, problem solving, research and innovation skill and professional development across several fields preparing individuals for careers and contributing to social development. The higher education sector has played a critical role in promoting broad-based economic growth and social sector development in Nepal (Bista & Gaulee, 2018). Students represent most significant assets of any educational institution. Their academic success is intricately linked to the social and economic progress of the nation. The activities of students are essential in generating high caliber graduates who will evolve into valuable human capita and leader. As such, they play a crucial role in driving the nation's economic and social progress (Ali et al., 2009). The emergence of knowledge-based economies has fundamentally transformed the role of higher education in enhancing national competitiveness driving economic development. Countries increasingly recognize that economic prosperity relies on producing graduates with globally relevant competences, promoting innovation research and fostering international collaboration (Chien, 2023 ; Temtime, 2017). Higher education institutions must emphasize on strengthening quality education and improving administrative efficiency to retain students (Ojha et al., 2025 ; Surya et al., 2024).

Academic achievement represents the outcomes that demonstrate the extent to which an individual has progressed toward specific educational goals within a learning environment, such as schools, universities (Suleiman, 2023). Academic performance itself is a complex and multifaceted construct that goes beyond grades and examination. According to Steinberger (1993), it includes not only the acquisition of knowledge and skills but cognitive growth, emotional resilience, social interaction and physical well-being all of which contribute to an individual's educational success. Maslow's hierarchy needs theory proposed that individuals possess a series of basis needs that must be satisfied in a sequential order for physical needs to self-actualization needs (Maslow, 1943). In the context of higher education, institutions have a critical responsibility to address such as physical safety, a sense of belonging, self-esteem and opportunities for self-fulfillment for better academic performance.

Theory of higher education examines how students acquire, develop and build skill as well as how they remember information and use it in practical life. Learning theory offers structured frameworks that inform instructional design and teaching methods, allow students to cultivate a profound, learning comprehension and to remember knowledge as ensuring skill (Awaah, 2025). Contemporary higher education is progressively shifting away from conventional methods that emphasize memorization and test results towards teaching strategies that promote critical thinking, problem-solving, teamwork and application of knowledge on real world situations. In this context, constructivism, transformation learning and connectivism offer supportive theoretical frameworks that can help to help increase student academic performance in higher education in Nepal.

Constructivism is a theory of learning that points that knowledge is primarily constructed by learners through interaction, collaboration and reflection (Paiaget, 1970; Vygotsky, 1978). Transformative learning theory as constructed by Mezirow (1990) presents transformative learning as complements constructivism that focused on the cognitive and attitudinal transformation through critical reflection and experiential involvement. Transformative learning encouraged the learners to evaluate their assumptions, develop their perspectives, foster autonomy and self-directed learning. Higher education of Nepal encourage student's adaptability and intercultural skills by integrating transformative practices as case study, reflections simulation (Ojha, 2025).

Connectivism is a contemporary learning theory proposed by Siemens (2005) and Downes (2010) extends these frameworks into the digital era by emphasizing learning through networks, collaborative learning, integration of technology, enhanced pedagogies, social networks and distributed knowledge systems in shaping how individuals acquire and apply knowledge in real life. In Nepal, incorporating connectivist approaches through online learning platforms, digital collaboration tools and excess to international knowledge networks prepares students to participate effectively in a globalized knowledge economy, enhances digital literacy and supports lifelong learning (Downes , 2010; Siemens, 2005).

Bloom's taxonomy provides a relevant theoretical framework for understanding the factors affecting student's academic performance in higher education. Bloom et al. (1956) conceptualized learning as a progression through six cognitive levels: remembering, understanding, applying, evaluating and creating. Students' progress across these cognitive levels is influenced by individual, instructional and institutional factors including motivation, teaching quality, assessment practices, learning resources and institutional support. These factors facilitate the development of higher order cognitive skills leading to improved academic performance. Anderson and Krathwohl reframe the categories into action oriented cognitive processes: remember, understand, apply, analyze, evaluate, and create thereby emphasizing critical thinking, innovation and metacognitive development (Anderson & Krathwohl, 2001). Aligning curriculum design, pedagogy and assessment practices in Nepalese universities with these higher order cognitive domains can foster analytical reasoning, research competence, creativity and problem-solving skills which are essential attributes for participation in the global knowledge economy.

According to Meepradit et al. (2022), several factors are significantly affected with academic achievement including demographic variable, learning environment, learning habits and psychological factors. Similarly, Poudel (2020) determined four key factors as academic performance that contribute to overall educational effectiveness, research and publication innovation, interactive learning and capacity building. These factors play a vital role in enhancing the quality of education. The factor influencing students' performance is one of the most challenging aspects in higher education.

Vermunt's (2005) study indicated the social-economic, psychological and environment factors affecting academic performance in higher education in Nepal. Similarly, Wang and Chen's (2024) study reveal that individual factors such as motivation and self-efficiency influence students' academic performance while family, school and social factors also play a significant role in determining students' academic performance.

The foundation of modern higher education in Nepal dates back to the early 20th century. According to the Ministry of Education (2024), the development of the modern higher education's system in Nepal has covered over a century, beginning with the establishment of Tri-Chandra College in 1918. Tribhuvan University is the first university of the country which started in 1959, eight years after the establishment of democracy. The higher education system in Nepal currently covers 1425 campuses with 423,996 students enrolled in various academic programs. Tribhuvan University has 1,124 campuses including 62 constituent campuses and 1,062 affiliated campuses. Nepali's higher education sector experienced significant growth; however, students' academic performance continues to be influenced by a range of individual, instructional and institutional factors. While this expansion has improved access participation, it has not been uniformly accompanied by improvement in academic performance. Persistent challenge include inadequate infrastructure, outdated curricula, governance inefficiencies, political interference, weak quality assurance mechanisms, limited research fund and disparities between constituent and affiliated campuses to affect academic performance.

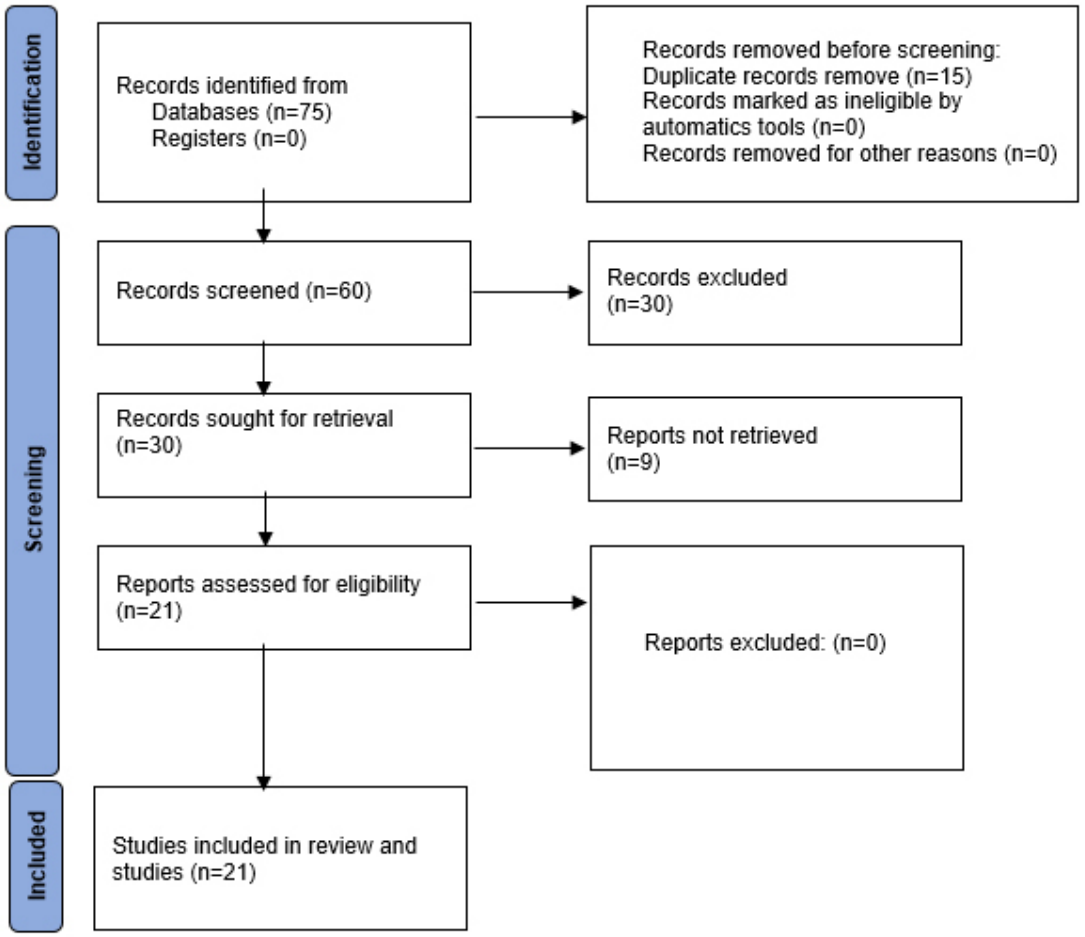
Various empirical studies conducted in Nepal have examined factors affecting students' academic performance, including social-economic status, weak academic performance, irregular attendance, employment, securing a permanent job, financial difficulties, health concerns, involvement in entrepreneurship, lack of motivation, insufficient guidelines and counseling and inability to understand students' expectations and feelings (Dhakal, 2016; Devkota & Giri, 2020; Paudel et al., 2020; Chapagai, 2024; Khanal, 2024). However, the existing studies remain fragmented across individual qualitative and quantitative studies, making it difficult to identify the most influential determinants and draw comprehensive conclusion. Moreover, there is a lack of systematic evidence synthesis using internationally recognized review frameworks such as PRISMA. This gap limits evidence-based decision making for policy maker, university administrators and educators seeing to improve academic outcomes in Nepalese higher education. This study addresses this gap by synthesizing empirical evidence on the factors affecting academic performance in higher education in Nepal using the PRISMA framework. This study is significant because it systematically synthesizes empirical evidence on the factors affecting students' academic achievement in Nepalese higher education using the PRISMA framework. The findings will contribute to strengthening Nepal's higher education system, improving student's success and retention, supporting institutional quality enhancement and advancing the country's long term human capital development and sustainable socioeconomic progress.

Methods and Procedures

This study employed the systematic review design based on preferred reporting items for systematic reviews and meta-analysis (PRISMA-2020) framework to identify, screen, evaluate and synthesize evidence on the affecting academic performance in higher education in Nepal. The comprehensive study was conducted across multiple electronic databases including in Google Scholar, NepJOL, ERIC and JSTOR to identify studies published between 2013 to 2025. The search strategy was developed using a combination of key words and Boolean operators to maximize the retrieval of relevant studies. The primary search terms included "academic performance", "higher education" and "Nepal". The keywords were combined using Boolean operations such as AND and Or. To ensure comprehensive coverage, the reference lists of all included studies were manually screened to identify additional relevant publications that were not retrieved through the databased search. Furthermore, policy reports and official documents published by University Grants Commission and the Ministry of Education were reviewed to strengthen contextual understanding. Clear inclusion and exclusion criteria were set before screening. Studies were considered eligible for inclusion if they (a) were published between 2013 and 2025, (b) focused on factors influencing academic performance, (c) were conducted within the higher education context of Nepal, (d) were published in peer reviewed journals in English, and (f) reported empirical finding with sufficient methodological detail. Studies were excluded if they (a) were published before 2013, (b) focused on school level education, (c) were conducted outside Nepal, (d) were not peer revised publications, (e) lacked methodological clarity, and (f) were duplicate records. Initially, seventy five articles were identified through database search. After fifteen duplicate records, sixty studies remained for title and abstract screening. Then studies were excluded due to insufficient relevance to the research objectives. Subsequently, thirty articles were assessed for eligibility and nine were excluded for not directly addressing determinants of academic performance in Nepal's higher education. Finally, twenty articles were reviewed in detail to determine their eligibility for inclusion in the study. In Nepal, only a limited number of studies have been conducted on this topic; therefore, the discussion and conclusion of the study were drawn based on these twenty full papers. This step by step process ensures that only the most relevant and credible sources are included in the final analysis of the study. The systematic review presented here synthesizes findings from twenty studies on the factors influencing academic performance among higher education students in Nepal. Data were extracted using structured framework and synthesized thematically to identify recurring social-economic, psychological, pedagogical and technological determinants of academic outcomes.

Figure 1

Flow Diagram of the Study



Inclusion Criterial: The articles related to academic performance of higher education in Nepal published between 2013 to 2026 are included published in peer reviewed journals written in English.

Results

The included studies indicated that psychological, institutional and pedagogical determinants emerged as the major associates of academic performance each represented in eight studies (38.15) followed by technological (n=3), socio-economic (n-2) and technological and demographic determinates (n=1) each. Psychological variables include motivation, self-esteem, anxiety, stress, and study habits showed the most consistent associations with academic performance (Karki, 2025; Paudel et al., 2020; Pokhrel & Achary, 2024; Bastola, 2021; Tanamg & Khanal, 2023; Chapagai, 2024; Khanal, 2024). Similarly, institutional variables include faculty

quality, library facilities, infrastructure, assessment system (Tharu, 2024; Chapagai, 2024; Ghimire, 2023; Adhikari & Kaur, 2026; Baruwal, 2025; Kumar & Anburai, 2024; pokhrel & Achary, 2024). Pedagogical determinants include teaching methods, classroom environment, time management, flipped classrooms, classroom attendance (Chapagai, 2024; Devkota & Giri, 2020; Kaushar, 2013; Kaushar, 2013; Devakota et al., 2025; Ghimire, 2023; Tharu, 2024). Academic performance is also influenced by technological factors such as access to digital technology, access to digital learning infrastructure, internet access, social media and artificial intelligence (Pokhrel & Acharya, 2024; Adhikari, 2025; Rawal, 2025). Social-economic variables include parental education statues, family income sources and available of scholarship are consistently key factors of academic success (Neupane & Gurung, 2021; Devkota & Giri, 2020; Abu et al., 2019).

Table 1

Characteristics and Key Findings of Included Studies

Study	Objectives	Methods	Factors	Key finding
Duwal and Khonju (2021)	To examine the key academic factors that influence students' academic performance.	The study employed a cross sectional survey research design.	Demographic	Age, gender and year of study were associated with performance
Baruwal (2025)	To investigate perspectives of faculty members on the issues academic performance of students.	A phenomenological research design has been employed	Institutional	Faculty perceived institutional and behavioral factors as central to student's performance.
Adhikari and Kaur (2026)	The study examines the association of quality management practices, innovative work behavior and academic performance.	The study used a quantitative research design.	Institutional	Quality management as a strategic tools for academic performance in Nepalese higher education

Ghimire (2023)	To assess the factors affecting the academic achievement of bachelor's-level students.	This study used a quantitative and descriptive research design	Institutional and pedagogical	Internet access, library resources, and student learning habits contributed to achievement.
Kumar and Anburaj (2024)	To identify factors that affect academic performance in higher education.	This Systematic literature review approach.	Institutional and pedagogical	
Abu et al., (2019)	To identify factors that affect academic performance in higher education.	Systematic literature review approach.	Institutional and technological	Prior academic performance, e-learning activity, demographics and social
Chapagai (2024)	To find the factors that affect the academic performance of public campuses in the Tanahun district to improve education equality.	This study used a quantitative and descriptive research design	Institutional; psychological; Pedagogical and environmental	Campus facilities, personal attributes, teaching methods and leaning environment jointly predicted performance.
Tharu (2024)	To explore the factors affecting academic performance among master s-level students	A cross-sectional research design was used.	Institutional and Pedagogical	Faculty expertise and administrative support influenced performance.

Kaushar (2013)	To analyze the role of time management in students' academic performance	A case study research design was used.	Pedagogical	Time planning time management were positive associated with academic performance.
Devakota et al. (2025)	To investigate the factors affecting the academic performance of graduate students of TU Nepal.	The study employed a survey research method analytical research design	Pedagogical	Study habits were associate with graduate students' academic performance
Dhakal (2016)	To explore the relationship between academic performance and stress.	This study used a quantitative and descriptive research design	Psychological	Academic stress was associated with lower academic performance.
Paudel et al. (2020)	To understand the factors influencing the level of self-esteem among the undergraduate students.	The study employed a survey research method analytical research design.	Psychological	Self-esteem was positively associated with performance, depression, anxiety and stress showed negative association.
Bastola (2021)	To examine the factors affecting students' success in mathematics.	The study employed a survey method and quantitative research design	Psychological	Motivation and prior subject knowledge predicted performance in mathematics.

Tanamg and Khanal (2023)	To identify the important factors influencing the academic performance of master's level students.	A case study research design	Psychological	The learning habits, communication skills and motivation significantly influenced performance.
Khanal (2024)	To examine the determinants of academic performance in University.	This study used a descriptive as well as causal comparative research design.	Psychological	Cognitive ability, motivation, self-efficacy, emotional intelligence and time management predicted performance.
Karki (2025)	To examine the effect of key psychological factors on academic achievement of master's level students.	A cross-sectional research design.	Psychological	Psychological factors significantly affect academic performance
Pokhrel and Achary (2024)	To investigate the factors affecting university students ' intentions and behaviors toward eLearning.	This study used a quantitative and descriptive research design	Psychological, Institutional and pedagogical	Institutional, psychological and technological factors each significantly predicted e-learning behaviors and performance.
Neupane and Gurung (2021)	To explore the influence of parental socioeconomic status on students' academic performance	A cross-sectional survey design has been employed	Social –economic	Parental social and economic status was strongly and positively correlated with performance.

Devkota and Giri (2020)	To explore students' motivation for better learning effects and performance in examinations at university	A cross-sectional survey research design	Social-economical and pedagogical	Home learning environment and regular class attendance were significant predictors
Adhikari (2025)	To explore the impact of social media on the academic performance of university students in Nepal.	The study employed a survey research method analytical research design	Technological	Social media use and associated with academic performance.
Rawal (2025)	This study explores the role of ChatGpt in improving outcomes of university students in Nepal	The study employed a qualitative research method	Technological	AI can foster engagement and academic success

Discussion

This study showed that various factors are affecting academic performance in higher education in Nepal including psychological, social-economic, institutional, environment and technological factors. These factors affect directly and indirectly on student outcome.

Psychological factors include motivation, self-esteem, anxiety, stress, and study habits showed the most consistent associations with academic performance. Karki (2025), Paudel et al. (2020) and Pokhrel and Achary (2024) stated that self-esteem, depression, anxiety and stress have mixed effects on academic performance, high self-esteem enhances students' academic achievement while increased levels of depression, anxiety and stress negatively affect their performance. Bastola (2021) found that motivation and prior knowledge of the subject matter affect students' academic performance. According to Suleiman (2023), students' learning skills affect students' academic performance. According to Tanamg and Khanal (2023), students' study habits, communication skills, and motivation level significantly influence academic

performance. Chapagai's (2024) study showed that personal attributes and behaviors contribute to students' overall educational achievement. According to Khanal (2024), intelligence, cognitive abilities, motivation, self-efficacy, learning styles and strategies, emotional intelligence, well-being, time management and study habits significantly and positively influence students' academic performance. The finding emphasizes that the higher education institution should identify students' needs to increase their engagement in learning and improve their academic outcomes. These findings align with Maslow's hierarchy need theory (Maslow, 1943) which proposed that higher order learning can only achieve fundamental psychological and emotional needs of satisfaction. The findings are also supported by transformative learning theory (Mezirow, 1991) which state that meaningful learning occurs through critical reflection, self-awareness and perspective transformation. Students with higher motivation and psychological resilience are better positioned to engage in reflective learning processes resulting in deeper understanding and improve academic performance.

Academic performance is influenced by teaching pedagogies. The objective of the study is to explore relationship between teaching pedagogy and academic outcome of students in higher education. Pedagogical variables are teaching methods, classroom environment, time management, flipped classrooms, and classroom attendance. According to Chapagai (2024), the teaching-learning environment, methods, resources, student-friendly atmosphere and positive teacher-student relationships were key contributors to students' academic success. Kumar and Anburaj (2024) found that time management influence students' academic performance. As Shahjahan et al. (2021) found, irregular attendance in the classroom affects the academic performance of university students. According to Devkota and Giri (2020), regular attendance in the classroom significantly affects the academic performance of university students. Kaushar's (2013) study found a significant positive relationship among time planning, time management, and academic performance. The finding of the study shows that teaching method, classroom environment and time management were significantly influencing academic outcomes of students. The findings strengthen Bloom's Taxonomy which conceptualizes learning as a progression forming basic knowledge acquisition toward higher order cognitive processes. Student centred pedagogies that encourage inquire, critical thinking, application and problem solving facilitate progression through these cognitive levels thereby improving academic achievement. Furthermore, the findings support constructivist theory which emphasizes active participation, collaboration and experiential learning rather than passive memorization. The findings indicate that pedagogical reforms promoting active learning should remain a major priority within Nepalese Universities.

Institutional variables such as faculty quality, library facilities, infrastructure, assessment system are other key factors of academic outcome. Several empirical studies showed that institutional shortcomings especially in resources limited in Nepali higher education significantly affect students' academic performance. Tharu (2024)

explored the factors affecting academic performance among Master's level students by employing the ross-sectional research design. The study found that institutional factors such as faculty expertise and administrative support influence students' academic performance. Chapagai's (2024) study identified that the facilities provided by the campus were significant influencing students' academic performance. The study also shows that personal attributes and behaviors, teaching-learning environment, methods, resources, student-friendly atmosphere, teacher-student relationships affected students' academic performance. Likewise, Ghimire (2023) highlights that the e-resources and internet facilities contribute to academic performance at Bachelor's level students in Nepal. Institutional factors directly affect the academic performance in higher education in Nepal so that education institutions need investment in infrastructure and faculty development program. Adhikari and Kaur (2026) found quality management as a strategic tools for academic performance in Nepalese higher education. These study strongly support constructivist learning theory (Piaget, 1970; Vygotsky, 1978) which states that knowledge is actively constructed through interaction with supportive learning environment rather than passively transmitted by instructors. The study suggests that improving institutional quality remains a strategic priority for strengthening higher education performance in Nepal.

Academic performance is also influenced by technological factors such as access to digital technology, access to digital learning infrastructure, internet access, social media and artificial intelligence. These finding are strongly explained by connectivism theory (Siemens, 2005; Downes, 2010) which states that learning is a networked process whereby knowledge is distributed across digital technologies, social interactions and information networks. The findings from pokhrel and Acharya (2024), Adhikari (2025) and Rawal (2025) indicate that integrated educational technologies and AI tools can substantially improve learning effectiveness and academic achievement.

Social-economic variables such as parental education statues, family income sources and available of scholarship are consistently key factors of academic success. Educated parents and strongly financial condition family has better academic outcome due to better guidance and access to resources, provide learning resources in house and enhanced motivation. Neupane and Gurung (2021) have reported that there is a strongly positive correlation between the family's social and economic status and students' academic performance. The family's social and economic status emphasizes students' academic performance in higher education in Nepal. Devkota and Giri (2020) stated that the home earing and learning environment directly affect the academic outcome of a child. Abu et al. (2019) stated that students' previous academic performance, e-learning activity, demographics and social information affected the academic performance. These findings align with Maslow's hierarchy need theory (Maslow, 1943) which states that adequate financial security and supportive social environment provide the foundation for effective learning.

Conclusion

The academic performance in Nepalese higher education is influenced by internal and external factors such as psychological, institutional, pedagogical, social-economic, technological and demographic factors. This study showed that psychological factors such as anxiety, stress, academic motivation, mental well-being and self-esteem are the most significant factors for academic achievement as well as institutional factors including teacher quality, teaching learning environment, faculty competence, teaching methods, infrastructure and learning resources play a significant to academic success. Technological factors such as digital technology, access to digital learning infrastructure, internet access, social media and artificial intelligence tools have also become increasingly importance in enhancing students learning experiences and academic success. Students' socio-economic status also affects for their academic outcomes.

The findings supported at integrated theoretical perspective drawing on constructivism, transformative learning theory, connectivism Bloom's taxonomy and Maslow's hierarchy needs theory. These theories collectively explain that academic success depends not only on student's individual abilities but also on supportive learning environment, pedagogies, psychological wellbeing and access to digital knowledge network. Therefore, improving academic performance requires comprehensive institutional strategies rather than isolated interventions. The study has importance implication for higher education policy and practice in Nepal. Nepalese higher education institutions should strengthen quality assurance mechanism, enhance faculty development, financial support, infrastructure improvements, academic counseling and mental wellbeing services, innovation pedagogy and integrate educational technologies into teaching. Financial and academic support system for disadvantaged social economic backgrounds students can ensure equitable educational opportunities. The findings of this study can provide actionable, evidence based guidance to support policymakers, researchers and educators enhance overall educational quality and academic output in Nepal.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98966

Exploring Emotional and Academic Struggles of Low-income Students in Nepali Public Schools

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Abstract

Students from low-income families often experience emotional and academic challenges that hinder their education participation and achievement. Despite growing evidence on the relationship between poverty and educational outcomes, little qualitative research has explored how these challenges are experienced by students in Nepali public schools. In the context of Nepali public schools, this study aimed to explore the emotional and academic struggles experienced by a student of low-economic background and examine how these experiences influence learning behavior and academic performance. Guided by Bronfenbrenner's Ecological Systems theory, the study adopted general qualitative research design, data were collected through an in-depth interview with the purposively selected 15 years old student. The collected data were analyzed using Braun and Clarke's six phase thematic analysis. The findings revealed four major themes; emotional stress and anxiety arising from financial hardship and family responsibilities, low self-esteem and social isolation, the influence of emotional distress on learning behavior and classroom participation, and the impact of economic hardship on academic performance through limited learning resources, excessive household responsibilities, and reduced study time. The findings demonstrate that poverty affects not only students' access to educational resources but also their emotional well-being, motivation, concentration, and engagement in learning. The study highlights the importance of coordinated support from schools, families, communities, and policymakers to address the emotional and educational needs of economically disadvantaged learners. Strengthening counseling services, targeted financial assistance, and inclusive school practice can contribute to improving both students' well-being and academic success in Nepali public schools.

Keywords: Academic achievement, emotional stress, income, self-esteem, learning behavior

Introduction

Emotional and academic struggle is a common issue for low income students specially studying in public schools. Emotional disorders are disturbances in mood

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affect and emotional regulation that result in significant impairment inequality of life productivity and interpersonal functioning. Emotional stress is a type of stress that causes an intense and negative stress response when someone experience emotions like worry, fear, frustration, danger or sadness (American psychological Association, 2018). Whereas Academic struggles can be defined as the challenges that hinder students' ability to succeed in their studies. These challenges can be emotional, cognitive or environmental and they can vary widely among individuals.

Education is a powerful weapon to bring change in an individual and in the nation. To provide education for a peoples' holistic development, schools play significant role. Specially, public schools in Nepal are established with the aim of providing education for every kind of students. Public schools are such a place where students come from varied backgrounds like linguistic, socio-economic, geography, ethnicity and race. Many students enrolled in these schools come from economically disadvantaged households, where financial hardship may limit access to learning materials, educational support, and opportunities for academic enrichment (Khatri et al., 2024; Education Sector Plan, 2021-2030). Such socioeconomic conditions can influence not only students' academic achievement but also their emotional well-being, motivation, and classroom participation. Understanding how these challenges are experienced by low-income students is therefore essential for developing equitable educational policies and school support mechanisms.

School is a place where students get opportunity to learn and reveal their creativity and potentiality. However, sometimes it becomes a place where inequality is identified and it becomes a place of burden. Especially; public schools become such place where low- income background students feel they are recognized and they are devalued.

Students from low-socio economic background face emotional and academic struggle that impede success. Low income students are burdened by financial constraints, which can lead to stress, decreased access to resources, and diminished opportunities for academic enrichment (Huang et al., 2025).These factors may affect their motivation levels and ultimately, their academic outcomes. When students do not have enough money to take part in schools activities and function like tour, picnic they feel sad and nervous. In some cases students do not have a pair of shoes and uniform as well. They face struggle in managing learning materials. Students sometimes become the victim of poverty and become the character of fun due to the dress they wear and their personality. They face emotional struggle. Not only the emotional struggle, they also face struggle in academic achievement as well. Due to poverty they can't manage time for study as well. They can't afford for their tuition and extra classes for difficult subjects. Those students who run with extreme poverty sometimes leave the classes and had to join the work with their parents too.

Different scholars have examined the relationship between poverty and students'

educational experiences from various perspectives, and their findings consistently indicate that poverty adversely affects both academic performance and emotional well-being. Research conducted in Nepal and other countries demonstrate that financial hardship restricts students' access to educational resources reduces classroom engagement and limits opportunities for academic success. For instance Khatri et al. (2024) found that poverty significantly decreases students' classroom engagement and assignment completion in Nepalese community schools, while Sirin (2005) through a meta-analysis established a strong relationship between socioeconomic status and academic achievement across diverse educational contexts. Similarly, Adeniji (2025) argued that poverty impacts cognition, attention, health and social skills that affect academic performance. Although these studies primarily emphasize the academic consequences of poverty, other scholars highlight its emotional and psychological dimensions. Acharya (2009) explained that Poverty comprises multiple risk factors that affect emotional, cognitive and physical well- being of a learner. Whereas Russel et al. (2008) emphasized that children raised in poor homes with emotional dysregulation may get easily frustrated with the task they are given up. They do not perform well in the class or group work that leads to exclusion and exchange of information decreases and it ultimately leads to poor academic achievement. Likewise Unity et al. (2013) reported that students who come from impoverished families are more likely to have problems in school than the students who come from middle or upper class families. Collectively, these studies suggest that poverty is not merely an economic condition but a multidimensional phenomenon that simultaneously influences students' emotional health learning behavior, classroom participation and academic achievement.

The study is based on the theory of Bronfenbrenner's Ecological System Theory. This theory shows that students' performance is not just about academics. It is shaped by interconnected environments from immediate family, school (micro system) to broader culture (macro system). Positive links from between these systems boost results while the issue like poverty hinders performance by creating stress, impacting motivation, focus and creating resource disparities. Applying this theory helps educators see the whole world, fostering stronger family –school community partnerships to create supportive learning ecosystems. The key systems of Bronfenbrenner's theory are the microsystem, mesosystem, Exo-system and the macro system. According to microsystem supportive home life and positive peer relation foster security and focus whereas dysfunction families lead to emotional issue. The mesosystem describes the linkage between home and school. Parent poor connection with school creates academic gaps. Similarly, the Exo-system deals with parents' work place. A parents' employment status indirectly affect learning. The macro system states that poverty creates resources disparities and stress that significantly harm the performance of student (Bronfenbrenner, 2000)

Although the previous studies focus on poverty and academic performance they are not context specific. Few qualitative studies in Nepal focus on emotional

experiences of low-income students. Why the students of public schools face academic and emotional struggle, anxiety and fear in learning are not studied from the previous researches.

So, the objective of the study is to explore emotional and academic struggle of low income students in public school. The study particularly focuses on how poverty affects emotional well-being, classroom participation, learning behavior and academic performance. To fill up the gap this study aims to find the answer of the questions what emotional challenges do low-income students face in public school classroom? And how do emotional challenges influence students learning behavior and academic outcomes?

The study, exploring emotional and academic struggle of low income student in public school is significant for academic, psychological and practical level. This study helps educators, school administration and stakeholders to understand how emotion, stress and confidence level of students affect their learning behavior and academic performance. Not only from the academic point of view, but also this study would help to understand the learners' psychology. By knowing the learners' psychology learners can be provided guidance counseling and motivation from academic institution. In practical level the evidences from the study will guide the school leaders and organizations to support the students with scholarships, learning materials and psychological support.

Methods and Procedures

The study was conducted within an interpretive research paradigm, which assumes that reality is socially constructed and understood through individuals' lived experiences and meanings. Consistent with this paradigm, the study adopted general qualitative research design proposed by Merriam and Tisdel (2016), as it enables researchers to explore and interpret participants' experiences in their natural contexts. Qualitative design was considered appropriate because the study sought to understand the emotional and academic struggles of a low-income student from her own perspective rather than to measure or generalize these experiences. In addition Poth (2023) argues that qualitative inquiry facilitates an in-depth understanding of participants experiences, emotions, and meanings they assign to their social realities.

The study was conducted in a public school from Banganga municipality, Kapilvastu where many students come from poor economic background. Purposive sampling technique (Creswell, 2013) was used to select an information rich participant who met the purpose of the study. The participant was a fifteen years old grade 9 female student referred to by pseudonym Juneli to protect her identity. I selected the specific girl because she was from very low-income background and faces struggle in managing learning materials. Being a teacher from the same school, I became familiar with her circumstances through home visits, discussion with her class and subject teachers, and regular interactions at school over approximately eight months. This prolonged engagement with the participant helped establish trust and enhanced the credibility of the study (Enworo, 2023).

Ethical considerations were carefully observed throughout the research process. Permission to conduct the study was obtained from the school administration. Informed consent was obtained from her guardian and assent was obtained from the participant before the interview. The purpose of the study, voluntary nature of participation, confidentiality, anonymity, and the participant's right to withdraw at any stage were clearly explained. A pseudonym was used in reporting the findings, and the interview recording and transcript were stored securely and used solely for research purposes.

Data were collected through face to face semi structured interview conducted in Nepali language in a quiet room within the school during the lunch break. The interview lasted for about forty five minutes and was audio-recorded with the participants' permission. An interview guide containing open ended questions was used to explore the participants' emotional experiences, family responsibilities, learning behavior, motivation and academic difficulties like lack of resources, classroom participation etc. follow up questions and probing techniques were employed to obtain detailed descriptions and clarify participants' responses. Conducting the interview in the participant's first language enabled her to express her experiences more comfortably and authentically.

The interview was transcribed verbatim and analyzed using Barune and Clarke's (2023) six phase thematic analysis. At first the audio recording was repeatedly listened to and transcribed to achieve familiarity with the data. The participants' exact words and gesture with emotional experiences were included in transcription. Second, meaningful units of text were identified and assigned initial codes. Interesting features and important data were identified. This action was followed by grouping the codes into potential themes representing common patterns across the participant's experiences. Then the preliminary themes were reviewed and refined to ensure that they accurately reflected both the coded extracts and the complete dataset. After that each theme was clearly defined and appropriately named to capture its central meaning. Finally the themes were interpreted and presented by integrating verbatim quotations from the participant with relevant literature and Bronfenbrenner's Ecological Systems Theory. To enhance trustworthiness of the findings, prolonged engagement with the participant, careful documentation of the analytical process, and the use of direct quotations were employed to strengthen credibility and transparency.

Results and Discussion

Emotional Challenges that Low-income Student Face in Public School Classroom

Emotional Stress and Anxiety

The findings indicate that poverty influences students not only through limited financial resources but also by creating persistent emotional stress and anxiety that interfere with learning. The participant's experiences reveal that concerns about her family's financial hardship, debt, and future responsibilities constantly occupied her

thoughts, making it difficult to concentrate on classroom learning. In an interview she stated "*my mother has taken loan from our relatives to feed us and afford for our learning materials in the hope that once I will earn and clear the debt".* This psychological feeling creates mental stress and anxiety in study.

The participant doesn't pay proper attention to her study due to stress and anxiety. While studying she used to remember her family problem. The problem she faced creates mental disorder and low concentration. She thinks about her father. She would ask to herself if my father had did well, earn and take care of us, our life would be more enjoying like other friends. She cursed her fate. Due to stress sometimes she came up with the idea of leaving the study and go to India to earn money. Once in an interview she said "*I like to drop school go to India and earn money for living. I can't concentrate for my study in this situation. The economic status in mind creates fear in continuing my study".* According to Maslow (1962), individuals cannot effectively focus on higher-level needs such as learning and self-development unless their basic physiological and safety needs are fulfilled. This emphasizes that the participant was in trouble in fulfilling her basic needs. The girl is haunted by low income of her family.

Stress and anxiety due to low- income troubles the participant very much. The participant doesn't like to share anything with her friends. She doesn't like to stay nearby with her friends. She likes being alone because she thought that she was the only girl to face such problem .when I asked her about her relation with her friends she replied " *I don't want to spend time with my friends because their economic status and mine is very different. I don't want to share my problems to anyone. If they knew my status then they will treat me differently".* This statement emphasized that she had suppressed her problems with in herself. She is in the thought that revealing her secrecy will be a matter of fun. She doesn't like to be the matter of fun. These findings are consistent with previous studies that identify poverty as a major determinant of students' emotional and academic difficulties. Acharya (2009) argues that poverty exposes children to multiple emotional, cognitive, and physical risks, while Russel et al. (2008) report that children raised in economically disadvantaged households often experience frustration and emotional dysregulation that hinder effective participation in school. Although these studies establish a strong relationship between poverty and education outcomes, they mainly describe general patterns across larger populations. The present study extends this understanding by providing a context specific account of how emotional stress is experienced by a low-income student in a Nepali public school.

Bronfenbrenner's Ecological Systems Theory offers a meaningful explanation for these findings. The participant's emotional stress originated within her immediate family environment (microsystem), where financial hardship, parental struggles, and household responsibilities directly affect her psychological well-being. At the same time, broader socioeconomic conditions represented within macro system intensified these challenges by limiting educational opportunities and creating persistent economic insecurity.

The findings contribute to the existing literature by demonstrating that poverty affects students' educational experiences through complex emotional processes rather than financial deprivation alone. By illustrating how emotional stress shapes motivation, concentration, and educational aspirations, this study highlights the need for schools to complement financial assistance with counselling services, psychological support, and stronger collaboration with families to create learning environments that promote both academic success and emotional well-being.

Low Self-esteem and Reduced Confidence Level

The findings reveal that poverty not only restricts students' access to educational resources but also undermines their self-esteem and confidence. The participant associated her family's financial hardship with feelings of inferiority and social exclusion, leading her to withdraw from school activities. The participant keeps herself isolated in school activities. Sometimes she feels regret to study in public school. When she sees her neighbors going to private school in attractive uniforms in school bus she immediately reminds her income issue. Though her friends are studying in public school, she forget everything and connects the issue with money. She quoted "*If we had enough money I would have gone to private schools or I would read in English medium in the same school. It all due to money".* This issue generates inferiority in her mind. According to Lightsey (1999), negative social experiences and lack of supportive environments can reduce students' self- efficacy and confidence, which ultimately affects motivation and classroom participation. Somehow she linked the issue with inclusion and right to education. The question why discrimination on students education. Why education is free and in cost. This creates discrimination.

Discrimination is revealed when she is teased by her friends is in the school premises. She is bullied by her friends in case of her dress up and the things that she possess. She has to wear ragged clothes, torn out shoes. This looks abnormal to her school friends. She shared her experience saying "*once, my bag was torn out while studying in grade seven. we had no money to manage another one. My mother sew it with a thread that doesn't match with bags colour. When I reached at school all the students of my class began to laugh. This made me think why I am living in this world, but I don't have any way out to leave the world".* This critical feelings make anyone to think about students' difficulties that she face in the school.

Despite the situation sometimes she is scolded by her class teacher. She usually arrives late at school. She missed morning assembly and entered the class lately. Though being scolded she doesn't like to share the problem with her class teacher. She is in fear of revealing the secrecy. She quoted "*class teacher scold me when I am late for school. At that time I feel that everyone in the world is against me. Suddenly the idea of leaving school comes to my mind".* The analysis suggest that economic disadvantage contributes to emotional insecurity which in turns create low self -esteem and decreases academic performance.

These findings are consistent with previous studies that identify poverty as a significant factor influencing students' psychological well-being and educational engagement. Lightsey (1999) argues that negative social experiences and the absence of supportive environments reduce students' self-efficacy and confidence, thereby affecting motivation and classroom participation. Likewise, Acharya (2009) suggests that poverty exposes children to multiple emotional and psychological risks, while Russell et al. (2008) found that persistent socioeconomic disadvantage often leads to frustration, low self-worth, and emotional vulnerability. Although these studies explain the relationship between poverty and psychological well-being, the present study provides a richer understanding of how low self-esteem develops through every day experiences of ridicule, social comparison, and perceived educational inequality within a Nepali public school context.

Bronfenbrenner's Ecological Systems Theory offers an important perspective for interpreting these findings. The participant's low self-esteem was shaped not only by financial hardship within the family (microsystem) but also by her interactions with peers and teachers in the school environment, where teasing, criticism, and social comparison reinforced feelings of inferiority. These experiences were further influenced by broader societal perceptions that often associate private schooling and economic privilege with educational success and higher social status, reflecting the influence of the macro system. The interaction of these ecological systems demonstrates that students' self-esteem is socially constructed through continuous interactions between family circumstances, school experiences, and wider cultural values.

Influence of Challenges on Students Learning Behavior and Academic Performance

Emotional Challenge and Learning Behavior

The findings indicate that emotional challenges arising from poverty significantly influence students' learning behavior and classroom engagement. The participant's experiences demonstrate that emotional stress, anxiety, and low self- esteem reduced her ability to concentrate, participate actively, and remain less motivated in her studies. When she faces emotional difficulty she struggle to focus, participate and retain information in the classroom. Her feelings of fear reduces motivation. Emotional stress and low confidence resulted in poor concentration, reduced motivation, and passive classroom participation. She explained how emotional distress affected her attention in class. *"Sometimes I am sitting in the class, but my mind is not attentive because of home problems*". Emotional difficulties and socio-economic barriers may reduce students engagement in classroom activities(Fredrick et al., 2022).The analysis suggests that emotional challenges have direct impact on learning behavior of students. Emotional stress influences students' ability to regulate emotions and participate effectively in learning activities (Cherniss et al., 1998).

Her learning behavior is also affected by workload at home. . Sometimes she doesn't get enough time to accomplish the assignments given. She focused " *I have to work a lot at home. I get up at 4 am in the morning. Then I helped my mother clean the house. Feed the animals cook food, go to dairy to sell milk and so on.* This work load minimizes time to study that surely disturb in learning and practice at home. Without practicing at home and revising the lessons how the expected outcomes will be achieved. During the season of plantation she has to stay at home and helps her mother to work in the field. Work is emphasized than study.

Work load, mental stress and anxiety ultimately enforced her to leave the study. When she can't go to school for few days during planting and harvesting season she came up with the idea of dropping school. She seeks solution in leaving school. Studying is not a primary task for her. She has to take care of her small brother as well. Engaging in housework for a long time rather than study creates confusion in learning. She missed the important classes. Then she feel more distracted in study than usual. She stated " *there is no one to support for my study and help my mother, I see my mother always struggling for us, so how could I concentrate on my study"* The analysis revealed that academic success is influenced by work load home environment and support from elders. The microsystem of the theory prevails here. According to (Biggs et al., 2017), stress arises when individuals perceive that environmental demands exceed available coping resources. In this context, lack of adequate resources contributes significantly to academic stress among students.

These findings support previous research demonstrating that emotional distress and socioeconomic disadvantage reduce students' engagement in learning. Fredrick et al. (2022) reported that emotional difficulties and limited school support negatively affect students' participation in classroom activities, while Cherniss et al. (1998) emphasized that emotional stress weakens students' capacity to regulate emotions and engage effectively in learning. Similarly, Biggs et al. (2017) argued that academic stress emerges when environmental demands exceed an individual's available coping resources. While these studies identify the relationship between emotional stress and learning, the present study extends this understanding by illustrating how household labor, caregiving responsibilities, and financial hardship interact to shape the daily learning experiences of a low-income student in a Nepali public school.

Bronfenbrenner's Ecological Systems Theory provides a meaningful explanation for these findings. The participant's learning behavior was strongly influenced by interactions within her microsystem, particularly her family environment, where household responsibilities and financial difficulties competed with educational activities. The weak connection between home demands and school expectations also reflects the influence of the mesosystem, as limited communication and support between family and school reduced opportunities to address the participant's learning difficulties. These ecological interactions demonstrate that students' learning behavior cannot be understood solely as an individual characteristic but must be viewed within the broader family and social contexts that shape their educational experiences.

The findings contribute to existing knowledge by demonstrating that emotional challenges influence learning behavior through interconnected family, school, and socioeconomic circumstances. Rather than affecting only academic achievement, poverty alters students' capacity to concentrate, participate, and persist in learning. These findings suggest that schools should adopt holistic support mechanisms, including counselling services, flexible academic support for students with heavy family responsibilities, and stronger collaboration with parents and communities to reduce barriers to learning and improve educational participation among economically disadvantaged students.

Life Challenges and Academic Performance

The findings reveal that the participant's academic performance was shaped by multiple life challenges associated with poverty rather than by a lack of ability or interest in learning. Although she expressed a strong desire to continue her education, limited financial resources prevented her from accessing learning materials, private tuition, and other educational opportunities that could enhance her academic achievement. Describing her situation she stated "*I like to study a lot .I like to take tuition and extra classes for difficult subjects. But we don't have enough money. My mother can't afford for my study. She has to look and afford for my brother and sister too"*. The participants' potentiality is suppressed with economy. This analysis clearly states that better academic performance is linked with income.

Lack of adequate income source leads to limited access on learning materials that directly affect her study and learning process. She expressed that "*When I was in class eight I had to buy a new copy but my mother can't pay for a single copy. After a week she gets money by working in others house and I was able to buy a copy"*. As a result she can't reflect her true potential in her academic performance. She expressed frustration to her study.

Force of grade and achievement from teacher and mother also gets the participant frustrated. She felt fear of getting grades. Her mother has high expectation that her daughter would study well, get good scores and find a better job in the future. Her mother is affording her in the hope that one day she would repay the debt being an educated and well paid job holder citizen. In this context, she compares herself to other students in the school who are very free and don't have any stress in studying. These findings are consistent with previous research demonstrating that socioeconomic disadvantage is closely associated with students' academic achievement. Sirin (2005) concluded that socioeconomic status is a significant predictor of educational outcomes, while Khatri et al. (2024) found that poverty reduces students' classroom engagement and completion of academic tasks in Nepali community schools. Similarly, Adeniji (2025) argued that inadequate financial resources limit students' access to educational opportunities and negatively affect academic performance. However, the present study extends these findings by showing how academic performance is influenced

by the cumulative effects of financial hardship, limited educational resources, family expectations, and emotional resilience. Unlike many previous studies that primarily examine measurable educational outcomes, this study provides a deeper understanding of the lived realities through which poverty influences academic achievement in the context of a Nepali public school.

Bronfenbrenner's Ecological Systems Theory helps explain these findings by illustrating how academic performance is shaped through interactions among multiple ecological systems. Within the microsystem, the participant's family provided emotional encouragement despite severe financial hardship, motivating her to continue her education. At the same time, limited economic resources restricted access to educational materials and learning opportunities. The influence of the Exo system was evident in the family's unstable economic circumstances, which indirectly affected the participant's schooling, while broader socioeconomic inequalities within the macro system constrained educational opportunities available to children from low-income households. The interaction of these ecological systems demonstrates that academic performance is not determined solely by individual effort but is strongly influenced by family, community, and societal conditions.

Despite experiencing numerous hardships, the participant demonstrated remarkable resilience by continuing her education with the encouragement of her mother and inspiration from national role models such as Mahabir Pun and Jhamak Ghimire. This finding contributes to existing knowledge by showing that poverty does not inevitably result in academic failure; rather, students' educational trajectories are shaped by the interaction of economic hardship, family support, personal determination, and supportive social influences. The study therefore highlights the importance of strengthening financial assistance, scholarship programmes, access to learning materials, and school-based psychosocial support so that economically disadvantaged students can translate their aspirations into meaningful academic success.

Conclusion

This study explored the emotional and academic struggles experienced by a low-income student in a Nepali public school and demonstrated that poverty influences educational experiences through interconnected emotional, social, and economic processes. The findings revealed that financial hardship contributed to emotional stress, anxiety, low self-esteem, social isolation, reduced classroom engagement, limited access to learning resources, and lower academic performance. At the same time, the participant's perseverance and her mother's encouragement illustrated that resilience and family support can help students continue their education despite severe socioeconomic challenges.

The study contributes theoretically by extending the application of Bronfenbrenner's Ecological Systems Theory to the context of low-income students in Nepali public schools. The findings demonstrate that students' emotional well-being

and academic performance cannot be understood solely as individual characteristics but are shaped through interactions among family circumstances, school experiences, peer relationships, and broader socioeconomic conditions. By providing an in-depth account of a student's lived experiences, the study enriches existing literature, which has largely focused on statistical relationships between poverty and educational achievement, with a context-specific qualitative perspective.

The findings also have important practical implications for teachers, school leaders, counsellors, and parents. Schools should recognize that students from economically disadvantaged backgrounds may experience emotional distress that affects learning and classroom participation. Creating supportive classroom environments, strengthening guidance and counselling services, identifying students at risk of educational exclusion, and promoting inclusive teaching practices can enhance both students' emotional well-being and academic engagement. Greater collaboration among teachers, parents, and communities is equally important in addressing barriers that extend beyond the classroom.

From a policy perspective, the study suggests that educational equity requires more than providing free schooling. Policymakers should strengthen scholarship programmes, expand access to learning materials, provide school-based psychosocial support services, and develop targeted interventions for students from economically disadvantaged families. Policies should also encourage schools to integrate students' emotional well-being into educational planning and support mechanisms so that financial hardship does not become a barrier to learning and educational attainment.

This study is limited by its focus on a single participant from one public school and the use of interview data as the sole source of evidence. Consequently, the findings are not intended to be statistically generalizable but to provide an in-depth understanding of one student's lived experiences. Future research could include multiple participants from different geographical regions, compare experiences across public and private schools, incorporate perspectives from parents and teachers, and employ longitudinal or mixed-methods designs to examine how poverty influences students' emotional well-being and academic development over time.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98967

Parental Perceptions of Girls' Education in the Muslim Community of Nepal

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Abstract

This study investigated parental perceptions on Muslim girls and their education. Girls' access to education in Muslim communities is shaped by a combination of social, cultural, economic, religious and gender-specific aspects. The objective of this study was to explore the perception of parents and its influences on girls' education. Parents' perception of benefits of girls' education and barriers to girls' education were also examined. Qualitative research design with narrative approach has been used in this study. I applied the interpretive paradigm to explain the information gathered from the participants. The site of this study was Muslim community of Bara district. The participants include three parents from the same Muslim community. I used purposive sampling procedure for selecting the participants. I conducted in-depth interviews using interview guidelines as a data collection tool. I developed themes based on the information provided by the participants and linked them with related theories. The study found that the socio-cultural impacts, family income sources, safety and protection concern in the public places for younger girls and the gender bias and social control specially impacted to educating girls as perceived by the parents. Muslim mothers were found to be aware of their girls' education. They have reflected their entire life-struggle that they faced because of their illiteracy.

Keywords: Narrative approach, gender equity, Muslim community, educational access

Introduction

When I studied about the parental perception to educating girls from multiple viewpoints, a multifaceted interaction with girls and parents' social, economic, racial, gender, protection and cultural factors have been revealed. Those interactions have given me the understanding that the Muslim children study in Urdu schools. There are two religious schools of Muslim: Madrasa Salafiya Darul Islam and Madarsa School.

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The schools are established to teach the holy book of Islam like the Quaran and Urdu. One school has been established for giving only Urdu language knowledge to the children. Next one is religious mainstream school of primary level.

Nepalese society is mixed of various castes, ethnic groups, languages, cultures and religion. Prithvi Narayan Shah accurately referred to Nepal as "a common garden of 4 'varna' and 36 'jaat'." The phrase "unity in diversity" is what Nepalese people demonstrate on the international stage and a sense of religious tolerance is deeply ingrained in everyone's heart, mind and soul (Dahal, 2003, pp. 87-135). A tradition of cultural interaction, interrelation, and interdependence has continued from ancient times to the present day. As a melting pot of multiple religions, Nepal allows individuals the freedom to follow, practice, and maintain their cultural traditions. People from various cultural backgrounds have all contributed to the development of a strong national culture with the Muslim community as one of them.

Nepal's National Population and Housing Census identified a total of 142 castes and ethnic groups (Population Census, 2021). Out of them, Muslim is one of the castes known as ethnic and religious group. Muslims constitute the largest minority but educationally they are one of the most backward communities in the country (Ahmad, 1981). Muslim girls lag behind their male counterparts and women from other communities in the country. Muslim girls from different socio-economic strata have a great deal of marginalization in their life situations.

Muslim history in Nepal began in the 15th century when traders from Kashmir and other regions of South Asia, Central Asia, and Tibet came to Nepal. Later, more Muslims arrived in Tarai, including those connected to the 1857 Indian uprising and British diplomats (Kafle et al., 2024). They settled in Kathmandu, engaged in trade, and some even rose to positions of court officials (Fadzakir, 2001). The Malla dynasty, especially King Ratna Malla, helped to welcome these traders.

According to Sharma (2007), mostly tradesmen, these early settlers used Kathmandu as a hub for commercial routes between Lhasa and Kashmir. In the 18th century, Muslims from Tarai region were also imported by King Bhaskar Malla. He brought them as bangle dealers, musicians, and perfumers. While they are endogamous, they also preserve unique identities and groups, particularly in relation to marriages. Global Islamist discourses financial and technological resources. Ansari (1981) stated the Muslim population in Nepal has encountered obstacles, and Muslim women are especially affected, experiencing lower literacy levels and restricted access to education.

According to Acharya (2025), Muslim women in Nepal continue to experience significant social and economic disadvantages. Their limited access to and participation in education remains a major barrier to achieving the goal of universal education (Pradhan, 2021). The National Statistics Office (NSO, 2023) reports that Nepal has a

Muslim population of 1,483,066, representing approximately 5.095% of the country's total population. Furthermore, the Muslim community in Nepal comprises four major ethnic groups: Indian, Tibetan, Kashmiri, and indigenous Nepalese Muslims (Acharya, 2025).

According to the Census report 2021, most of the Muslim community lives in the Terai region. The remaining are found mainly in the city of Kathmandu, Gorkha and the western hills. The Muslim Population in Bara is (11.9%). Literacy rate of Madhesh Province 63.5%, female 38.88%, male 72.5%. The net enrollment rate of Muslims is 47.1%, which is lower than the national average. There is a gender gap in schooling in Madhesh, with females dropping out. Rural Madhesi parents are skeptical about girls' education, influencing to cultural and traditional views. In Nepal's patriarchal society, a boy must have a higher degree of education, a better career, and a higher family position than girl to marry a girl. According to Dawadi (2019) education has long-been out of access for girls in Muslim Community of Nepal. A society in which females are denied access to school or have their dignity and religious freedoms violated while learning is either progressive, inclusive or resilient.

A journey of education is crucial for every child. Without the best parenting good education is rarely possible. Education is a joint endeavor involving parents, teachers and schools. According to Steinberg (2004) "a good parent is someone who gives their children safety, love, support, care, and guidance. Good parents are involved in their children's lives, show empathy, understanding, and set appropriate boundaries." Draper and Harpending (2017) said "a parent is a person who brings up and cares for another. However, being a parent does not necessarily mean that biologically passed genetics to a child" (pp.207-236). A parent can take on different forms, such as a stepparent, grandparent, legal guardian, or a combination (Sitepu, 2024). A responsible parent sincerely loves the child, supports, nurtures and encourages the child in each step. They provide a space for the child to be heard to be seen, and appreciated the children on their initiation and success either the success is small or great. The role of a parent is multifaceted, encompassing caregiver, teacher, role model, and protector for their children at anytime and anywhere (Berns, 2015).

Gender equality in education is one of the crucial aspects in the world and Nepal as well. The Government of Nepal is committed to ensuring quality education for all. The government has taken major steps to promote gender equality. Provided equal access to education, enforced laws against gender discrimination, supported women's leadership and organized skill development programs (Garg, Kumar & Garg, 2025). Schooling the girls has central value for both girls' and the development of the nation. The Government of Nepal has been invested time and money for achieving this. The government has also formulated laws, policies, and programs to ensure gender equality in education. National Education Policy, Girls' Scholarship Program, Free Textbook Distribution Program, and Mid-Day Meal Program. Though, there is a high inconsistency in girl's education in rural areas of Madhesh Province. In the case of

Madhesh Province, there is a high disparity in gender equality in education and other aspects. An estimated 160,000 girls between 11 and 14 years old are out of school, with a significant number of them residing in the Madhesh Province, exclusively from the Dalit and Muslim societies (Gupta, 2019). Due to the parents' perception, awareness, early marriage practices and poor economic conditions girls are excluded from educational opportunity.

Hofstede (1986) stated on one hand, education offers labor and training. On the other, it replicates traditional cultural norms and values in the society. More precisely, social production will result from including every member of society in educational process. In the same way, education involves both imparting knowledge to others and acquiring information from someone else. Education moreover indicates to the information urged through schooling or instruction and to the institution of instructing as an entirety (Giroux, 1984). Education refers to both the act of guiding and the process of learning. It as a rule indicates particularly to the educating of children or individuals and the learning done by them.

The Government of Nepal also participated and promoted the global campaign "Education for all," Yet the female literacy rate remains 69.4% (National Census, 2078). The education of girls and women is a significant national issue, both as a crucial aspect of development and as a fundamental human right. Pokharel (2008 pp. 20-28) expressed that in Nepal, girls and women face various forms of social discrimination, particularly in education. They are often regarded as the most marginalized and underserved segment of the Nepalese population. In lower-income families it is common for parents to prioritize sending their sons to school while neglecting their daughters. Muslim women, in particular, continue to be affected by the traditional social structures within their communities (Keddie, 1990).

It should be noted that education provides females with a decent source of income and sustenance. It supports their economic function and growth. Children's education is dependent not just on their father's income, but also on their mother's. It shifts the burden of motherhood to both men and women (Budig & England, 2001). Because one's degree of education influences one's income and potential. It is critical that girls have an education in order to make a greater contribution to their families, society, and the world at large.

A child's first instructor is a woman, and the first school is at home. It indicates that the entire world revolves around girls' development, which can only be achieved through education. Stone (2007) claimed that the earliest parents had an unfavorable attitude about educating their daughters. A girl's growth is greatly influenced by her parents' attitudes. Because they believe that girls are external money who must stay at home. There are also more elements that contribute to parents' negative attitudes, such as financial insecurity, safety concerns for their daughters and their socioeconomic level (McLoyd, 1998). Parents' attitudes regarding their daughters' education are shifting,

with a growing desire to educate them. Parental involvement in girls' education boosts their confidence and motivation to succeed them. "A girl can fight with the entire world but never argue with her parents" (Brown, 2014, pp. 72-86).

The girls' issue has been the subject of much research concentrating in particular on their schooling and various types of discrimination. Sherwani (1998) cited Classical Islamic legal tradition recognizes that the father or legal guardian as the guardian (*wali*) of a minor girl, while the husband assumes responsibility for her maintenance and protection after marriage. This framework is rooted in the concept of *wilayah* and traditional exegesis is of Qur'an 4:34 (male as protector and maintainer for female). Although its interpretation and implementation remain subjects of debate among contemporary Muslim scholars. It demonstrates how girls have historically been neglected and have always been seen as a financial and moral burden on their parents. The Muslim community is frequently perceived as restrictive toward women and lacking support for women's rights.

Parents are adopting conventional attitudes toward their daughters in Muslim community. Parents prioritize investing in sons due to cultural norms. The expectation that sons will financially support the family and the belief that sons yield greater economic benefits. This tendency stems more from social, economic and cultural influences. Parents' contrast attitudes toward girls lead to discriminatory acts and make girls vulnerable (Brown & Tam, 2019). They are seen as a liability by their parents. Consequently, access to educational opportunities is influenced not only by provision and infrastructure but also by the familial context and environment. In which decisions and aspirations regarding children's education are developed. In this way, the environment within the family plays a crucial role in developing the decisions and aspirations that determine children's educational paths, alongside the provision of educational facilities.

Muslim parents often perceive household resources as limited and tend to allocate them more favorably towards their sons. This reinforces a pattern of gender bias that contributes to the discrimination of daughters (Kaul, 2018). Furthermore, it considers Nepal's constitutional commitment to gender equity and inclusive education. It is essential to comprehend how Muslim parents view girls' education in order to achieve equal educational achievements. Guarantee that no community is left behind in efforts to build the country. Few empirical studies have been conducted on Muslim parents' opinions of girls' education in Nepal. The information that is available is either non-community-specific or generalized. To produce data that is specific to a community and setting in order to inform inclusive, successful educational interventions and policies. This study is important to study about the parental perception regarding their girls' education in Muslim community.

Although considerable research has examined parental attitudes, gender disparities, and girls' education, limited attention has been given to Muslim parents'

perceptions of their daughters' education. Most existing studies emphasize general socioeconomic barriers while paying insufficient attention to the influence of religious beliefs, cultural norms, and family aspirations on educational decisions for Muslim girls. Furthermore, qualitative studies exploring the perspectives and lived experiences of Muslim parents remain scarce. This study seeks to address these gaps by examining the factors that shape parental perceptions of girls' education within the Muslim community.

The main objectives of this study are as follows:

1. To identify the beliefs and perceptions of Muslim parents regarding the education of girls in Nepal
2. To explore barriers that prompted Muslim parents reluctant in educating their daughters
3. To examine how parental perceptions affect the educational influences of girls in Muslim community

Methods and Procedures

The empirical investigation for this research was carried out in the Bara district, where Muslims constitute a distinctive religious minority group. To thoroughly examine phenomena, this study employs an interpretive paradigm and a qualitative method. It used subjective, naturalistic research in authentic environments to examine how parents understand about girls' education. The study incorporates guiding questions and forms of emergent inquiry.

For this study, I selected three experienced parents (whose daughters were studying in school) purposively from Muslim Community of Bara district. The three practiced participants provided the information to reach the objectives. With frequent visits and contact, I built rapport and took consent from every participant to interview them. The approach of the interviews involves sharing the participants' perceptions, feelings, and experience. By eliminating jargon and metaphorical phrases at the participants' location and engaging in an extended interactive conversation in the local language, an in-depth interview was conducted in a natural environment. Each interview was conducted in a supportive and practical environment designed to encourage open and honest discussion about girls' education. I arranged the setting to help participants feel at ease, enabling them to express their thoughts freely and without reservation.

The interviews were audio-recorded, noting the key points in diary. The interviews were transcribed and then coded and categorized into five themes. Repetitions were eliminated from the data to guarantee correctness and I used to stop study information from being invented, falsified and misrepresented (Patil & Wagh, 2023). I discussed the results based on the recurring themes. For ethical issues, I used alphanumeric codes to indicate the participants as P1, P2, and P3 (P3 was the male parent of Muslim girl).

Results and Discussion

This section presents the findings of the study based on the data collected to address the research questions.

Socio-Cultural Impacts in Girls' Education

Effort of Muslim girls is highly restricted without parental authorization. According to P3, in Tarai region, Muslim parents commonly prefer their children to attend religious schools where Urdu is taught alongside Islamic studies. These religious schools operate outside the mainstream education system and are primarily intended to provide religious instruction to Muslim children. Such institutions are established with the purpose of fostering religious literacy, in relation to the teachings of the Quran. A Maulana or religious leader, appoints an individual to serve as a teacher in these schools, responsible for instructing children in Quranic knowledge. Children typically study in these religious schools for three to five years (Biantoro, 2019 p, 178-199). As shared by P2, "*after completing this phase of religious education, parents often do not permit their daughters to pursue further studies in mainstream school"*. This practice reflects broader societal norms and cultural expectations that emphasize traditional gender importance and restrict educational opportunities for girls. As a result, Muslim girls in such communities' face barriers to accessing formal education beyond the religious curriculum. The religious curriculum teach about the Muslim religion which is not enough to compete in market as they shared. These restrictions contribute to the overall educational disadvantage experienced by Muslim girls.

In Madhesh, child marriage remains a pressing issue, deeply affecting families. P3 stated that, he has seven daughters and one son. He has more daughters because of the hoping for a son. His eldest daughter was married at the age of 13. Now his second daughter's marriage is arranged by parents to take place after two weeks at the age of 16. The cultural practice of early marriage is compounded by financial challenges. As pursuing higher education for his girls often leads to excessive dowry demands from prospective grooms' families. It is not only the issue for Muslim community but also the issue of Madhesh. These demands place a heavy burden on families like him. It has made his extremely difficult to afford both education and marriage expenses. This economic pressure discourages families from educating their daughters, perpetuating a cycle of early marriage and limited opportunities. Addressing this issue requires tackling both the cultural norms that prioritize early marriage and the financial constraints that make education seem unattainable.

Income and Girls Education

Household income is a fundamental determinant of a family's financial well-being, as it enables families to balance their income and expenditures effectively. When household income is limited, families often prioritize meeting their basic needs by reducing expenses and seeking additional sources of income. Under such

circumstances, education may receive lower priority, particularly among families with low and unstable incomes or limited livelihood opportunities.

Constitutionally, the Government of Nepal has declared free and compulsory basic education and free secondary education. However, such types Muslim families keep their children out of school because of the conception of high cost of education. The same issue prevents girls from lower-income homes from receiving a formal education. Low income, constrained income sources and poverty are preventing Muslim girl children from mainstream education. Government schools offer free basic education, but there are extra fees for things like uniforms, books, stationery and other supplies (Karki, 2014). A family with a low income does not be able to afford the costs. The participants shared that *the economic status and the family income source impact on their child education. Specially, they focus to provide educational opportunity to their son besides their daughter*. A significant number of Muslim girls are denied the opportunity to receive education each year due to financial limitations of their families.

P1 said that to fulfill the requirements of family, senior girl child needs to take care of their siblings, go to field for collecting grass, firewood and cattle grazing. At the same time, the son goes to school. Girls who are studying in school are also have to be engaged on household chores before and after school time. So, they have not time for their homework and study at home. Due to this, their academic performance seems poor than their friends. P1 and P2 indicated that *nowadays parents are aware of the importance of girls' education. Specially, female parents shared their experiences how they are facing difficulties and obstacles because of being not literate. So, they don't want to make their girls like them*. *Families those have basic income sources they send their both children son and daughter to school. But who have not basic income sources, working in other houses and shops for their day-to-day expenses, they don't send their girls to school.*

P3 shared that he works in a tailoring shop as a tailor. He gets 200-300 rupees per day as wages. He has 9 members at home. His wife and daughters work other's field in seasonal farming. It is very crucial for them to accelerate daily expenses. So, the education for girls is not their priority than the basic requirement fulfillment. He added that, as he has only one son and needs to educate his son at any cost. The son will be their supportive hand in the future, he believes.

The above quotation specified that the Compulsory and Free Education Act, 2076 is not implementing properly. Due to the unseen cost of education children from poor families have not access of education. Schools are collecting fee for admission, exam and practical. It makes parents overloaded specially those who have not consistent income sources and more children. The provision of Constitution also be implemented and monitored from concerned authorities.

Safety and Protection for Girls in Public Space

Safety and security are the major concern for girls of Madhesh. Muslim girls encounter serious issues regarding safety and protection as a result of a complicated interplay of elements, such as socio-cultural expectations, gender-based violence and economic inequalities (Aslam, 2025). Their vulnerability is intensified by discrimination, marginalization and insufficient access to education and resources. P3 expressed his opinions in this aspect, saying that "*in Madhesh, as girls grew into teenagers, boys began to tease them. The boys stop the girls in the way to school, they begin to tease, bully, and harass them. Getting married to a girl can be challenging if someone brings up the concern of her character. However, the elite family can disregard this kind of problem due to their access to property and power. Though, a poor family cannot ignore the* problems*. It expands throughout the society, which rejects families and restrictions in social functions. Additionally, getting boys will be difficult for marrying those girls. The parents of poor families thus forbid their daughters from attending school and from marrying young"*.

Concerns regarding safety and protection greatly affect the education of marginalized girls in a harmful way. Issues such as violence, discrimination and the absence of safe, supportive learning environments restrict their access to and involvement in education. It ultimately reduces their opportunities (Adelman & Taylor, 2006). These obstacles are especially severe for girls encountering multiple forms of marginalization. When girls experience any form of violence, it significantly disrupts their educational attainment to focus on and continue their education. As a result of ongoing violence, many girls begin to miss classes frequently and may eventually drop out of school altogether. Though, they cannot share it with anyone due to the prestige of family in the society.

So, the safety and protection in and on the way to school is a significant reason why parents hesitate to offer education for their girls. Guarantying the safe learning environment in school is crucial for girls' education. To address this issue, community awareness should be strengthened, a quick and accessible reporting system should be implemented, reporters' confidentiality should be protected, and a robust system of punishment should be established.

Religious Perception and Girls Education

In certain Muslim communities, views on girls' education are shaped more by cultural interpretations and Islamic principles. Some families prioritize domestic roles for girls and especially when resources are scarce (Becker et al., 2025). They place less emphasis on their formal schooling. As a result, perspectives on educating girls differ widely across Muslim-majority societies. It reflects a complex mix of religious understanding, cultural expectations and economic realities. There is not strict to get education and knowledge for both male and Female. Though, the concept is that for female, religious knowledge and education will be enough.

In Muslim-majority societies, religious conservatism frequently restricts girls' access to education. By emphasizing traditional gender roles, moral safeguarding and strict separation between the gender, the expense of broad, secular educational opportunities for girls (Jalloh, 2025). Although, mainstream Islamic teachings explicitly require education for everyone. Conservative and fundamentalist interpretations impose particular limitations that impact women heavily. Nowadays, the situation is gradually changing which is required.

Gender Bias and Social Control on Muslim Girls

I exposed that social features like gender bias and social control significantly contribute to Muslim girls' marginalization in schooling. It is pertaining to the traditional and patriarchal Nepalese society. Rather than restricting their sons, parents frequently place gender-biased restrictions on their daughters, compromising girl's safety in public places. Gender analysis theories highlight the widespread societal injustices and inequities that women face, which are mainly ignored (Ritzer, 2011). The idea of gender differences discusses how gender-based role assignment results in a division of labor that maintains women in less influential positions. Since women have the dual responsibilities of managing household chores and caring children.

This is partly due to the fact that parents place a high value on their sons' education since it is expected that this will secure their financial stability in old life (Alstott, 2004). Obtaining girls' education is sometimes seen as an expensive responsibility that has little long-term positive impact on the parents' well-being. The ultimate goal for daughters is marriage; upon getting married, they must leave their parents' house and get a dowry. Postponing their marriages past the age of eighteen or so is worthless. According to P1, my husband is upset about the neighbors who discourage our daughter from going to school. She disclosed that although my spouse is somewhat receptive, he begins to impose on daughter when he hears or is influenced by others. She feels unpleasant. They always ask my husband, "Why are you funding your daughter's education?" My husband controls all the decisions and plans at home. When money is constricted, families choose to fund sons in this community. Educations over daughters' since men are more likely to be employed in the future.

Parents from a low-income family do not encourage daughter to pursue her education, but give their son financial, educational and recreational support. P2 also explained how our son is receiving different treatment because we view him as a source of security for our retirement. We believe it makes sense to invest in his education. We can observe that our neighbor has set aside a specific study area in their one-bedroom home for their son. Everyone in the household is instructed to maintain silence while he studies. If daughter had time at home for her homework, she frequently distracts by having to help with cooking and other household chores rather than studying.

Conclusion

Muslim girls from lower socioeconomic families encounter a number of intimidating challenges in school. Perception of parents regarding their girls' education directly impacts. Parents do not allow to go to school to their girls because of those motives. Financial constraints make it more difficult for them to enroll in and continue their education. Where they are subject to the obstructive effects of their neighbors, are probably where they belong. Due to a lack of funding, daughters' chances of receiving an education are harmed when support is frequently allocated to sons' education. Community level elements are also significant, including identity politics, the spatial segregation of Muslims, family and community dynamics.

Religious conception and financial hardship severely limit Muslim girls' educational opportunities. In many Muslim communities, cultural norms rooted in conservative interpretations of religion prioritize early marriage over education for girls. These norms often restrict girls' access to schooling. Financial hardship compounds this issue, as in Muslim families face economic disadvantages. Limited resources force families to prioritize boys' education over girls. Muslim girls encounter disproportionate financial barriers compared to other groups. Poverty often leads to child labor or domestic responsibilities for girls, further reducing school attendance. Discriminatory practices in some communities, like restricting girls' mobility, exacerbate these challenges. This combination marginalizes Muslim girls in educational systems. Understanding these barriers is crucial to addressing their educational exclusion. Targeted interventions, like scholarships and community awareness help to overcome these obstacles.

The findings suggest governments and education policymakers need to enhance financial aid, scholarships and related support systems to ease economic pressures. It focuses on low-income households and boost girls' access to education and continued attendance in school. Community leaders, teachers and civilsociety groups to run awareness initiatives that advocate for gender equality and highlight the lasting social and economic advantages of educating girls.

Schools and local officials should work to ensure girls' safety by offering reliable transportation, maintaining secure learning environments and establishing clear procedures to prevent harassment and violence. Religious figures and community influencers to be cooperated to share authentic Islamic teachings that affirm girls' right to education and counter traditional beliefs that limit female participation in schooling. Efforts make to encourage parents to treat sons and daughters equally in educational matters by addressing gender-based biases in family decisions. Future studies should explore these topics using broader, more varied samples, compare different regions or communities, and apply longitudinal or mixed research methods to gain deeper insights into how cultural, economic and religious factors shape girls' education outcomes over time.

The research shows that girls' access to education in Muslim communities is shaped by a combination of social, cultural, economic, religious and gender-specific factors. The study highlights the need for policies that reduce financial barriers to girls' education. It also emphasizes improving girls' safety and promoting gender equality within communities. Additionally, it encourages community initiatives that support accurate interpretations of religious teachings to ensure equal access to education.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98968

Analysing Deuda Folk Culture of Western Nepal from the Perspective of Informal Education and Social Learning

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Abstract

This study analyses the Deuda folk culture prevalent in Sudurpaschim and Karnali regions of western Nepal from the perspective of informal education, social learning, and cultural transmission. Deuda is not only a medium of folk songs and dances but also an important cultural practice for building social relationships, collective participation, cultural continuity, and imparting life-useful knowledge. Although modern education system prioritises formal education, community-based cultural practices play an important role in building an individual's knowledge, skills, values, and perspectives. This study attempts to highlight the educational importance of Deuda and its potential importance as an indigenous pedagogy. A qualitative research design employing an interpretive approach has been adopted in the study. Semi-structured interviews, group discussions, participant observation and related document study were used for data collection. Deuda artists, elders, youth, and teachers were involved through purposive sampling. The collected data have been analysed using the thematic analysis method. The findings show that Deuda is an effective medium for intergenerational transmission of language, history, cultural values, moral education, social behaviour, and practical knowledge. It encourages observation, imitation, participation, collaboration, social inclusion, and collective identity building. However, modernisation, migration, digital entertainment, and declining participation of the younger generation have been found to create challenges to its continuity. Therefore, the findings imply that by accepting Deuda as an educational resource based on local knowledge systems, its interactive and rhythmic practice can be integrated with local curricula, child-centred and inclusive teaching methods, adult education, and community-based learning to strengthen the relationship between schools and communities.

Keywords: Deuda culture, oral knowledge, indigenous pedagogy, cultural transmission

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Introduction

Nepal is a country with multilingual, multicultural and multi-ethnic characteristics. Each region or province of Nepal has its own unique culture, tradition and social practices that have been continuously maintained. Deuda folk culture, especially prevalent in Sudurpaschim and Karnali regions of western Nepal, is an important cultural heritage that is deeply connected to social life, cultural identity and community relations. Deuda is not only a medium of song and dance but has also been established as a vibrant cultural practice that promotes social interaction, collective consciousness, entertainment, cultural transmission and social relations within the community. Traditionally, Deuda is a social activity practised in village fairs, festivals, Gaura, weddings and group gatherings. In this process, participants get the opportunity to learn knowledge related to social relationship building, social values, experience exchange, cultural values, ethical conduct, agricultural life, gender relations, cooperation and community responsibility through songs, dialogues, question-answers, group presentations and behaviors.

Individuals learn behaviors and values through observation, participation and social interaction (Bandura, 1977). Deuda is an effective medium for informal education and social learning, especially as children and young people learn language, social behavior, moral values, and cultural knowledge by observing and imitating the activities of their elders. Since such learning develops through experience, participation, and social practice outside the formal school structure, it can be considered an effective medium for informal education (Smith, 2002).

Although the modern education system primarily prioritises formal schooling, cultural practices, experiential learning, and social interactions within the community also have a significant impact on the formation of an individual's knowledge, behavior, and attitudes. Freire (1970) argues that education is not limited to schools and that consciousness is developed through community, dialogue, and cultural practices. UNESCO (2003) notes that intangible cultural heritage plays an important role in transferring knowledge, skills, and cultural continuity within a community. Learning through Deuda appears to be working to preserve local knowledge systems, collectivism, collaboration, social values, and cultural identity.

Folk culture is the basis for the construction of social knowledge and learning should be considered as a result of social and cultural processes (Vygotsky, 1978). In Western Nepal, Deuda seems to be a means of intergenerational knowledge transmission, strengthening social relations, and preserving cultural identity. However, due to modernisation, migration, digital entertainment, and changing lifestyles, various changes and challenges are emerging in Deuda culture. The declining participation of the younger generation and the weakening of traditional cultural practices have made it necessary to study the social and educational role of Deuda. Therefore, this study has attempted to analyse Deuda from the perspectives of informal education, social learning, and indigenous pedagogy.

Various studies, books and research have been published globally on the relationship between folk culture and informal education (Izu, & Somlata, 2025; Saud, 2022). In particular, social learning, community-based knowledge transfer and learning processes through cultural practices have been interpreted by various scholars as important educational foundations. The ideas of Bandura (1977), Freire (1970), Vygotsky (1978), and UNESCO (2003) have made significant contributions to this. However, these studies mostly focus on a global or general cultural context and have not directly linked the Deuda folk culture prevalent in the western region of Nepal to informal education and social learning.

Some research has also been done on the Deuda culture prevalent in the western region of Nepal. Shah's (2023) study on Deuda transformation has studied the transformation of Deuda from folk culture to popular culture. Similarly, Air's (2023, 2025) study on Deuda as folk poetic tradition and Deudā: A Verbal Art of the Subaltern has analyzed Deuda as an oral tradition, cultural identity and expression of a neglected community. In addition, GC and Joshi's (2024) study has highlighted the environmental consciousness in Deuda. Similarly, Bajgain's (2080 BS), Study on Deuda Folk Songs, Upadhyay's (2017) study on Deuda: A Carnival Poetry of Performance, Joshi's (2074 BS) study on Doteli, Gaura Parva's Mythological Context and Song Study, and many other studies have studied Deuda. Thus, although the Deuda folk culture of western Nepal has been practised for a long time as a medium of social relations, cultural transmission and collective participation, there has not been sufficient study on its educational and social learning aspects. Most studies focus on the musical, literary or cultural aspects of Deuda, but there seems to be little in-depth analysis of its impact on informal education, social behavior, moral values and social learning within the community. Thus, there is a clear research gap regarding the educational role of Deuda culture and its impact on the social learning process.

In particular, the issue of how children and youth are learning language, social values, cultural behavior, and collectivism through Deuda is still unclear. Similarly, the question of what changes are being brought about by the impact of modernity, urbanization, migration and communication technology in the practice, participation and intergenerational learning process of Deuda culture is also at the centre of this study.

On the contrary, due to the limited use of local culture and indigenous knowledge systems in school education, community-based learning practices are not given sufficient importance. The issue of how cultural practices such as Deuda can be used as indigenous pedagogy and community-based pedagogy has also become an essential area of research. Therefore, this study attempts to address issues such as the role played by Deuda folk culture in informal education and social learning processes, social values, cultural identity and transmission of local knowledge, the impact of modern social changes on the practice and educational role of Deuda culture, and the potential for its development as an indigenous pedagogy and community-based teaching method.

The purpose of this study is to analyse Deuda folk culture in the context of Western Nepal from the perspective of informal education, social learning and cultural transmission. The specific objectives include:

1. To identify the practices of informal education in the community through Deuda folk culture
2. To analyse the role played by Deuda culture in the social learning process
3. To explore the impact of modern social changes on the educational and social role of Deuda folk culture

Methods and Procedures

This study is based on a general qualitative research design (Marriam & Tisdell, 2016). An interpretive approach has been used to understand the meanings of social and cultural practices in depth. The Deuda communities of Sudurpaschim and Karnali provinces have been selected as the study area. Participants have been selected through the purposive sampling method including Deuda singers, local experts, scholars, teachers and youth as respondents. For data collection, additional information has been collected through semi-structured interviews, focus group discussions, participant observation of Deuda play and secondary sources, such as Deuda songs, cultural performances and related documents and YouTube. The collected data has been analysed through the thematic analysis method, and the findings have been discussed on the theoretical basis. Triangulation, field notes and participant validation have been adopted to ensure the reliability of the study.

An attempt was made to understand the multidimensional aspect of social learning and informal education by including people of different ages, genders and roles who have a direct relationship with Deuda culture. The participants include three Deuda Artist (DA) (DA1, DA2, DA3); three Senior Citizen (SC) (SC1, SC2, SC3); three Youth (Y) (Y1, Y2, Y3), three teacher and educators (TE) (TE1, TE2, TE3) and five FGDs. The data were analysed through a thematic approach.

Lamki Chuha Municipality of Kailali district was selected to directly observe the Deuda play and culture. The main reason for selecting this area is the significant presence of communities who have migrated from various hilly districts of Sudurpaschim and Karnali Province forming the mixed community. In addition, since Deuda is played regularly for five days a week in different places, this area is considered important as a living and representative practice site of Deuda culture.

The researcher, myself, is directly involved in Deuda folk music culture and is an insider in its practices, which has helped to analyse the study in depth. However, reflexivity has been adopted to control potential bias, and the perspectives of the participants have been prioritized.

Results

The findings from the data have been presented thematically quoting some relevant Deuda songs.

Historical and Cultural Background of Deuda

Deuda songs, dances and poems were born when trying to express the experiences of folk life in various regions of the Sudurpaschim and Karnali Province in musical rhythm. Deuda songs not only provide entertainment but also convey social and educational messages.

The origin of the word Deuda is mainly linked to its unique singing style and footwork. When playing Deuda, the players in a circle move one and a half steps forward and half steps back and adjust their footwork. In this, the genre may have been established under the name 'Deuda' through derivation from the one-and-a-half-foot gait and one-and-a-half frequency of voice-waves (Pant, 1975). According to scholars of Nepali language and grammar, words have been modified with the development of Khas language. Some local opinions associate it with the praise of the gods. Bajgain (2080BS) has mentioned that the word "Deuda" is derived from "Devbadai", which refers to a song sung during festivals while worshipping the deity. It occupies an important place as a cultural and historical heritage. The development of Deuda songs has played an important role in strengthening the cultural identity of this region as well as in social relations and practical learning. However, academic research seems to have paid more attention to it as a practical expression of folk life and a medium of social communication.

According to scholars, the initial form of Deuda began during the period of Prakrit and Apabhramsa languages. However, it is estimated that its beginnings were from the then Khas kingdom (Sinja). It is also believed that the songs sung on Bhirpakha, Sukha, Sukha, the victories of the ruler and social events may have been later modified and developed into the Deuda play.

Deuda has survived only in oral tradition for a long time. The work of collecting and documenting it became possible only in modern times. In BS 2015, Doti folk artist Dhan Bahadur Malla recorded the Deuda song for the first time on Radio Nepal and took it from the hill village fairs to the national level. He took it to the stage. Similarly, after BS 2040, Deuda became professional and widespread.

In the current changing environment, Deuda has always had historical significance. Deuda songs are not only a means of expressing the cultural identity of Sudurpaschim, but also a musical campaign for national recognition and inclusive nation building (Stirr, 2012). Pant (1975) has considered Deuda as a folk cultural expression representing the life, culture and collective consciousness of Sudurpaschim, in which song, dance, dialogue and community participation are included together. The folk culture of any society is born from the life of the people and remains alive in

the life of the people (Joshi, 2071 BS). In this context, Deuda is also a cultural heritage that expresses the life, feelings and social relations of the local society.

With migration and globalization, the recent migration from Sudurpaschim and Karnali to the Terai (Kailali, Kanchanpur, Bardiya) and the Kathmandu Valley has changed the geography of Deuda. With migration, culture also transfers, a direct example of which is the Gaura celebrated in Tundikhel in Kathmandu and the Deuda played. Currently, the young generation has started presenting it on global platforms by fusing it with modern instruments.

Human learning and development are built through social interaction, language, culture and collective experience (Vygotsky, 1978). From this perspective, Deuda is not just entertainment or folk songs but a living cultural medium carrying collective knowledge, social practices and cultural identity of Western Nepal. Especially in rural communities of the Sudurpashchim and Karnali regions, Deuda has long been found to express social relations, labor culture, religious beliefs and collective feelings.

Culture is the basis of learning. Since individuals learn knowledge through language, symbols, traditions, and practices prevalent in society, the songs, rhythms, dances, and dialogues of Deuda are important cultural tools of social learning (Vygotsky, 1978). For example, the local language, proverbs, cultural references, and ironic expressions used in Deuda serve to transmit the social experience of the community to the new generation. This confirms Vygotsky's concept that the construction of social knowledge is a collective process, not an individual one.

In particular, the historical development of Deuda seems to be linked to agricultural life, festivals, fairs, and collective labor culture. The performance of Deuda, especially at Gaura, Bhailo, weddings, and other cultural occasions, has become a means of strengthening community relations. Thus, Deuda is a folk tradition deeply related to social structure and cultural continuity.

Social Relations, Collectivism and Inclusion in Deuda Folk Culture

Based on the responses of the respondents selected as a sample, Deuda folk culture is seen as an important means of strengthening social relations. DA1 has stated that since people play together in a Deuda group without discrimination, it strengthens social unity and relations. Since women-women, men-men and boys-girls participate collectively in Deuda, community cooperation and social closeness are seen to develop. DA2 states that there is no caste discrimination in Deuda and people from all communities play together on an inclusive basis. For example,

Sai rahichhau Chhetri ko chhora ma Dalit ma Bhoola

Dekhinchha pairanu chhain chattan mathiko phoola

The girl says in this song that you are the son of a Kshetri and I am a Dalit. Our love is like a flower on a rock. It can be seen but cannot be used. We can play Deuda

together. There can be good love between us, but we cannot spend our lives together. Because there are limits to the beliefs of the caste society. In this way, Deuda is used to convey a message about the values and social boundaries of the caste system in society through songs. The relationship between Dalits and Chhetris has also been expressed through songs. On the one hand, this shows that Deuda acts as a means of practising social inclusion; on the other hand, it shows the social norms of the caste system. According to SC1, in the past, Deuda was played collectively at weddings, religious and cultural functions, creating an atmosphere of harmony and cooperation in the village society. Y1 said that participating in Deuda gained social relationships and a sense of group identity. TE1 said that Deuda teaches cooperative behavior and social harmony. Direct observation also found that people of different castes, ages and communities participated in the same place. This confirms that Deuda is not just entertainment but a practice of social integration.

In the group discussion, participants expressed their experience that Deuda strengthens social relationships, increases harmony in the village, and reduces loneliness. One respondent said: "When playing Deuda, everyone has fun together, mutual relations in the village are strengthened, and mental stress is also reduced." This statement makes it clear that Deuda plays a role in building social interaction and emotional relationships. While playing Deuda, youth get the opportunity to learn cooperation, dialogue, respect, and collective behavior. For example, Deuda that reflects social harmony was found to be as follows:

> *Gau ra samaja milau hatemalo gardai* ("Let's unite the village and society, joining hands)
>
> *Sanskritiko vikas garau yuwa aghi sardai* (Let's develop culture, youth moving forward.)

This type of Deuda teaches social harmony, cooperation and collective behavior. Especially in rural areas, Deuda still seems to be alive as a means of community unity.

From the perspective of Social Learning Theory by Bandura, people are learning collective behavior, cooperation and social values through group follow-up and interaction. Similarly, according to Sociocultural Theory, since social interaction is the basis of learning, Deuda is seen as a cultural practice that builds social relationships.

Oral Knowledge, Cultural Transmission and Informal Education in Deuda Folk Culture

According to the responses of the respondents, Deuda is an effective medium of oral knowledge and cultural transmission. According to SC1, 'Duda was played in groups during religious and cultural functions, weddings and other social functions and there was a large audience, so it strengthened social relations. In our time, Deuda was the only means of cultural transmission and entertainment. Love, happiness and sorrow

were exchanged through Deuda and other information was shared.' For example,

Aadhi khet banjo rahayo, rukhka chhayale

Achham dekhi Dailekh aanya mitra ka mayale

In this song, the boy says that half the field is barren due to the shade of the trees and that I came from one district to another because of your love.

The lyrics of this song provide information about the influence of the shade of trees on social relations, love, geography and agriculture. It is also found that religious knowledge, social values, love, happiness and sorrow and practical knowledge are passed on to the new generation through Deuda. DA3 stated that Deuda imparts knowledge of history, genealogy, language, culture and kinship to the younger generation. TE1 stated that education is not limited to literacy but also through oral and practical practice. This presents Deuda as a medium of informal education. Y2 stated that Deuda imparts information and experience about various aspects of society. Observation also showed that songs are sung in a question-answer style, rhythms are adjusted, and participants learn by watching each other. This presents a form of experiential learning. SC2 sang the Deuda song like this-

Indra le kutniti khele apsara lai nachai

Devi le saitan marin mahila shakti dekhai

This Deuda song conveys a religious and moral message as well as information about the place of women in ancient times. This makes it clear that Deuda is a storehouse of practical life knowledge.

Similarly, during the focus group discussion, some youths interpreted Deuda as a means of preserving cultural identity. One participant said: "Deuda is our identity, it has preserved old customs and village culture." This statement shows that Deuda is a means of cultural transmission and social identity formation. Through Deuda, youths learn local language, customs and social values.

This analysis is related to the concept of Informal Education. The process of people learning knowledge through daily social practice outside formal schools is clearly visible in Deuda. According to Sociocultural Theory, since language and culture are the main means of learning, Deuda seems to have become a means of transferring cultural knowledge.

Observation, Imitation and Participatory Learning in Deuda Folk Culture

The learning process in Deuda folk culture seems to be based on direct participation, observation and imitation. DA3 responded that Deuda is learned through observation, imitation and participation. From the observation, it was found that the participants were learning to move their feet, hold hands, sing songs and match rhythms by watching each other. It was seen that the girls and boys sang songs in a question-

answer style. This shows that the interactive learning process has developed. Y3 said that participating in Deuda provides mental concentration, physical exercise and collective experience. TE2 responded that pedagogy based on observation, imitation and participation can also be developed in school education. These ideas were also supported by the FGD. This shows that the learning method of Deuda is also related to modern teaching methods.

From the direct observation, it was observed that during the Deuda play, boys and girls ask and answer questions. The audience was calmly listening to the play and to Deuda's questions. For example, there is social interaction in it.

a) *Sanai chhai bhai thulo hollai umer chadhallai*

Deuda kheli ke garallai school padhallai

b) *Atto khet ma chatto mato radda ta raddai chhu*

Deuda kheli sandesh dinchhu padha ta padhai chhu

In the above Deuda dialogue, the girl gives a message to the young boy to go to school, while the boy also gives an educational message to the audience through Deuda songs and replies that he is also going to school. This shows that there is also awareness-based learning in Deuda. The process of the audience listening to the questions and answers calmly and learning from it was also observed in the observation. This has established Deuda as a participatory learning process.

This situation can be explained by Social Learning Theory. According to Bandura, since people learn by observing the behavior of others, the practice of observation and imitation in Deuda is a direct example of social learning. Similarly, according to sociocultural theory, group dialogue and participation create knowledge, which is clearly seen in Deuda.

Changing Contexts and Challenges of Deuda Culture

Based on the responses and direct observations of the respondents, the traditional form of Deuda culture seems to be changing in the present day. SC1 stated that Deuda was the main medium of social relations, religious beliefs, moral values, and oral knowledge transmission in the past. However, in the present day, due to modern lifestyle, technological development, and migration, its practice and form have changed. According to SC2, Deuda was previously the main medium of entertainment and group interaction in the village society, but now the younger generation is more attracted to modern songs and music. Y1 stated that although the youth in rural areas are more familiar with Deuda, the youth living in urban areas are attracted to modern musical culture. This shows that urbanization and modernization have affected Deuda culture. DA1 stated that various group efforts, cultural programs, and social media are being promoted to preserve the originality of Deuda culture. This shows the positive side of digitalization expanding the reach of Deuda. However, according to DA2,

despite the promotion through digital media, there has been some distortion in the originality and traditional style. Modern presentation, commercialisation, and media-oriented performances are likely to weaken the traditional community form of Deuda. SC3 expressed concern that despite the increasing commercialisation of Deuda, its original cultural aspect is weakening. This shows that there is a conflict between cultural preservation and commercial use.

Observations of Deuda plays showed that the participation of the elderly and adults in Deuda play was more, while the participation of the younger generation was comparatively less. This indicates a challenge in generational transmission. DA3 stated that the interest of the younger generation in Deuda is decreasing. This situation seems to pose a problem in cultural continuity in the future. However, some young people had a positive view, linking Deuda with social relationships, mental balance, entertainment and cultural identity. This shows that Deuda's social importance remains even amidst change.

Similarly, some negative aspects and challenges of Deuda were also raised in the group discussion. Due to the impact of modernity, urbanization, and modern technology, the direct participation of youth was seen to be decreasing. Out of the five youth who participated in the discussion, three said that they were not interested in playing Deuda or did not play it regularly. One youth said, "We listen to Deuda but are not that interested in playing it. Nowadays, new songs and modern entertainment seem more attractive."

This response indicates a growing distance from traditional cultural practices among the modern generation. There was also a tendency among educated and urban youth to view Deuda as an 'old' or 'rural' culture. This has created a challenge in the actual practice and transmission of Deuda.

However, the fact that social media and digital technology have played a positive role in the promotion of Deuda was also clear from the group discussion. Youth said that they watch and listen to Deuda through YouTube, Facebook, and TikTok. One participant said, "Earlier, it was limited to the village, but now you can watch Deuda even on your mobile phone, so the new generation has started to learn about Deuda."

This seems to have created an opportunity to bring Deuda to a new generation through digital media. However, there is also a risk of changing the original rhythm, language and style during digital presentation. Some participants responded that Deuda's originality is starting to be lost when modern music is mixed in.

Similarly, concerns were also expressed in the group discussion about some distortions. In some places, it was mentioned that the tendency to use obscene and slang words in the name of Deuda, excessive competition or weakening cultural dignity is increasing. This seems to have an impact on the cultural value and educational role of Deuda.

Overall, based on the focus group discussion, Deuda culture seems to have played an important role in developing social harmony, love, collaboration, cooperation, cultural preservation, entertainment and emotional balance in the social learning process. However, modernity, the impact of technology, the decreasing direct participation of youth and the challenges related to preserving originality have raised questions about its continuity. Therefore, it seems necessary to transfer Deuda to the new generation by coordinating it with modern technology and preserving its originality.

TE1 stated that local culture and Deuda should be included in the local curriculum of schools. TE2 stated that a participatory teaching method can be developed based on Deuda. Y3 also expressed the view that local curricula and degree-based courses should be conducted to preserve folk culture. This shows that institutional initiatives are needed to preserve Deuda culture. DA3 stated that there is a need for institutional preservation of Deuda. On this basis, collaboration between the community, school, government and cultural institutions seems necessary. The focus group discussion concluded that Deuda should be institutionally preserved and developed as a part of formal education.

When analysing this situation according to Sociocultural Theory, culture is a social process that changes with time, society and interaction. When the social environment changes, cultural practices and learning processes also change. The modern influence, migration, digital media and changes in the interests of the youth seen in Deuda are the result of this sociocultural transformation. Similarly, according to Social Learning Theory, the attraction towards modern music seems to have increased as the new generation learns new behaviors and musical practices from the social environment.

The facts obtained from artists, elders, youth, teachers, participatory observation and FGD have presented similar conclusions. Artists have called for preservation, elders have expressed concern about the loss of originality, youth have accepted modern influences, teachers have suggested curricular inclusion, and observations have shown an imbalance in intergenerational participation. All these facts lead to the conclusion that Deuda culture is in a state of flux and that a coordinated effort is needed for its preservation, transmission, and revitalisation.

Discussion

When the findings of this study are analysed in an integrated manner, it is seen that Deuda folk culture is deeply related to the social life, cultural practices, collectivism, oral knowledge transmission and social learning of Western Nepal. Triangulating the facts obtained from artists, elders, youth, teachers, FGD and direct observations, it is confirmed that Deuda is not just an entertaining cultural practice but a living process of social interaction, informal education and cultural identity building. The findings of this study are particularly directly related to Sociocultural Theory, Social Learning Theory and Informal Education.

First of all, the study has shown that Deuda culture strengthens social relations, collectivism and social inclusion. Artists have stated that people of different castes, communities and genders participate in Deuda without discrimination. Elders have stated that Deuda was played collectively in the past during marriages, religious and cultural functions and that it developed unity and cooperation in the village society. Youth have stated that Deuda provides social relations and a sense of community. Similar conclusions were also obtained from the FGD. Direct observation also found that people of different castes, ages, and communities participated in the same place. When triangulating these facts, Deuda is a means of social integration.

This finding seems to be directly related to Sociocultural Theory. According to Vygotsky (1978), learning is constructed within social interaction and cultural context. Group singing, question-answering, rhythmic matching, and intergenerational participation in Deuda show that learning is being constructed within a social environment. Local language, group participation, and cultural practices seem to socialise knowledge construction. Therefore, Deuda is confirmed to be a socially mediated learning process, not just a cultural performance.

Similarly, the study has presented Deuda as a medium of oral knowledge, cultural values, and informal education. Elders have said that religious knowledge, moral values, love, happiness-sadness, and practical life experiences are passed on to the new generation through Deuda. Artists have said that Deuda teaches history, genealogy, language, culture, and social values. Teachers and educationists have said that education is not limited to literacy alone but also verbal and practical. Youth have said that Deuda provides social experience, entertainment and mental balance. Observations showed question-and-answer style, rhythmic presentation and participatory learning. All these facts confirm that Deuda is a means of transferring useful knowledge.

This finding seems to be related to Informal Education. According to Informal Education Theory, people learn through daily social life, cultural practices and experiences outside of school. Even though there is no formal textbook or teacher in Deuda, participants are learning language, rhythm, social behavior, moral values, cultural identity and collectivity (Smith, 2002). This presents a form of experiential learning and community-based learning. Teachers or respondents have said that local culture and Deuda can be linked to local curricula and adult education. This shows the possibility of integrating informal learning with formal education.

Another important finding of the study is the process of observation, imitation, and participatory learning in Deuda culture. Artists have said that Deuda is learned through observation, imitation, and participation. Observations showed that participants were learning to move their feet, sing songs, match rhythms, and ask and answer questions by watching each other. Youth reported that they gained mental concentration, physical exercise, and social experience while participating in Deuda.

Teachers reported that participatory pedagogy can be developed based on Deuda. The expression "I am giving a message to people through Deuda, and I have also been studying in school," presented by a boy who sings a song, shows that educational awareness is being transmitted through cultural practice. Similar facts obtained from artists, youth, teachers, and direct observations can confirm that observational learning is being practised.

This finding is directly related to Social Learning Theory. According to Bandura (1977), people learn by observing the behavior of others, imitating them, and through social participation. In Deuda, the new generation is learning songs, rhythms, social behavior, and cultural values by watching their elders. Here, elders, artists, and experienced people are seen as role models. This presents a practical form of observational learning and modelling.

The study also showed challenges in Deuda culture due to the changing social environment. The elders have said that modern music, migration and changing lifestyles have affected the originality of Deuda. The youth have said that digitalization has distorted the originality even though it has promoted Deuda. The artists have pointed out the need for conservation and institutional development. Teachers and educationists have expressed the view that it should be included in the local curriculum. The participants in the group discussion have expressed the view that Deuda should be institutionally developed, conserved, promoted, included in the school curriculum and made a part of the teaching method. The participation of the elderly and adults in the observation was higher than that of the youth.

Conclusion

This study shows that it is an effective medium for social learning, cultural transmission and informal education. Deuda is seen as a living cultural practice that builds social relationships, develops collectivity, promotes social inclusion and transfers intergenerational knowledge. It was found that language, history, genealogy, religious consciousness, moral values, practical knowledge, social values , and emotional experiences are being transferred to the new generation through Deuda.

Thus, the social role of Deuda appears to be multifaceted. First, it develops social unity and collectivity. Since Deuda is played collectively in villages during fairs, festivals, weddings, or special occasions, cooperation, intimacy and social harmony increase among people. Since collective participation is given more importance in Deuda than caste, class, or economic status, it also seems to encourage social inclusion.

Second, Deuda culture is also a medium of social education. Deuda songs are found to express moral education, social messages, gender relations, the importance of labour, love, satire, and criticism of social evils. For example, some Deuda songs poignantly present foreign employment, poverty, social discrimination, or women's suffering. In this way, Deuda also plays an informal educational role in spreading

awareness in society. Third, Deuda is a symbol of cultural identity and originality. Even amidst the effects of globalization and modernity, Sudurpaschim community is using Deuda as a cultural practice to preserve its identity. Deuda is gaining importance, especially as a means of connecting the younger generation with their language, costumes, rhythms and traditions. UNESCO has also considered the preservation of local intangible cultural heritage as an important basis for preserving cultural diversity, to which Deuda culture is directly related. In addition, Deuda also plays the role of emotional balance and entertainment. Deuda has been used as a useful medium to relieve fatigue after hard work, provide group entertainment and reduce social tension. Deuda has been an integral part of social life since the days when radio, television or modern entertainment media were limited in rural societies.

The study clearly shows that there is an observation, imitation and participatory learning process in Deuda. The participants have developed a process of learning through singing songs, rhythmic rhythms, question-answering and social interaction in groups. This has established Deuda as a medium for experiential learning based on the social and cultural environment. The findings of the study are directly related to Sociocultural Theory, Social Learning Theory and Informal Education.

However, modernity, digitalisation, urbanization, migration and the attraction of youth towards modern music seem to have created challenges in the originality and transmission of Deuda culture. However, digital media has also helped in its dissemination. Therefore, a coordinated effort of communities, schools, local governments and cultural institutions is necessary for the preservation, revival and transmission of Deuda culture. This also presents the conclusion that it is possible to connect Deuda with local curricula, adult education, cultural education and community-based learning processes and create a new pedagogy based on Deuda values, increasing the activeness of students in learning.

This study presents important educational implications for the education sector. First, it seems necessary to connect local culture and community-based teaching with school education. Historical beliefs, skills, language, rhythm, social interaction, moral education, and cultural values in Deuda culture can be included in the local curriculum. This helps to develop a culturally responsive pedagogy by linking education to the local context.

Second, since Deuda's learning process is based on observational learning and participatory learning, it can be used as a teaching method. Teachers can use question-answer style, group presentation, role play, rhythmic teaching, interactive learning and collaborative activities in the classroom. This strengthens learner-centred pedagogy. Deuda-based activities can be useful especially in language teaching, social studies, moral education and art education.

Third, the study has shown that experiential learning and community-based learning can be encouraged based on local folk culture. Students can be involved

in community-based project work, folk culture observation, cultural interaction and learning activities with local artists. This can strengthen the relationship between the school and the community.

Fourth, the collectivism, cooperative behavior, and social inclusion inherent in Deuda culture can be linked to inclusive pedagogy. The practice of involving students of different castes, communities, and genders in collaborative learning activities can help develop social harmony and tolerance.

Fifth, the study has shown that Deuda can also be linked to adult education and functional literacy. Awareness-raising and practical education programs can be conducted in the community using local languages, folk songs, and cultural performances. This can strengthen informal education and lifelong learning.

Sixth, although digitalization creates challenges for Deuda culture, it can be used as an educational opportunity. Schools and local bodies can develop Deuda songs, history, and cultural practices in the form of digital archives, audio-visual materials, and e-learning materials. This can help develop attraction and identity towards local culture in the new generation.

Overall, the study shows that Deuda folk culture needs to be reinterpreted not only as a cultural heritage but also as a pedagogical resource based on social learning, informal education, and local knowledge systems. Therefore, Deuda culture can make a significant contribution to the development of local culture-based pedagogy, participatory learning, experiential learning, and culturally responsive teaching.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98969

Curriculum beyond Classrooms: Unfolding the Pedagogical Practices of Home

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Abstract

Educational discourse has traditionally situated pedagogy within classrooms as a part of the explicit curriculum. The intellectual community has largely accepted the idea that home is the first school of children. If home is understood as a school, it necessarily contains a curriculum. These ideas reflect the curriculum beyond the classroom. Accordingly, the objective of this study is to explore pedagogical practices in the home curriculum. A qualitative research approach and case study design were employed in this study. I have selected one home, one grandparent, one parent, one child and one expert as a teacher by purposive sampling method. In-depth interviews with parents and children, observations of daily family routines, and the learning process of the child have been employed for information collection. This study was conducted in Dailekh district, Gurans Rural Municipality, which is a rural area of Nepal. The data were analyzed thematically and interpreted theoretically. The findings showed that home pedagogy is largely implicit, experiential, flexible, and individualized. I found that modeling, imitation, participation in household chores, dialogue, and shared responsibilities are the major strategies of home pedagogy. The parent focuses on moral values, cooperation, self-reliance, cultural continuity, and emotional development of the child. The role of parents and elders as informal pedagogical agents guides learning through care, example, and contextual instruction to children. The study concludes that the pedagogy practiced at home makes learning practical and experiential.

Keywords: Home pedagogy, home curriculum, local knowledge, lived experience, learning for living

Introduction

The dominant discourse about curriculum studies has historically situated pedagogy within the formal boundaries of schooling. There are different types of curriculum in formal schooling, such as planned curriculum, taught curriculum, implemented curriculum, learned curriculum, hidden curriculum, etc. (Su, 2012). But I believe curriculum is also beyond formal schooling as a home curriculum. Conventional curriculum theory has emphasized planned objectives, structured content, and

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measurable outcomes embedded within institutional settings (Lattuca & Stark, 2009). Such a perspective has contributed to the concept of an explicit, structured, formal, and rigid curriculum. For a long time, this concept has been widely applied within the formal education system. However, there has been a paradigm shift within the concept of curriculum, such as the concept of the hidden curriculum of Philip Jackson (1968). However, educational thought has increasingly problematized this narrow perception of a rigid, classroom-based curriculum. The common understanding is that home is the first school of a child (Seung Lam & Pollard, 2006). If we believe home is a school, I argue that there is a learning plan, which I call the home curriculum. My academic and real-life experiences reflect that the curriculum is beyond the classroom as well as formal schooling. According to Taba, curriculum is a plan for learning (Lunenburg, 2011). So I called home curriculum because home has its own learning plan. This motivation is one of my core values in this research work.

Ordinary people declare that "the home is the first school." If the home functions as a school, it necessarily embodies curricular activities in the homely environment. My previous study has also established that a curriculum exists within the home. The study revealed that the home curriculum also includes intent, content, method, and evaluation similar to the school curriculum. In this regard, Vygotsky (1978) has emphasized that learning is socially mediated and rooted in everyday interactions (Potrac et al., 2016). This reflects the reexamination of curriculum as lived experience rather than solely as documented plans.

I learned that education was confined to the home before the establishment of formal schooling. Traditionally, fathers taught their sons about familial and social responsibilities (Tasch, 1952). On the other hand, mothers instructed their daughters in domestic duties (Pildes, 1978). Likewise, these traditions have been practiced in Nepalese society in the present time. This reflects the home pedagogy within the home curriculum beyond the classroom curriculum. The pedagogy of home curriculum unfolds through participation in household chores, cultural engagement of children, lessons of discipline, and shared responsibilities with family members. This aligns with Dewey's (1938) notion of education as life itself rather than preparation for life (Williams, 2017). These processes are similar to curricular activities as well as the pedagogy of formal schooling. These types of home pedagogy shape the children's moral reasoning, self-independence, social competencies, family and cultural identity in thoughtful ways.

Modern educational discourse has largely confined curriculum and pedagogy to formal school settings as well as classroom practices. When curriculum is understood in a broader sense, it exists not only within the classroom but also beyond the classroom. Children also learn important life skills and values beyond the classroom. This reflects that home has its own curriculum and pedagogy, which indicates home pedagogy. The central problem lies in the failure to uncover the home pedagogy through classroom instruction. Children have been experiencing meaningful and transformative learning

from home pedagogy, but such types of pedagogy have not connected with school pedagogy. As a result, how children learn at home has not been effectively integrated into classroom learning. This gap has contributed to making school learning less effective and burdensome for students.

This study tries to explore the pedagogical practices rooted within the home curriculum. It also examines the values of home pedagogy for the holistic development of children beyond the classroom curriculum. The study seeks to answer questions such as how the curriculum is practiced in the home with pedagogical strategies. What values and competencies are transmitted through home pedagogy? This study contributes to curriculum theory and practices by growing the border understanding of curriculum and pedagogy beyond classroom boundaries. The findings of this study support the connection between home and school pedagogy for the holistic development of children.

Literature Review

Philip Jackson (1968) stated that students learn beyond classroom instruction, which is unofficial or implicit learning (Dyson, 2003). This reflects that the school culture is also a learning material for students. The interaction among teachers and students creates a learning environment beyond the explicit curriculum. This concept aligns with home education. Children learn various life skills and knowledge within the home environment. This indicates that different homes have their own curriculum. School culture is created from the joint involvement of teachers and students. They bring their own culture from their home culture. In this sense, school culture aligns with the home education of students and teachers.

Academic researchers argue that schools reproduce dominant cultural values and power relations through implicit messages of the school (Apple, 2012). His argument focuses on implicit learning in school beyond the classroom curriculum. Similarly, the theory of cultural capital conceptualized the notion of cultural capital and habitus in the field of education (Bourdieu, 2018). This reflects that the students' home-based learning influences their adaptation to school culture. These arguments show that the school culture is not an impartial space; it comes from the homely environment of teachers and students. Integrating home and school culture affects students' learning experiences and their own identity.

A curriculum theorist stated that curriculum should be understood as lived experience (Pinar, 2015). His statement indicates the curriculum is a learning plan that provides different types of learning opportunities to learners in the classroom and beyond classroom situations. Aligning with this argument, Basil Bernstein's theory of pedagogy explains that patterns of family communication shape children's cognitive aspects and make readiness for school (Sadovnik, 1991). His statement indicates the value of home pedagogy for enhancing school education. Learners develop their cognitive structure from home to school education. In this regard, Lev Vygotsky developed the concept

of the Zone of Proximal Development (ZPD) (Xi & Lantolf, 2021). He argues that learners can do more with guidance from a more knowledgeable person. Vygotsky further stated about the socio-cultural impact on knowledge construction in the theory of social constructivism (Alkhudiry, 2022).

John Dewey, who argued that education must be rooted in lived experience (Dewey, 1986). He further stated about 'Learning by Doing' and 'Learning by Experiment' approaches in the field of education. Philosophically, pragmatism rejects rigid curriculum and pedagogy (Garrison & Neiman, 2003). Pragmatic ontology believes in continuity between lived experience and formal education. This reflects that home pedagogy is the foundation of learning because it takes a learning-by-doing approach in education. 'Learning by Doing' approach supports the household participation of children, action-oriented disciplining ideas, family responsibility, work and earning, etc., in the homely environment.

Figure 1

Conceptual Framework of Home Pedagogy



Four major aspects are given in the above picture about the home as a pedagogical space. The nature of home pedagogy, pedagogical agents, pedagogical practices, and internalization of learning are involved in home pedagogy. These are my research arguments, which have been examined from field findings, literature, and theory in this research work.

Methods and Procedures

The study was grounded in the pragmatic ontology, relational epistemology, and value-laden axiology. This means reality is shaped by lived experience, knowledge comes from human experiences, and values acknowledge moral and cultural commitments. Similarly, a qualitative research approach and case study design were adopted to examine the home pedagogy. This study was conducted in a rural area of Nepal. The purposive sampling method was used for sample selection. A single home was selected as the study area. The home was so different than others, so I selected that home as a different case. The home was conducted by joint family assumptions. Three generational people lived in that home. Not only this, well-educated and under-educated family members properly communicated with each other. I have taken one grandparent, one parent, and one child who belong to a single home. I have selected one expert as my respondent, who was a school teacher. The grandparent has given information about traditional pedagogical practices at home; the parents provided information about modern pedagogical practices at home, and the child reflected on home and school pedagogy. Similarly, the expert provided information about gaps between home and school pedagogy. Information was collected through in-depth interviews with parents, the child, and the expert. I have also used participant observation to collect information about home pedagogy. Field notes were maintained to capture contextual information and reflective insights. The information was analyzed thematically based on systematic transcribing, coding, and decoding, and interpreted theoretically using different theories.

Results

This study was based on ground reality as well as first-hand information. I have taken some literature and theories for the validation of ground reality. This session reflects the major findings of this study and the discussion over the findings.

Home has a Semi-Structured but Unwritten Curriculum

The findings show that the home has a semi-structured curriculum, but which is un-written form. I found that the family values, disciplining model, household responsibilities, family relationships, income, and expenses are in a structured form. On the other hand, time management, working values, health and sanitation, personal hygiene, food habits, clothing, etc., are in an unstructured form. Home has its own intent, content, method, and evaluation, but these are unwritten forms. In this regard, the participant parent said, *"Children should follow the family rules, show the expected discipline, take on household responsibilities, and limit our income and expenses."* This reflects the structured and explicit home curriculum, which is guided by parents. On the other hand, the participant child stated, *"I am free in my own working values; I should take family responsibilities, but own my style, time, and ethics. I am not compelled to follow all types of parents' values."* His statement indicates the generational gap in terms of family norms and values, which determines the semi-structured home curriculum.

The expert provides a similar opinion to the parent and teacher about the home curriculum. He also believes in a home curriculum, but it is not similar to the school curriculum. The expert further stated, *"I believe in family norms and values, but what is so different in every home, I call implicit home curriculum."* His statement indicates the unstructured and implicit home curriculum, which is rooted in the implicit school curriculum. These align with John Dewey's idea of education as lived experiences (Dewey, 1986) and William Pinar's curriculum as lived reality (Pinar & Grumet, 2026). These ideas are rooted in field findings. The findings show that the home pedagogy contains intent, content, method, and evaluation, but it operates unwritten and informally with lived experiences.

Nature of Home Pedagogy: Lived, Experiential, and Value-Laden

I found that home pedagogy is rooted in lived experience rather than structured written plans. Children learn through experiential activities related to household chores. I observed that parents guide their children, but children complete their work without any rules and regulations of the family. Parents have their own strategies of teaching, which is guided by family norms and values, but, children follow their own rules within the family environment. This reflects value-laden pedagogy where parents expect output rather than process. Home pedagogy contains the context, result, behavioral change, duty, responsibility, and many more, which are based on the lived experiences of children. It denies the contents and formal process. Children learn from their own lived experiences based on familial routine and expectations.

In this regard, the participant parent said, *"We guide our children intentionally through daily family routine, moral discipline, family values, and responsibilities."* His statement shows the lived experiences in pedagogical practice. I found that parents teach their children based on the needs and values of the family. Similarly, children understand and self-regulate by their own values. In this sense, the participant child said, *"I perceived family responsibilities as my learning opportunities that shaped my good behavior".* This reflects lived, experiential, and value-laden pedagogy, which applies a common understanding between parents and children. From these field findings, I conclude that home pedagogy integrates life and learning without separating them.

Parents as Primary Pedagogical Agents

I found that parents are primary educators within the home curriculum as pedagogical agents. They teach their children about real-life situations rather than livelihood. They have many ideas about teaching-learning strategies that make effective learning in a home environment. Parents teach their children with emotionally bound teaching strategies. They teach their children based on family needs and values. Parents understand the abilities of their children and provide different types of roles in household chores. In this regard, the participant parent stated, *"We provide moral duty and household responsibilities based on their level of ability."* Parents make an individual learning plan for their children and provide opportunities for individualized

learning. They also demonstrate role models as household responsibilities within the family. I observed that the children learn by imitation when their parents fulfill the household responsibilities. If the parents misalign the household responsibilities, at that time, children also correct their parents. This reflects the parental role as a key agent of home pedagogy.

Similarly, the participant child said, *"I learn through imitation and guidance of my parents. But my learning plan and process are based on my own interest and ability."* This indicates the joint role of parents and children in enhancing home learning. I observed that children make a baseline of parental guidelines, but the child apply their own creativity in the learning process. This makes meaningful learning in the home setting. In this regard, the participant expert stated, *"The role of the parent is more meaningful in home learning, but children also apply their own style and strategies".* His statement indicates the collaborative learning approaches that apply in home pedagogy. From these field findings, I conclude that home pedagogy is relational and reflective. This aligns with Lev Vygotsky's Zone of Proximal Development (ZPD) (Zaretsky, 2021). This concept advocates that learning occurs through purposeful guidance from a more knowledgeable person, such as a parent or teacher.

Pedagogical Practices

Field information shows that homes adopt various pedagogical practices that are more practical and life-oriented. Children adopt these types of pedagogical practices, which are directly related to lived experiences. I observed that home pedagogy primarily follows a "Learning by Doing" approach. In this regard, the participant parent said, *"My children are directly involved in farming, household chores, family rituals, and community work."* His statement indicates that the home pedagogy is action-oriented rather than content transformation. The family adopts the learning-by-doing process from generation to generation. It makes sustainable learning without theoretical understanding. Children can work without any theoretical definitions. This type of learning directly associated with their real life.

In this regard, the participant's child said, *"I can do everything in my household activities which I learned by action and imitation. It makes me skilled, self-confident, and help decision making ability."* His statement indicates the practical learning strategies within the home environment. It makes children self-independent in terms of learning for living. Relating this statement, the expert explained that home pedagogy aligns with the philosophical foundation of pragmatism. Pragmatic philosophy argues for experiential and experience-based pedagogy, which helps to develop the problem-solving ability of children (Burroughs, 2015). From these field findings, I conclude that home pedagogy enhances practical intelligence, moral reasoning, and self-independence of children through experiential pedagogy.

Transmission of Cultural Capital and Identity

I observed that home pedagogy transforms the cultural identity of the family, which comes from one generation to the next. Parents want to transmit their own family values to children through practical engagement. I observed that the parents motivate their children for the engagement of family and community rituals. They jointly involve such types of activities that transmit cultural identity to children. In this regard, the participant parent said, *"My children should respect elders, participate in religious rituals, and engage in community activities. They should follow family tradition without any condition."* His statement reflects that family tradition is more valuable for children. The ways of learning seem more compulsory without any choice. Parents are strict in transmitting family tradition to their children. They teach their children about traditional family rituals both theoretically and practically. Based on field findings, I conclude that children learn the cultural identity of their family through the strict teaching approach of their parents. It cultivates the family tradition in our society.

My field findings show that home pedagogy shapes children's family and cultural identity. In this regard, the participant child said, *"My parents always teach and engage me about our family traditions and cultural identity. I should follow my parents because I am a part of my family. If I ignore such types of activities, they scold me."* His statement reflects the autocratic teaching approach of the family in terms of family and cultural identity. Supporting these ideas, experts stated that parents teach their children about family tradition and cultural identity forcefully. He further noted that parents give more priority to their own family values, which they teach their children in autocratic and democratic ways. This reflects the values of family tradition and cultural identity, which are core content of home pedagogy.

Gap between Home and School Pedagogy

Field findings and literature show that there is a big gap between home and school pedagogy. As a researcher, I know that school pedagogy is rigid, teacher-centered, textbook-oriented, structured, theoretical, and exam-oriented. In this regard, the participant parent stated that school pedagogy neglects moral and practical life skills. He further noted that school teaches textbooks only without any real-life skills. Supporting this, the participant's child specified that school learning is so rigid, boring, and exam-oriented. He further stated that home learning is so interesting and easy. His experience reflects the gap between home and school pedagogy. Such types of gaps create learning difficulties for students in the classroom setting. In this context, experts argued that integrating home pedagogy into classroom practices could reduce the burden on students in school learning.

Emotional Development and Relational Learning within the Home

The things I found out about home pedagogy show that it really helps children

develop their emotions through the way people interact with each other. At home, it is different from being in a school where people focus on book learning and getting grades. I saw that parents talk to their children about how they feel when they are doing things at home, and this helps create a feeling of trust and understanding. In this regard, a participating parent said, *"We teach our children how to work, but we also teach them how to feel things and how to care about people and deal with tough situations."* This shows that children learn about emotions by being with their family and not just by being taught in a class. Children learn how to be patient and understanding and how to solve problems by living with their family.

A child said, *"When I am sad or do not understand something, my parents and grandparents talk to me and help me understand how I am feeling. They tell me stories about when they were sad or did not understand something. This makes me feel better and stronger."* This shows that the way family members talk to each other and help each other at home is a way of teaching emotions. I saw that when families tell stories together, eat together, and solve problems together, these are all ways that children learn about emotions. An expert said that people do not think about how important it is for children to learn about emotions at home. He said that children who get help with their emotions at home are better at getting along with people and can deal with problems when they are in school or other places. This is what Vygotsky said in 1978: that learning about emotions and book learning are connected to the people and culture around us (DiPardo & Potter, 2003). It is also what Dewey said in 1938: that real education is about the person, including emotions, and how we interact with other people (Hohr, 2013).

From what I found out, I think that home pedagogy is a way of teaching that focuses on relationships and helps children learn about emotions, as well as practical things, and what is right and wrong. The home is a place where people can learn about emotions because of the close and caring relationships. If schools could understand and use this way of teaching emotions, it could help create a complete and caring way of educating children.

Intergenerational Knowledge Transmission and the Role of Elders

The things I found out show that what parents teach their kids at home is not the thing that matters. Home pedagogy is more than parents teaching their children. It also includes grandparents, older relatives, and older people in the community who teach kids things. I saw that older people teach kids about the old ways, traditions, and things they learned from their own lives. They do this by telling stories, showing them how to do things, and doing things together that are important to their culture. In this regard, a grandparent told me, *"Our older family members are like living books. They teach our kids things that they cannot learn from school books. About our land, our ancestors, our values, and how we live."* This shows how much parents value what older family members can teach their kids. Older family members are not just people

who live in the house; they are also teachers who help shape who their kids are and how they see the world.

In this regard, a participating child remarked, *"My grandmother tells me stories every night about our family's past and what our ancestors went through. From her stories, I learn how to deal with problems and remember who we are."* This shows how stories and talking about the past can be tools for teaching kids from one generation to the next. These stories teach kids lessons, help them remember their history, and pass on cultural values in a natural way. I also saw that kids learn things from their older family members, like how to farm, how to use herbs to heal, how to cook traditional foods, and how to take care of the environment. This kind of knowledge is special to the place where they live, in Nepal, and is an important part of what kids learn at home. An expert told me that this way of passing on knowledge from one generation to the next is a way to keep local cultures alive and make sure that cultural traditions continue.

This is similar to what Bourdieu said in 2018 about cultural capital, which is the idea that knowledge, values, and ways of being are passed down from one generation to the next and help shape who we are (Davies & Rizk, 2018). It is also similar to what Gay said in 2010 about teaching kids in a way that respects their culture and family background (Gay, 2013). From what I learned, I think that passing on knowledge from one generation to the next is an important part of what kids learn at home. Older family members are important teachers, and we should recognize the important role they play in teaching kids. If we can connect what kids learn at home with what they learn in school, it could make their education more meaningful. Help them feel more connected to their culture.

Discussion

I found that the nature of home pedagogy emerges as lived, experiential, value-laden, practical, collaborative, and integrated with learning and life. Parents teach their child, especially household chores, family rituals, farming, community engagement, moral conduct, earning, and self-independence. These types of skills are commonly taught based on the learning-by-doing method. These types of learning strategies align with Dewey's experiential learning theory (Bower, 2014) and Lev Vygotsky's concept of the Zone of Proximal Development (Doolittle, 1995). The findings illustrate that parents provide different types of responsibilities to children, and children actively engage in these types of activities by using self-creativity and self-regulation. This reflects the collaborative pedagogy between parents and children. Socio-cultural theory supports this experiential and collaborative learning (Bleakley et al., 2011). This theory suggests that knowledge is co-constructed through imitation and active participation. So, home pedagogy enhances practical intelligence, moral reasoning, and self-independence among students.

This study shows that home pedagogy transmits family traditions and cultural

identity through hands-on practices. This intergenerational transmission shapes children's own self-identity and behavior within home pedagogy. This aligns with the conceptual framework of this study. Parents are the key agents of home pedagogy, but they use both autocratic and democratic approaches. Children get opportunities for development and the use of their own creativity. This reflects the flexible, unstructured, implicit pedagogy of home curriculum. On the other hand, school pedagogy is rigid, structured, teacher-centered, textbook-oriented, and exam-centered. From this finding, I conclude that home pedagogy helps the holistic development of children, but school pedagogy is limited to the preparation for exams.

Conclusion

From this finding, I conclude that home contains its own pedagogy, which is lived, experiential, value-laden, relational, parent-centered, and collaborative. The home pedagogy fosters practical intelligence, moral reasoning, and self-independence of children, which is especially focused on the cultural transmission of the family. Home pedagogy based on hands-on practices and family engagement, where the role of the parents is very important for the behavior shaping of children. Home pedagogy is directly rooted in life skills because it is more flexible, practical, action oriented. On the other hand, school pedagogy is rooted in knowledge transmission and preparation for exams, because it is more rigid, structured, and textbook-centered. In this sense, home pedagogy helps in the holistic development of children.

This study provides several theoretical, pedagogical, and policy implications in the field of education. First, the findings of this study suggest that the curriculum should not be understood only within classroom practices. The curriculum is also beyond the classroom, such as the home curriculum. So, educators should widely understand the concept of curriculum. Second, the study highlights the crucial role of parents as primary pedagogical agents of home curriculum. So, schools should acknowledge and collaborate with parents to strengthen the connection between home and school learning. Third, the findings indicate that lived pedagogical practices of home curriculum, such as learning by doing and community engagement in the school curriculum, could reduce the gap between home and school pedagogy. Finally, the study implies that the educators of Nepal should design a thematic curriculum to incorporate local and indigenous knowledge, skills, and pedagogy into the home curriculum.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98970

Programme Evaluation of B.Ed. English at a Remote Higher Education Institution in Nepal Using CIPP Model

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Abstract

Educational programme evaluation assesses the overall processes of a programme at different stages of its implementation within educational institutions (e.g. schools, colleges or universities). This study evaluates the B.Ed. English programme being implemented at remote higher education institution located in an underprivileged area. I adopted Stufflebeam's CIPP model (Context, Input, Process, Product) as a research design to evaluate the programme. I collected the data primarily through semi-structured interviews with five participants: four graduates from the B.Ed. English programme and one course instructor executing the programme. The findings of the study revealed that the programme was highly relevant in addressing the demand for higher education aspiration in English language education for economically marginalized and geographically disadvantaged students, especially those who were expecting to become English teachers in their future. Despite some inherent challenges in its implementation, the programme has proven effective in meeting the needs. This evidence-based reasoning is significant because it can serve as an instrumental tool for the university administrators, university authorities and policymakers to make informed-decision regarding the continuation and expansion of ongoing B.Ed. programme to ensure equitable access to higher education opportunities for marginalized communities.

Keywords: Context, input, process, product, evaluation

Introduction

Educational programme evaluation is essential for ensuring smooth functioning and progress of academic programmes. Continuous evaluation gives life to the educational programmes by scrutinizing the effectiveness, appropriateness, process of implementation, and future directions (Aziz et al., 2018). The evaluation ensures impact and effectiveness of the ongoing programme, identifying strengths, significance and direction for the improvement of an educational programme (Shrestha, 2024).

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Therefore, programme evaluation is a systematic process designed to assess the design, implementation, and outcomes of a programme to determine its effectiveness and identify opportunities for improvement.

There are primarily two major perspectives on programme evaluation. The first view on programme evaluation is traditionally centered at assessing achievement against the defined objectives at the end of the programme. Such evaluation models enable the evaluators to make summative decisions. This viewpoint of programme evaluation was forwarded by Rafal Tyler. According to Tyler (1942), programme evaluation should be objectives-based and the success of the programme should be determined by the extent to which the objectives have been achieved. This view is fundamentally based on the summative assessment of the programme.

However, the second perspective of programme evaluation is more comprehensive, as it is based on the assumption that a good programme should evaluate both formative and summative components of programme evaluation. Stufflebeam and Coryn (2014) objected the Tylerian objective-based evaluation approach arguing that it is was overly controlled, experimental, deficient and counterproductive, primarily for three reasons: First, in this model only evaluators are decisive in formulating the educational objectives without sufficiently addressing the needs of intended beneficiaries. More precisely, the evaluators evaluate the programme in relation to their own objectives. The evaluators' conflict of interest is attached in such model. Secondly, this approach tends to focus primarily on outcomes, without examining the programme objectives, structures and process of the programme. Thirdly, the objectives-based evaluations provide feedback only at the completion of a programme. In addition to these approaches, other forms of programme evaluation such as sample survey, standardized testing, site-visit are commonly used for evaluating a programme but they far too narrow in providing sufficient information for evaluation (Stuffleam & Coryn, 2014).

In light of this discussion, I argue that relying on a single component for programme evaluation is unlikely to ensure a comprehensive assessment of a programme. A good programme evaluation examines its efficiency in different phases of implementation. A perfect evaluation is one which can ensure the timely information on planning, execution strategies and operational processes, thereby leading towards successful outcomes (Stufflebeam & Coryn, 2014). In addition, a good educational programme evaluation reflects the intentions of targeted population and intended beneficiaries.

In this way, a successful programme evaluation allows concerned stakeholders, i.e. administrators, policymakers, and curriculum designers, to make informed decisions about whether to continue or terminate or expand the programme in terms of its efficiency (Stufflebeam, 1971). Since a programme evaluation is a comprehensive process, it is important for the evaluators to keep the targeted beneficiaries in mind

while designing the evaluation procedure. Sufflebeam and Coryn (2014) highlight that useful evaluations are grounded in descriptive and judgmental information. Descriptive information is the factual description of a programme, including a programme's goal, plans, staffing, operation and outcomes, while judgmental information is directed towards identifying strengths and weaknesses focused on improving the situation.

Several scholars have developed various programme evaluation models to access and improve ongoing programmes. Some few are: First, *Logic model*. This model evaluates a programme by assessing four distinct measurements. They are: inputs, activities, outputs and outcomes. This model examines how programme inputs, activities and output are logically connected in order to achieve specific results (see W.K. Kellogg Foundation, 2004). Second, *Kirkpatrick Model*. It evaluates a programme's effectiveness at four levels. They are: *reaction, learning, behavior and results* (see Kirkpatrick, 1994). Third, *RE-AIM Model*. This model evaluates a programme's effectiveness on the basis of five key components: reach**,** effectiveness**,** adoption**,** implementation**,** and maintenance (see Glasgow et al., 1999). It focuses on how widely a programme reaches to its target population (reach), the impact it has on participants (effectiveness), how well it is adopted by different settings or groups (adoption), how consistently it is implemented (implementation), and how well it is maintained over time (maintenance).

Despite these various models for programme evaluation, the widely used model for educational programme evaluation is Context, Input, Process, and Product (CIPP Model) framework, developed by Daniel Stufflebeam in the 1960s. Stufflebeam's CIPP framework is a decision-oriented evaluation approach designed to help administrators make well-informed decisions. This comprehensive framework is used for conducting formative and summative evaluations of projects or organizations as it provides the practical and actionable insights to improve the programmes which are under execution (Stufflebeam & Shinkfield, 2007). According to Scriven (1967), the purpose of evaluation should be both formative and summative. Formative assessments of a programme are meant for 'improvement'. The information should be used for ensuring quality and improving operations. While summative evaluation is retrospective in nature, it is conducted to ensure 'accountability', which typically occurs following the development of the programme or services rendered. The goal of summative evaluation is to inform final judgment about the programme for improving the existing situation. However, it should be noted that Stufflebeam's CIPP model appears to prioritize 'improvement' over 'accountability'. This viewpoint gets supported when Stufflebeam points out, the most fundamental tenet of the CIPP model is "not to prove but to improve".

In Stufflebeam's CIPP model, the first component is context evaluation, which focuses on the assessment of the needs of a community and the environment in which the programme operates. According to Stufflebeam (2003), the objective of context evaluation is to define relevant context, identify the underlying needs of the target

population, and explore opportunities for addressing those needs. More specifically, it assesses the overall environmental readiness of the project and examines whether the existing goals and priorities align with the targeted population's needs. In this sense, context evaluation involves a comprehensive needs assessment, which appears to evaluate a project or programme from a broader perspective, which is often overlooked in other conventional models such as the objective-based-model. To clarify further, context evaluation is basically guided by 'What needs to be done?' This step helps identify problems, assets and opportunities within a defined community and environmental context (Stufflebeam & Shinkfield, 2007).This step is crucial in shaping programme's direction, ensuring that the goals are clear and aligned with community needs and available resources. Different methods can be applied for context evaluation which include system analysis, surveys, document reviews, secondary data and the Delphi technique (Dalkey & Helmer, 1963, as cited in Stufflebem and Coryn, 2014)

The second component is input evaluation**,** which examines the resources, strategies, and plans in place for the programme's implementation. The primary purpose of the input evaluation is to explore possible approaches to address the identified needs. The central question it asks is 'How should it be done?' This includes deciding on procedural design and educational strategies that will most likely achieve the designed outcomes. According to Stufflebeam and Coryn (2014), experts, evaluators and stakeholders collaboratively identify or create potentially relevant approaches and formulate responsive plans during input evaluation. In this phase, evaluators analyze the available human and material resources, propose budgets, and recommend alternative solutions, strategies and procedural design where necessary. Based on this theoretical stance, it can be argued that input evaluation is critical for determining whether the programme has the necessary tools and support to achieve its objectives. It assesses whether the programme's design is feasible and if the resources allocated are sufficient to meet the intended goals. Furthermore, it provides insight into whether the programme is properly planned and whether the necessary expertise and materials are available for effective execution. Common techniques used for doing input evaluation include literature searches, visit to exemplary projects, employment of advocate teams and pilot trials (Stufflebeam & Shinkfield, 2007).

Process evaluation is the third component of the CIPP model, which offers an opportunity to periodically assess whether the project is being carried out appropriately and effectively (Stufflebeam & Coryn, 2014). More specifically, process evaluation monitors the ongoing implementation process of a programme or project. The key question it addresses is, 'Is it being done?' Process evaluation fundamentally serves two purposes. First, to examine how the planned activities are being executed. Second, it recommends the necessary adjustments or revisions based on the findings. Furthermore, it intends to monitor the projects' procedural barriers that might hinder the programme implementation (Stufflebeam & Coryn, 2014). It is to be noted that process evaluation provides the opportunity for real-time improvements during programme delivery. The

effective process evaluation techniques mentioned by Stufflebeam and Coryn (2014) include on-site observation, participant interview, rating scales, questionnaires, record analysis, photo, case study of participants, focus group, self-reflection and meeting with staff members.

The final component of the CIPP model is, *product evaluation*, which focuses on assessing the outcomes or results of the programme. It aims to identify and evaluate the project/programme's outcomes both intended and unintended. It provides summative information that can be used to judge the merit and impact of the service of the project. More precisely, it ascertains the extent to which the needs of all the participants were met. The central question it addresses is, 'Did the programme succeed?' Product evaluation results enable the evaluators to determine whether a programme should be continued, repeated and/or extended or in other settings (Stufflebeam, 1980). By evaluating the product, stakeholders can assess the programme's impact and decide whether it is meeting its goals and identify areas for further improvement. The techniques for product evaluation are: logs and diaries of incomes, case studies, hearing focus group, document/records retrieval and analysis, achievement tests and rating scales (Stufflebeam & Coryn, 2014).

Thus, the CIPP model offers a comprehensive framework for evaluating a programme in four distinct but interrelated stages: need assessment (context evaluation), planning (input evaluation), implementation (process evaluation), and outcome (product evaluation). It allows the evaluators to evaluate a programme both evaluation *for* outcomes (formative) and evaluation *of* outcomes (summative). It enables them to gather useful information at every stage for continuous improvement and ensure accountability, enabling the stakeholder make-informed decision.

Previous studies on programme evaluation using CIPP model (e.g. Zahroh et. al, 2025; Shukla, 2011; Shrestha, 2024; Bohara et. al., 2025) have evaluated the programme and curricula mainly focusing on programme relevance, effectiveness, strengths, and weaknesses of curricula, courses, and educational institutions. CIPP approach of programme evaluation even extends to the evaluation of effectiveness of training programme to evaluation of assessment system and quality of exam papers.

However, comprehensive assessment of an entire academic programme particularly in remote higher education institutions with the primary emphasis on programme's relevancy and effectiveness using CIPP framework remains scare. Consequently, little is known about the strengths, limitations and implementation processes of such programmes. Hence, there is a need for systematically evaluating the quality and effectiveness of academic programmes implemented in such contexts. Without such evaluations, university administrators lack evidence for improving programme quality and ensuring equitable higher education opportunities.

This study evaluates the effectiveness of the B. Ed English programme offered at Tila Karnali Multiple Campus (hereafter TKMC), a remotely located higher

educational institution of Nepal from the perspectives of instructors and students using context, input, and process and product framework of the CIPP model developed by Stufflebeam (1971). More specifically, it examines the contextual setting of the English programme and the formulated goals, Moreover, this programme evaluation is directed toward evaluating the plans, content, teaching methods, materials and assessment dimensions of the programme. Additionally, it focuses on understanding the students' and instructors' perceptions about the programme and their competencies after the programme. Using this study, the researcher aims to suggest relevant directions for improving the English programme.

Methods and Procedures

Since this study was grounded in Stufflebeam's CIPP model of programme evaluation, it employed the interpretivist research paradigm and a qualitative research method to assess the B.Ed. English programme which is being implemented at TKMC. Due to the subjective and contextual nature of programme evaluations, Stufflebeam and Coryn (2014) recommended to employ qualitative or mixed research methods in CIPP evaluation model. They argue that these methods enable evaluators to examine the programme's context, resources, implementation and outcomes holistically. In alignment with these recommendations, this study used qualitative research approach to understand the relevance, efficiency and effectiveness the B.Ed. English programme at TKMC, a remotely located higher education institution in Kalikot district of Nepal. For the purpose of the study, I purposively selected five participants which consisted of four graduated-students from the programme–currently employed in different sectors and one course instructor responsible for executing the programme. The sample deliberately included two male and two female participants to ensure representation of diverse perspectives and respect gender inclusivity. Although I used semi-structured interviews as the primary tool for data collection for this study, I used other supplementary tools such as on-site observation, system analysis and document reviews, reading artifacts and focus group discussion due to the versatile nature of CIPP model. Following this, I designed the four/four interview questions for each participant addressing the four components of the CIPP model i.e., Context, Input, Process and Product (CIPP), following this, a document analysis protocol was also developed.

After obtaining informed consent from participants (beneficiaries), I conducted interviews with the participants to gather primary data. The interview was extended approximately for 45 minutes for each participant with 12 semi-structured interview questions in accordance with Smith et al. (2009) who suggest that qualitative interviews ideally range between 45 to 90 minutes with 6-12 interview questions. All four graduates of the programme participated through WhatsApp calls, while the remaining 1 participant (the course instructor with 5 years of teaching experience in this particular programme) participated in face-to- face conversational interview. I interviewed for almost 90 minutes with the course instructor considering that the course instructor

had a prolonged engagement with programme courses and their implementation. In addition to interviews, I analysed documents such as: reviewed a curriculum booklet, campus brochure and official website as artifacts for in-depth understanding of the B. Ed. English programme being executed at the campus. Analysis of documents and artifacts available at the campus which ensured data triangulation to enhance validity. It is to be noted that, I elicited first hand data utilizing semi-structured questions from the participants as a primary research tool and collected secondary data from document analysis of campus maintained at the campus to understand more about the programme. Furthermore, I analyzed the enrollment trends of the students of the last three successive years to see the impact of the programme of last three years.

With the informed consent of the participants, their interviews were recorded. One participant, however, declined to have the interview recorded. In this case, I captured her responses through note-taking. She preferred to write responses than to speak. This choice opportunity was provided in interview protocols. Once collection was completed, the researcher transcribed the interviews verbatim. Following the data collection process, I analyzed the raw data employing Braun and Clarke (2006) framework of thematic analysis. Initially, the researcher familiarized with the data by repeatedly reading the transcripts. The large amount of raw data which were mostly in interview transcripts were collapsed into codes to capture the essence of data (Saldana, 2016). Then I carefully examined the relationship among codes to find the patterns (categories). Subsequently, I had thoughtful and iterative observation on the patterns, which allowed me to develop four themes to align with the four components of the CIPP framework- context, input, process and product evaluation (Stufflebeam, 1971).

About the B.Ed. English Programme

TKMC, a remote higher educational institution is a constituent campus of Mid-West University implements the B.Ed. English programme since its establishment in 2006 aiming to produce competent English language teachers to teach for the secondary level. Each semester includes five courses, with a mix of lecture-based instruction, presentations, assignments, and project work as part of internal assessments, contributing 40% of the grade while the remaining 60% assessed from written exams at the end of the semester.

The programme includes wide range of courses covering language proficiency and pedagogical skills throughout eight semesters. Students are required to pass thirty-four papers throughout eight semesters to complete the B.Ed. English programme. The programme maintains a balance in incorporating subjects of diverse disciplines. Since it is an education programme, the major focus is on linguistics and language teaching and assessment. However, the same amount of emphasis is given to literature aiming to enhance learners' language proficiency through authentic reading materials for critical thinking. Moreover, the incorporation of interdisciplinary readings contemporary issue which embrace freedom, gender equality and peace, bi/multilingualism and world

Englishes in the postmodern era add extra value to the programme course.

Results and Discussion

Based on the developed research question and theoretical underpinnings of Stufflebeam's CIPP framework, this section discusses the findings in light of insights gathered from four graduates of the programme (beneficiaries) and one course instructor through semi-structure interviews, who were directly involved in B.Ed. English programme. Moreover, it critically analyses the participants' experiences and underlying narratives on implementation of English programme at TKMC. The discussions were based on four significant themes which included: 1*) Context Evaluation- Contextual assessment and relevance of programme in marginalized setting, 2) Input Evaluation- Resources allocation and institutional capacity, 3) Process Evaluation- Traditional pedagogical approaches for new project based learning academic programme and 4) Product Evaluation- Correlation between dropout trends and socio-economic barriers.* The findings were connected to *the relevance, efficiency, opportunities, challenges and areas of improvement* for the effective execution of the programme.

Context Evaluation - Contextual Assessment and Relevance of Programme in Marginalized Setting

According to Stufflebeam and Coryn (2014), context evaluation focuses on determining target population, identifying their underlying needs, opportunities and problems with in the environment in which the programme is being implemented. In this study, the context evaluation assessed the relevance of B.Ed. English programme at TKMC in relations to educational aspiration and socio-economic needs of geographically marginalized and economically disadvantaged students. The findings indicated that the programme has consistently fulfilled the higher education aspiration of marginalized people since its establishment in 2008, especially women who faced socio-cultural barriers to pursuing education in urban centers. Prior to the programme, students were compelled to travel to cities such as Surkhet/Nepalgunj and Kathmandu, which was almost unaffordable and socially impossible for young girls. This resulted in the exclusion from the opportunity to pursuing higher education after completing secondary level education, and was ultimately adding further injustices to marginalized students.

This academic initiation did not only open the door of access to higher education but also expanded multiple opportunities and guaranteed regional social equity to geographically marginalized students. From this point of view, this programme created the opportunity to local people who were expecting to pursue their higher education in English language and become English teacher in their future. The contextual environment of the programme also aligned significantly with the government's mission of decentralizing higher education and increase access in remote areas (MOEST, 2016).

The programme appeared to meet the expectations of the employers. No graduates was found unemployed. The graduated beneficiaries were rocking their positions successfully as two out of four participants have been working at the secondary level after successfully passing Open Teacher Service Commission Exam. It proved the direct relevance of the programme. There was a powerful quote of the SP1 who was selected through the TSC open competition exam to teach at the basic level as:

> *Travelling to urban areas like Kathmandu for higher education is difficult it for the ladies like us to go urban area which was beyond our capacity. The programme in the campus provided us the opportunity to be in this position. As a female teacher, I now teach English to students at the basic level (6-8) in government classes. I feel proud to be working in my own district living in my own house.*

The TP who was also the instructor of the programme resorted the following with the relevancy and the needs of the programme:

> *This programme has been a milestone for poor students, especially girls' students who cannot go to cities for their higher education due to their socioeconomic status. This campus is a learning hub for girls' students. Approximately 70 percent of students are girls in our campus. People often say that it's a 'choribuhari' campus.*

These data revealed that the newly introduced B.Ed. programme has effectively addressed the higher education aspiration of young students in underprivileged regions, and has significantly reduced the financial expenses. Furthermore, it has addressed the socio-cultural barriers which ultimately has minimized the level of exclusion form the opportunity to higher education. These findings are consistent with the empirical study conducted by Shrestha (2020) who also demonstrated that financial hardship and socio-cultural stigma were the primary causes of exclusion from higher education opportunities, especially by women and marginalized students in Nepal. In this sense, initiation of English programme has served as a tool for empowerment and social transformation for geographically isolated and hermeneutically marginalized group of people

Hermeneutically marginalized people are the most disadvantages group who are inadequately conceptualized or ill-understood (Fricker, 2007). The fact is that people, especially the girls from marginalized and low socio-economic status groups are historically excluded from knowledge producing initiatives and deliberately sidelined from the mainstream higher education opportunity. Nevertheless, this English programme is serving as a destiny of empowerment through which individuals are able to acquire the agency and professional competences to make strategic life-choices, which previously denied to them (Kabeer, 1999). From this perspective, the B.Ed. English programme appears to have expanded the agency among individuals in the

marginalized setting. Besides, the programme was found to have created equal access and opportunity to quality education to the higher educational aspirants in the remote region. More technically, the B. Ed. English programme at TKMC is based on intended individuals needs has been a soft gesture for a just society which has accelerated for socio-economic inclusion, educational accessibility, gender empowerment and employability by reducing the geographical exclusion, epistemic marginalization by enabling students to participate educational, professional and civic life. In line with these discussions, I affirm with Stufflebeam and Coryn (2014) who view that contextually relevant education programmes significantly improve the programme environment because they are based on the assessment of their beneficiaries' needs.

The SP2 who is currently working at a local NGO, Karnali Integrated Rural Development and Research Center (KIRDRC) for the last four years asserted as:

> *I am at this position at as an assistant coordinator at this office. My duty is to supervise the programme activities, prepare field reports and forward to the coordinator. Earlier I was not able to make reports earlier. I had to take the support from my seniors. The interesting thing is that I used to be invited to take part in seminars organized by our donors where the medium of communication normally used to be English. Because of not having enough confidence in English, I used to send other staffs to participate the events. After I attended the English programme at TKMC, I have a good command over both spoken and written English now. I take this opportunity myself now.*

Similarly, SP3 (aged 36) teaching English at basic level for 10 years as a permanent teacher asserted that "Though I didn't take the formal classes, I completed the programme from my self-studies. These certificates (degree) became a cornerstone for my job promotion."

From this discussion and participants' responses, it can be argued that the programme is so effective to people residing in this remote geographical belt and highlights a strong relevance of the programme. It has been meeting the needs and expectations of community people with limited opportunities to study English. So, it is highly relevant to the students especially female who are unable to go to urban areas to receive higher education due to their socio-economic status. The programme, in fact, has created the real higher educational opportunity within this remote area. Specifically, the programme has added extra identity of 'the center of excellence' in the under-resourced setting.

Input Evaluation - Resources Allocation and Institutional Capacity

Input evaluation assesses the resources, strategies and plans to achieve the programme objectives (Stufflebeam, 2003). The plans and resources allocated for the programme are vital for its operation. However, the findings of B.Ed. Programme indicated that TKMC is severely under-resourced. The evaluator found the programme

with 34 courses was being run only by three faculty members which sharply contrasts with higher education staffing norms. This finding identified a noticeable gap between national higher education policy and institutional realities in geographically remote campuses. Managing such a huge amount of courses by just three teachers was absolutely unrealistic and ridiculous. This shortage of instructional staff directly affected both in instructional quality and institutional functioning. The TP remarks captures this reality:

> *We have been handling this programme with just three faculties without any proper training. We can incorporate maximum 5 periods in a day which makes up 15 periods… Moreover, from one of three faculty members, we have to take compulsory English. We do not specify who to be taught. Sometimes, we have to involve for administrative works of the students as well.*

These situations highlighted versatile and multitasking roles of the faculties due to the lack of human resources, adequate teaching/learning resources and limited or no professional development opportunities for the faculties were the common critical challenges of remote regions' higher education institutions.

Additionally, the participant quote revealed that teachers were conducting the programme without receiving any formal trainings and specific guidelines. They were taking classes just as a part of professional responsibility rather than as for educational advancement and transformation. Teachers and human resources are the primary agents for the effective operation of the programme who give the effective outcomes.

The study sharply indicated the *chronic-under-staffing* to execute the programme. There is less probability of quality education under the situation, where untrained and less qualified teachers deliver too many courses at a time in higher education settings. It is to be noted that higher education courses are expected to deliver by the qualified and trained faculty members for better educational attainment. Teachers with under qualification are less unable to engage the students because they are likely to adopt a surface approach and try out to memorize the fact rather than attempt to understand. As a result, it diminishes the quality of teaching (Lucas et al., 1997, as cited in Gibbs, 2010). Therefore, the educational outcomes depends on the teacher resources: more qualified and trained the teachers, better the academy results. Unfortunately, the English B. Ed English programme is severely affected by understaffing both qualitatively and qualitatively. This finding affirmed with the Sharma et al. (2019) who demonstrated that teachers' shortage, inadequate funding and limited infrastructures are the common issues in Nepali rural higher education institutions. Similarly, Devkota (2021) has documented that the disproportionate distribution of the resources across geographical regions has created the structural injustices and bias, systematically pushing the remote regions' higher education institutions towards structural marginalization.

It might be significant to interpret that the same scenario is reflected in this particular English programme, which appeared to be extremely struggling with

the resource allocation and building institutional capacity, primarily in terms the number of teaching faculties. Shrestha (2024), however, documented that the M.Ed. ELT programme at Kathmandu University is running by the highly qualified and compassionate faculties and exceptionally dedicated administrative staffs to execute the educational programme. This scenario reveals the strong foregrounding and institutional capacity for the programme to implement by the highly qualified faculties. Nevertheless, the B, Ed English programme being executed at marginalized context is inversely proportional. Although institutional supports and mentorship are vital for higher academic attainment, the input evaluation of the programme revealed the fact that the faculties were never given institutional support to conduct the semester based programme.

In fact, the faculties are required to develop their professional abilities through frequent workshops, academic conferences or teacher development opportunities. As a result, students are receiving disproportionately fewer input in comparison to similar programmes being executed in urban areas. The input evaluation of the programme highlighted the regional disparities of in resource allocation and management.

Process Evaluation - Traditional Teaching Approaches for New Project-based Curricula

In Stufflebeam's CIPP model, Process evaluation focuses on the implementation dimension of an educational programme, particularly in teaching methods, interactions between students and teachers, and curriculum delivery (Stufflebeam, 2003). To be specific, this component examines, how the programme is being executed and whether the further adjustments and revisions of plans are needed. Despite limited resources and insufficient opportunities for teachers' professional development, the English programme appeared to be functioning satisfactorily despite procedural clarity, addressing the higher education aspiration of remote region. The evaluation of the programme revealed that there is procedural weakness in course delivery in the semester-based programme, where teachers were found to be employing predominantly traditional lecture-based teaching methods with a focus on lectures and classroom-based instruction despite the fact that programme curriculum lays explicit emphasis on the project-based learning. The finding indicates a clear misalignment between pedagogical intent and implementation (Biggs, 2000). Semester system education is primarily delivered through interactive lectures, discussion, group-work and project work where students' role is dominant. This view is consistent with Gibbs (2018) who documents that semester-based educational programmes are basically designed with the intent of participatory learning where students engage in collaborative work, critical inquiry and autonomous research. Gibbs further argued that collaborative learning is a good predictor of educational gain. In such collaborative learning environments teachers have the opportunity to make the necessary changes in the content based on the needs and interests of the learners from a discussion between the students and teacher (Johnson & Johnson, 2019, as cited in Shrestha, 2024). However, it was found

that there was a sharp disconnection and mismatches between the intended course objectives and the instructional mode of course delivery in the executed programme.

The fact is that semester-based educational programmes should be based on the critical dimensions of education where the teacher is expected to create opportunities for transformative dialogue and empowerment in the language classroom. Otherwise the traditional lecture method may unintentionally replicate systemic inequality in the marginalized educational context, reinforcing the banking model of education, where the banking knowledge by teachers is passed to the passive students (Freire, 1970). This argument get supported when the TP states:

> *Our teaching method is lecture based. Students listen to our lectures and make notes on what they understand… We have never received any orientations on semester's systems for apex body (the university). We are simply completing the course before the semester end exam.*

Furthermore, it is important to mention that the assessment in the semester system is predominantly formative where students are assessed in terms of their daily attendance, presentation skills, classroom discussion, peer collaboration, and project-work activities. Nonetheless, it was observed that the programme was based on exam-driven teaching, where educational activities were shaped by formal evaluation. That is, the entire programme's effectiveness was mostly assessed on the basis of the final evaluation results which was conducted by the university at the end of the semester. Despite the high relevancy of the programme in such a marginalized context, the English programme appeared to heavily suffer from pedagogical inadequacy, institutional support, monitoring and mentorship for the effective implementation and execution of the programme. Therefore, the periodical orientation on course delivery and semester system would be transformative shift in rural higher education by minimizing the structural injustices to the teachers working in remote regions.

Product Evaluation - Correlation between Dropout Trends and Socio-economic Barriers

Product evaluation assesses the final product of an educational programme, focusing on whether the programme has achieved its intended outcomes (Stufflebeam & Coryn, 2014). As far the B.Ed. English programme at TKMC is concerned, it has opened up an avenue and unlocked the access to higher education particularly for marg. nalized students and has satisfactorily fulfilling the aim of students to be competent English teachers in their future. The document analysis revealed that fact that more than 200 students have successfully completed the course. Interestingly, none of the graduates were reported to have been job less. However, there is noticeable threat in drop-out rates of the enrolled students for the programme. For instance, 15 students were admitted for the B.Ed. English programme, but only 9 students (which makes up 60 percent) were found to have completed the course. This evidence proves that there is high drop-out rate in the programme is another serious concern for the programme.

The SP4, who was recently graduated frome the B.Ed. English programme and pursuing his higher education in the M.Ed. in English programme at Tribhuvan University, Kritipur described the programme as:.

> *I took daily classes except in sixth and seventh semesters. The teachers are very friendly and the administration is very supportive there. Initially, we were 12 to take the English course. Only 5 of us completed the course. The main problem is that as they progressed to the next semesters, they started to decline, mostly female' friends especially after they got married…*

Furthermore, the researcher examined that students' dropout and socioeconomic factors are directly correlated. It was found that socio- economic factors of the students are the most challenging aspect of programme implementation. The main asset of the programme is girl students. After they get married, most of them leave their studies. Another important component is the economics because data state that students are compelled to leave the study; because they do not have money to pay fees to continue for the programme. These findings strongly affirm with Tinto's (1993) theory of Student Departure, who identifies multiple interacting causes of university students' dropout (attrition). The factors such as academic, social and personal matters disconnect the students from the educational institutions. Therefore, it is important for an institution to improve academic and financial support, specifically to girls' students. Additionally, providing mentorship and creating an inclusive environment are other critical solutions to retain the students in educational institutions.

Conclusion

This study evaluated the effectiveness of B.Ed. English programme of TKMC by using Stufflebeam's Context, Input, Process and Product (CIPP) framework from the perspectives of instructors and graduates. The evaluation sought to examine the on-going programme's contextual relevance, local educational needs, adequacy of available resources and pertinent challenges associated with programme execution.

The findings revealed that the programme is contextually relevant and has played a significant role in expanding access and inclusivity to promoting higher education in a geographically remote region. Furthermore, the study identified the key implementation challenges of the programme which included limited resources, inadequate staffing and insufficient opportunity for professional development for faculties. Most notably, it revealed a substantial gap between the programme's project-based curricula and the real practice highlighting the need for updating teacher professional competence.

This study contributes to the growing body of literature on CIPP-based evaluations by providing empirical evidence form a remote higher education context in Nepal. The study offers practical insights for campus administration, university authorities and policy makers to strengthen the programme through the allocation

of sufficient resources, faculty recruitment and bringing provisions for continuous opportunities for teacher professional development. Furthermore, the results obtained from the programme evaluation provide a strong bases for considering the expansion of B.Ed. English programme to M. Ed English programme at TKMC to ensure access and inclusivity among the students willing to start higher education in their own remote geographical settings.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98971

Consumer Adoption of Mobile Payment Services in the FinTech Ecosystem: A Systematic Literature Review

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Abstract

Mobile payment systems have rapidly emerged and transformed the financial services and payment landscape. The purpose of this study is to synthesize and critically review the recent literature and knowledge on mobile payments and users' acceptance of FinTech services, identify the dominant theories, and demographic factors influencing users' behavior. The methodology was Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), standardized to conduct and report systematic reviews in major academic databases. 37 final documents were synthesized. The results show that Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) are the most widely used theoretical frameworks, and are more often supplemented by trust and security constructs. The findings highlight the critical importance of consumer confidence in their security when using the practices, and the need for ongoing engagement and support with customer service to sustain their use of the practices. The relationships are moderately affected by generational and socio-economic contexts. Further research is needed on continued use and long-term effects on financial inclusion, particularly in low-income areas. This review intends to provide a broad overview of the field and to outline points for action in the future.

Keywords: FinTech adoption, mobile payment systems, consumer trust, user acceptance

Introduction

Digital technologies and the introduction of new business models are radically changing the financial world, and are generically referred to as Financial Technology

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(FinTech) or Financial Technology Services (Alt et al., 2018; Diana & Leon, 2020; Tan, 2022; Jayanthi et al., 2024; Venkatesan, 2025). The mobile payment system is at the core of this revolution, the system of using portable electronic devices, smart electronic devices, such as smart devices (smartphones, tablets, etc.), for financial transactions (Iman, 2018; Xin et al., 2015; Upadhyay et al., 2022). Mobile payments are becoming a widely used payment tools and changing how an individual pays for products, sends money, and uses financial services (Li et al., 2019; Hadi et al., 2022). The transition represents a paradigm shift in users' mindset, impacting the relationship between people and cash, money and digital banking systems. This affects the attitudes and utilization of money and banking systems. The global market of mobile payments has been growing exponentially, with the number of transactions reaching the trillions annually, especially in areas where a major proportion of the population has access to smartphones (Dwivedi et al., 2016; Ramli, 2021; Giglio, 2022).

Mobile payments are just one aspect of the broader FinTech ecosystem, which has much more varied services like digital lending, Robo-advisory, peer-to-peer insurance, and cryptocurrency exchanges (Li et al., 2019; Giglio, 2022). The more advanced financial services that are provided are important instruments that consumers can use to their advantage (Iman, 2018; Liu et al., 2019; Lal et al., 2020). Media attention to mobile payments is crucial to the overall picture of the diffusion of FinTech and the drivers of mobile payments to be adopted. The adoption rates are very different between developed and developing economies, depending on regulatory systems, cultural attitudes towards technology, and complementary infrastructure, such as reliable internet access and national digital identity systems (Dwivedi et al., 2016).

Although the academic and practical interest in this area is significant, the current literature about mobile payments and consumers' adoption of FinTech services is still very diverse. Studies in various fields such as information systems, marketing, economics, and behavioral finance are taken place (Lin et al., 2019; Hadi et al., 2022). This fragmentation has led to a wealth of detail, but a lack of coherence within the body of knowledge. For instance, the research based on the Technology Acceptance Model (TAM) tends to de-emphasize the importance of perceived ease of use and perceived usefulness as key factors, and the research from the trust and security perspective focuses on the intervening role played by perceived risk and institutional safety (Xin et al., 2015; Li et al., 2019; Mirchandani et al., 2020; Durai & Lallawmawmi, 2023). Moreover, there is a significant amount of literature that has focused on initial adoption intentions, and relatively little attention has been given to post-adoption actions, including continuation intention, actual use, and termination of services (Lin et al., 2019; Singh, 2020). This space is important as FinTech services must gain new users as well as keep their customers and build a strong relationship with them.

One major research gap in the current research landscape is the scarce of an integrated studies that incorporates the various factors influencing mobile payment adoption across contexts and user groups. Several narrative reviews and meta-analyses have been performed, but they tend to be limited in scope and/or geographic area (Liu et al., 2019). The systematic review explores the interactions among the factors, the relative importance of the various factors in different populations and cultural settings. Furthermore, many of the impacts of mobile payment adoption have been examined in only a few studies, and those studies have only just begun to examine the effects on financial inclusion, household financial resilience, and competition in the financial services sector (Kim et al., 2018).

The objective of this review is to provide a comprehensive and coherent understanding of the field by synthesizing fragmented literature into an integrated framework that captures publication trends, dominant theoretical perspectives, and the demographic and social factors influencing consumer adoption. This synthesis will be used for future researchers to draw on for a solid foundation of knowledge and to determine future research. This review offers a detailed map for practitioners and policy-makers to build better mobile payment services and policies that can enable financial inclusion and responsible innovation.

Methods and Procedures

The systematic literature review was conducted by following the methodology Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), standardized to conduct and report systematic reviews (Page et al., 2021). The process was divided into defining the review protocol, defining the dimensions used for thematic analysis of the research, applying inclusion/exclusion criteria, and conducting the study selection process and quality assessment. The steps involved in each of the individual phases are outlined below.

Review Protocol

The search strategy aimed to find a broad and representative set of peer-reviewed literature discussing mobile payments and consumers' use of FinTech services. To be comprehensive, we chose the five major academic databases and one scholarly search engine. The choice of the main databases: Scopus, Web of Science, IEEE Xplore, ScienceDirect, and Google Scholar. Every database has detailed search strings below:

Table 1

Search Strategy from Databases

Database	Search Strategy
Scopus	TITLE-ABS-KEY (("mobile payment*" OR "m-payment*" OR "digital wallet*" OR "e-wallet*" OR "contactless payment*") AND ("FinTech" OR "financial technology" OR "mobile banking") AND ("adoption" OR "acceptance" OR "usage" OR "intention")) AND NOT TITLE-ABS-KEY ("systematic review" OR "literature review" OR "meta-analysis" OR "survey")
Web of Science	TS = (("mobile payment*" OR "m-payment*" OR "digital wallet*" OR "e-wallet*" OR "contactless payment*") AND ("FinTech" OR "financial technology" OR "mobile banking") AND ("adoption" OR "acceptance" OR "usage" OR "intention")) NOT TS = ("systematic review" OR "literature review" OR "meta-analysis" OR "survey")
IEEE Xplore	("mobile payment*" OR "m-payment*" OR "digital wallet*" OR "e-wallet*" OR "contactless payment*") AND ("FinTech" OR "financial technology" OR "mobile banking") AND ("adoption" OR "acceptance" OR "user intention" OR "consumer behavior")
ScienceDirect	("mobile payment*" OR "digital wallet*" OR "e-wallet*" OR "m-payment*") AND ("FinTech" OR "financial technology" OR "mobile banking") AND ("adoption" OR "acceptance" OR "intention") NOT ("systematic review" OR "literature review" OR "meta-analysis")
Google Scholar	("mobile payment*" OR "m-payment*" OR "digital wallet*" OR "e-wallet*" OR "contactless payment*" OR "NFC payment*") AND ("FinTech" OR "financial technology" OR "mobile banking" OR "digital finance") AND ("adoption" OR "acceptance" OR "usage" OR "intention to use" OR "consumer behavior") -"systematic review" -"literature review" -"meta-analysis" -survey

Analytical Framework for Thematic Synthesis

The analytical framework was created with two research dimensions. The first dimension, Theoretical Frameworks and Models of Adoption is dedicated to the major theories in the field. The second dimension, demographic influences (generational and socioeconomic factors), examines the moderating effect of age, income, education, and other demographic characteristics on the association between adoption determinants and outcomes.

Inclusion and Exclusion Criteria

The following criteria were used to select the studies for inclusion: (1) Studies focused on mobile payments, digital wallets or contactless payments; (2) Studies examined consumer adoption, acceptance, usage or continuance intention as the dependent variable or primary outcome; (3) Studies published in English; (4) Studies published as a peer-reviewed journal article (5) Studies used empirical research methods such as quantitative surveys, qualitative interviews, experiments, or mixed-methods approaches; and (6) Studies published time frame until April 2026. On the

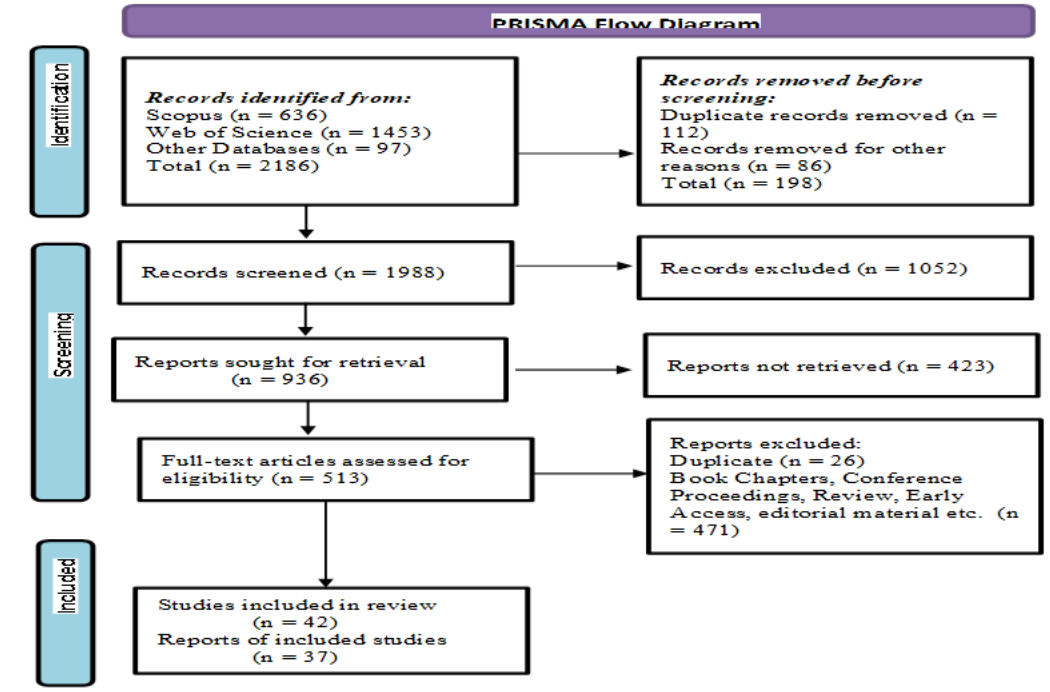
other hand, studies were excluded: (1) Review article, meta-analysis, or systematic review; (2) the study did not examine the mobile payment system; (3) the study was not available in full-text.

Study Selection Process

The process of selection of studies was designed in four stages, as per the PRISMA flow diagram, as illustrated in Figure 1.

Figure 1

PRISMA Flow Diagram of the Study Selection Process



Source: (Page et al., 2021)

Results

Main Information

The dataset provides a detailed bibliometric analysis of all publications of the research that were gathered between 1995 and 2026. 1,978 documents were obtained from 880 sources: journals, books, conference proceedings, and other academic publications. The dataset exhibits a high and steady growth rate in the field, 15.94 per year, showing the scholarly interest in the field and expansion of research over the years.

The average age of the documents is 5.28 years, suggesting that the dataset mainly consists of relatively recent publications. Moreover, the average number

of citations per document (30.81) indicates that the documents had impact on the academic world. In total, the publications include 60,448 references, which shows the publications have a solid theoretical and empirical base for the studies included in the analysis.

Table 2

Main Information about Data

Category	Description	Results
Main Information About Data	Timespan	1995–202
	Sources (journals, books, etc.)	880
	Documents	1,978
	Annual growth rate (%)	15.94
	Document average age	5.28
	Average citations per document	30.81
	References	60,448
Document Contents	Keywords Plus (ID)	3,089
	Author's keywords (DE)	4,817
Authors	Authors	4,390
	Authors of single-authored documents	190
Authors Collaboration	Single-authored documents	216
	Co-authors per document	3.28
	International co-authorships (%)	26.54
Document Types	Article	1,507
	Article; Early access and Article; Proceedings paper	63
	Article; Publication with expression of concern and Retracted publication	5
	Books and Book/Review chapters	122
	Conference paper and Conference review	182
	Correction and Correction; Early access	6
	Editorial material, Meeting abstract, News item, Note, Retraction	33
	Review, Review; Early access	50

Author's Keywords: 3,089 Keywords Plus and 4,817 Author's Keywords. The number of author keywords shows that authors have used different and specific keywords to represent their studies, indicating that the research field is multidimensional.

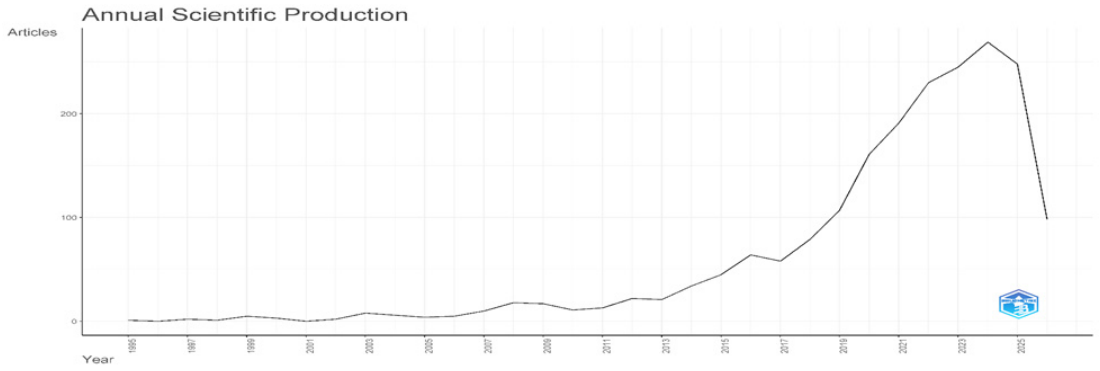
In total, 4,390 authors contributed to the publications, giving their names to them, 190 were single author documents, and most of the studies were joint. In total, there were 216 single-authored documents, with an average of 3.28 co-authors per document (moderate research collaboration). Moreover, of the publications, 26.54% are co-authored by international researchers, indicating high level of international collaboration and cross-country research. The document type analysis shows that most of the documents in the data set are journal articles (1,507 articles). There are also 177 conference papers, 115 book chapters, and 49 review articles.

Annual Scientific Production

The data on annual scientific production show the historical development and growth of the research field between 1995 and 2026. The trend of publication shows a slow growth during early years, with a sharp growth in recent years.

Figure 2

Annual Scientific Production



In the first period (1995-2005), the research was minimal, the number of articles published was very low, and in 1996 and 2001, no articles were published. In 2003, eight articles were published. From 2006 to 2015, it was in a moderate growth phase. The number of publications began to increase slowly; in 2006 (5), and in 2015 (45) articles were published. It seems to be an emerging interest among scholars and researchers.

After 2016, there was a significant increase, indicating the accelerated development of the research discipline. There was increase in the number of scientific publications from 2016 (64 articles) to 2019 (107 articles). The number of publications increased after 2020, with 161 articles published in 2020, 191 articles published in 2021, and 230 articles published in 2022.

The largest number of publications (269) was produced in 2024, reflecting the highest research activity in the data set. At the same time, the volumes of publications for the years 2023 (245 articles) and 2025 (248 articles). The significant drop in 2026 (98 articles) may not reflect an actual decrease in research activity, but could also be caused by the year not being completed yet. Overall, as indicated by the analysis of annual scientific output, the research field has been well developed and stable in the last 30 years.

Research Trends in the Domain (Mobile Payments and Consumer Adoption of FinTech Services)

Based on Table 3, the general research trends of mobile payment and consumer

adoption of FinTech services in different years can be seen. The findings indicate that the focus of the research in this field has shifted from business performance and financial inclusion to other aspects, such as consumer behaviour, trust, demographic attributes and post-adoption usage attributes.

Table 3

Research Trends in Mobile Payments and Consumer Adoption of FinTech

Themes	Observed Years
Theoretical Frameworks and Models of Adoption	2017, 2019, 2020, 2022, 2023, 2024
Trust, Security, and Perceived Risk	2018, 2021, 2024, 2025
Demographic Influences: Generational and Socioeconomic Factors	2019, 2020, 2022, 2023, 2024, 2025
Regional Case Studies in Emerging Markets (Asia and Africa)	2017, 2019, 2020, 2021, 2022, 2023, 2024, 2025
Continuance Intention and Post-Adoption Behavior	2019, 2020, 2022, 2023, 2024, 2025
Impact of External Shocks: The COVID-19 Pandemic	2020, 2022, 2023, 2024
Business Performance, Financial Inclusion, and Ecosystem Dynamics	Pre-2017, 2017, 2018, 2019, 2021, 2022, 2023, 2024

The first research focus was on "Business Performance, Financial Inclusion and Ecosystem Dynamics" which began before 2017 and endured through 2024. This implies that the first research was focused on the economic and institutional dimensions of FinTech services and their contribution to providing financial access and improving digital financial ecosystems.

"Theoretical Frameworks and Models of Adoption" domain was started in 2017 and increased in 2022-2024. It is expected that predictions of consumer intentions and their mobile payment system use behavior can be done by using technology adoption models, e.g., the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and other behavioral models, based on this trend. Similarly, in the years 2018-2025, the issues of Trust, Security, and Perceived Risk consistently show concern for privacy threats, cyber security, fraud, and consumer trust in digital financial transactions. There has been a clear message in recent years: In the adoption of FinTech, trust is crucial.

The study effort on the topic "Demographic Influences: Generational and Socioeconomic Factors" started to be prominent in 2019 and continued until 2025. It demonstrates rising academic interest in the acceptance and adoption of mobile payment technologies and FinTech services, and how the differing generations and ages relate to this.

Likewise, since 2017, the publishing of new books (Regional Case Studies in Emerging Markets-Asia and Africa) has been done on a regular basis, highlighting emerging economies. The studies highlight mobile payments' fast expansion in emerging markets where digital financial services are helping to increase financial

inclusion and drive economic change.

From 2019 onwards, the theme of "Continuance Intention and Post-Adoption Behavior" emerged as a prominent theme. The shift in trend signifies a deeper understanding of the use of FinTech platforms, their satisfaction, customer loyalty, and long-term interactions with them, rather than just adoption.

The years 2020-2024 were also dedicated to a key research area, the "Impact of External Shocks: The COVID-19 Pandemic". The pandemic altered consumer habits, and in a world of restrictions and contactless payments, the world went digital for payment.

The mobile payment and FinTech adoption space is becoming richer and consumer-driven. In the financial services in the digital age, recent studies have increasingly adopted a behavioural, technological, social, and contextual perspective to understand the changing dynamics.

Theoretical Frameworks and Models of Adoption

The analysis reveals that the most used models were the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), with some additional constructs added based on the context. The studies included demonstrate the models' continued development from their initial uses to being more complex and "integrated," and capable of considering the very complex process of FinTech adoption.

According to TAM (Davis 1989), perceived usefulness and perceived ease of use are key factors that influence the adoption intention of technology. In our sample, several studies use TAM as the basic theory. For example, in the Indian FinTech ecosystem, one study uses TAM to show that perceived ease of use and perceived usefulness have a significant impact on behavioral intention (Patnaik et al., 2023). A recent study adapted the TAM specifically for the mobile apps of FinTechs' for banking, further validating its model in that context (Durai & Lallawmawmi, 2023). Most of the TAM studies in our review build on the TAM and add other constructs that are specific to financial services. For instance, the extended TAM adds additional predictors, such as trust, perceived risk, and social influence, and one study reports that trust has a particularly strong influence on consumer adoption intentions for mobile payment services (Lin et al., 2019). One other research uses a multi-method assessment based on an adapted TAM that includes concepts of perceived security and compatibility to account for the subtleties of FinTech adoption (Singh et al., 2020). An extended model introduces domain-specific constructs, including financial literacy and perceived cost to the core constructs of TAM, thus strengthening the predictive power of the model (Jayanthi et al., 2024). The overall message from these extensions is that although the basic TAM constructs are important, they are not enough to explain consumer behaviour in the FinTech context, where trust and risk perception are prominent.

The Unified Theory of Acceptance and Use of Technology (UTAUT) model to analyze the cognitive factors for FinTech innovation in the context of digital banking shows that the two cognitive factors that are strong predictors of behavioral intention are performance expectancy and effort expectancy (Tariq et al., 2024). Upadhyay et al. (2022) extended the meta-UTAUT model by adding perceived severity and self-efficacy into the context of mobile payment services during the time of COVID-19. The study shows that the perceived risk to their health from using traditional payment methods significantly moderates the relationship between performance expectancy and behavioral intentions.

Table 4

Theoretical Frameworks and Models of Adoption in FinTech Research

Core Theories	Specific Model	Key Constructs/ Extensions	Sources
Technology Acceptance Model (TAM)	Core TAM	Perceived Usefulness, Perceived Ease of Use	(Durai & Lallawmawmi, 2023), (Patnaik et al., 2023)
	Extended TAM	Trust, Risk, Social Influence, Facilitating Conditions	(Singh et al., 2020), (Lin et al., 2019), (Jayanthi et al., 2024), (Patnaik et al., 2023)
	Post-Acceptance Model	Confirmation, Satisfaction, Continued Use Intention	(Qi et al., 2024)
Unified Theory of Acceptance and Use of Technology (UTAUT)	Core UTAUT	Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions	(Tariq et al., 2024)
	Extended UTAUT (Meta-UTAUT)	Perceived Severity, Self-Efficacy (e.g., during COVID-19)	(Upadhyay et al., 2022)
Other & Integrative Frameworks	Open Banking/ Institutional Trust	Trust in banks, trust in third-party providers, and data privacy	(Chan et al., 2022)
	Multi-Method / Literature Synthesis	Mixed methods, systematic review of adoption factors	(Patil et al., 2017), (Singh et al., 2020)

Core Theories	Specific Model	Key Constructs/ Extensions	Sources
	General Theoretical Explanation	Search for overarching theories explaining the FinTech wave	(Mirchandani et al., 2020)

In addition to the TAM and UTAUT models, a smaller, although still substantial number of studies uses other or hybrid models. In one study, the post-acceptance framework was extended to explore consumer adoption of FinTech, taking a view beyond initial adoption to include and examine the concept of continuance intention (Qi et al., 2024). This model is based on expectation-confirmation theory, which states that satisfaction is the main reason for ongoing use, as it depends on the extent to which a user's expectations are met through the experience. The second paper, meanwhile, adopts a novel perspective on the topic by exploring the phenomenon of open banking and creating a framework that combines institutional trust with technology acceptance factors (Chan et al., 2022). This research indicates that trust in the bank, trust in third-party providers, and perceptions on data privacy and security are important drivers of adoption, and may reveal characteristics of trust relations in an open, platform-based financial ecosystem. The other study is deeper and more theoretical in nature, in which they look for a broader and more theoretical understanding of the wave of FinTech (Mirchandani et al., 2020). The researchers in this study suggest that there is a need for models from other disciplines to complement their findings, such as models from economics and sociology, for example, the network effect and institutional theory. Finally, a comprehensive literature review is conducted by one study, which brings together results of various theories and frameworks to come up with a list of common determinants of digital payment adoption (Patil et al., 2017).

Generational and Socioeconomic Factors (Demographic Influences)

Mobile payments and FinTech services are not a common phenomenon in the population; instead, they are strongly influenced by demographic factors such as generational cohort and socioeconomic status. In the studies included, age, income, education, and related variables influence not only the probability of adoption but also the relative influence of the various determinants of adoption. The analysis shows that the younger generation, specifically the Millennials and Generation Z, are generally more open to adopting these technologies and that there are opportunities and constraints to adoption based on socioeconomic factors, including income and education levels, especially with low-income and less-educated populations.

Generational differences have been a major subject of literature, and following studies that investigate the adoption practices of younger generations (Diana & Leon, 2020; Phuong et al., 2022; Singh & Sharma, 2023; Acharya & Bhojak, 2024). A study investigates the continuance intention of FinTech payment among the Millennials in

Jakarta, with perceived usefulness, perceived ease of use, and social influence being significant factors in sustaining their use of FinTech payment among the Millennials in Jakarta (Diana & Leon, 2020). The findings of this study indicate that if Millennials find these payment services useful and easy to use, and believe that their social circle is using them, they are more likely to continue using these services, even after being introduced to them by the FinTech industry. Some of these findings suggest that even after being introduced to FinTech payment services by the industry, Millennials will be more likely to keep using them if they find them useful and easy to use, and if they believe that their social circle uses them. In the other study, Phuong et al. (2022) explores the predictors of intention to use FinTech payment services among Generation Z in Vietnam and proposes that performance expectancy, effort expectancy and social influence are significant predictors of the intention to use FinTech payment services among Generation Z. The study also reveals that the perceived risk hurts the intention to adopt, meaning that even amongst digital natives, security and privacy concerns are not to be overlooked. Another study offers a detailed analysis of digital natives' receptivity to FinTech from generations Y and Z, revealing that digital natives are generally receptive to FinTech, but that there are subtle differences in what factors drive that adoption (Acharya & Bhojak, 2024). For instance, Generation Y is likely to be more focused on trust and security, whereas Generation Z is more likely to be influenced by social factors and innovative service.

Table 5

Demographic Influences on Mobile Payment and FinTech Adoption

Demographic Dimension	Specific Factor	Sub-Factor / Focus	Key Findings	Sources
Generational Factors	Millennials & Gen Z	General adoption & continuance intention	Perceived usefulness, ease of use, and social influence drive adoption and continuance for Millennials and Gen Z.	(Diana & Leon, 2020), (Acharya & Bhojak, 2024)
		Impact of COVID-19	Pandemic accelerated adoption for both Gen X and Millennials, but motivations differed (usefulness for Millennials, ease of use for Gen X).	(Singh & Sharma, 2023)

Demographic Dimension	Specific Factor	Sub-Factor / Focus	Key Findings	Sources
	Gen Z only	Determinants of intention to use	Performance expectancy, effort expectancy, and social influence are key drivers; perceived risk is a barrier.	(Phuong et al., 2022)
	Digital Natives (Gen Y & Z)	Adoption perspectives	Both generations are receptive, but Gen Y emphasizes trust/ security while Gen Z is more influenced by social factors and innovativeness.	(Acharya & Bhojak, 2024)
Socioeconomic Factors	Income Level	Low-income groups & financial literacy	Perceived ease of use is a strong predictor for low-income users; financial literacy moderates the effect of perceived usefulness.	(Singh et al., 2024)
		Low-income customers & pandemic-driven adoption	Pandemic forced rapid adoption among low-income users, driven by necessity and government support, not intrinsic motivation.	(Billore & Billore, 2020)
	Education Level	Education as a driver of FinTech adoption	Higher education levels are associated with greater likelihood of adopting a range of FinTech services.	(Wang et al., 2025)

Demographic Dimension	Specific Factor	Sub-Factor / Focus	Key Findings	Sources
		Digital financial literacy & mobile banking adoption	Digital financial literacy (combining financial and digital skills) is a strong predictor of adoption intention.	(Venkatesan, 2025)
Cross-Cutting & General Studies	General User/ Non-User Analysis	User vs. non-user characteristics	Users are younger, more educated, and have higher incomes; non-users include both aware and unaware segments.	(Li et al., 2019)
	Regional/ Contextual Factors	Factors influencing adoption in Hyderabad, India	Demographic variables (age, income, education) moderate the relationships between adoption determinants and intention.	(Lal et al., 2020)

The impact of the COVID-19 pandemic on generational adoption patterns is also explored in the literature. One study looks at the intention of Indian Gen X and Millennials consumers to use FinTech payment services during the pandemic, and it found that the pandemic has acted as a catalyst for the adoption of FinTech payment services for both generations, but with different motivations (Singh & Sharma, 2023). The big driver for Millennials was the usefulness of FinTech services for keeping distance and avoiding physical contact, whereas for Gen X it was more about the facilitating conditions and how easy FinTech is for them to use, for example, support from family members. This study shows that there are varying impacts of external shocks on generational cohorts depending on their existing technological abilities and their life situation.

Another important aspect of the demographic influence is socioeconomic factors, especially income and education. For the first study, it seeks to understand the adoption of payment FinTech applications for low-income groups, where financial literacy is seen as a moderator of the influencing factors (Singh et al., 2024). The study

shows that perceived ease of use is a strong indicator of adoption intention, especially for low-income users, implying that they might be more sensitive to the complexity of the technology. Moreover, the current research shows that the relationship between perceived usefulness and intention to use is mediated by financial literacy, which means that the perceived usefulness has a greater effect on the adoption intention of high financial literacy users than low financial literacy users. Based on this discovery, it would seem that encouraging the use of financial technology in the market, among low-income people, should be accompanied by financial education, increasing the ability to understand and appreciate the merits of the financial technology. Another study looks at the switch from cash to digital payments at haste by low-income customers in India in the wake of the pandemic, which was forced upon by the pandemic (Billore & Billore, 2020). The study reveals that the factors that encouraged adoption for this segment were more about having to adhere to social distancing guidelines and being able to receive government support payments via digital means, rather than the traditional ones of perceived usefulness. This indicates that factors other than internal motivation can motivate low-income groups to adopt.

Education is critical and is closely connected to digital literacy in general and to the ability to navigate through intricate financial technologies. One study offers insights into the link between education and FinTech adoption based on data from China, where higher education levels correlate with increased adoption of various FinTech products and services, such as digital banking, mobile payment, and digital wealth management (Wang et al., 2025). The study proposes that education improves the cognitive functions of people and their ability to absorb new technology information, which decreases the complexity and risk of adopting new technologies. This is supported by another study, which explores the effect of digital financial literacy on customer uptake of mobile financial technology in the U.S. that shows that the digital financial literacy is also a significant predictor of intention to adopt (Venkatesan, 2025). The study identifies digital financial literacy as the amalgamation of basic financial knowledge and the ability to use digital devices and the internet for financial needs, and proves that financial literacy is more significant than digital financial literacy as well as digital literacy alone. This indicates that digital financial literacy programs can have a significant impact on driving adoption, especially among less educated communities.

A wider picture of demographic influences is given in a study, which considers the group of mobile payment users and analyses the potential of fintech both for users and non-users (Li et al., 2019). This research reveals that mobile payment users are younger, more educated, and earn more than non-users. Moreover, the study reveals that non-users are not a homogenous group, but both those who have heard about mobile payments but do not use them and those who never, to begin with, heard about the technology. This is critical for designing targeted interventions because the barriers to adoption for the two groups will likely be different. A study in Hyderabad, India, also investigates the moderating effect of demographic factors (age, income, education) on

the relationships between the adoption determinants and behavioral intention (Lal et al., 2020). For instance, the study reveals that the perceived usefulness' impact on the adoption intention is higher for younger and more educated consumers than for older and less educated consumers, whereas the perceived risk's impact is higher for older and less educated consumers than for younger and more educated consumers. The result highlights the importance of FinTech providers to develop a market segmentation and then create a marketing mix for each segment.

Discussion

This discussion brings together the key findings of each thematic area, discusses their theoretical and practical implications. A consistent message that is common across the literature is dominance of the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) as the major theoretical models for consumer adoption. Although this is consistent with past technology adoption reviews in the information systems literature (Li et al., 2019), our review indicates there has been a significant evolution from the inclusion of constructs that are "context-free" to the inclusion of context-sensitive constructs, particularly related to trust, security, and perceived risk. Theoretical extension is an acceptance of the underlying concept that financial services are riskier than the conventional TAM and UTAUT models because of the nature of the services. Previous studies have consistently found trust as an important mediator between security perceptions and adoption intention (Roh et al., 2024; Alamoudi et al., 2025; Ali et al., 2021), highlighting the growing trend of introducing a theoretical model that embeds trust as a central element in the adoption process.

The second pattern in the literature is that the role of mobile payments and FinTech services is played by the generational cohort and socioeconomic status as a moderator. This is in line with the rest of the literature on digital natives and technology adoption, which indicates that younger generations are more open to adopting these technologies compared to their older ones (Diana & Leon, 2020; Phuong et al., 2022; Acharya & Bhojak, 2024). Our synthesis also reveals a more intricate picture in that the motives that fuel the adoption process may vary across generations, with Millennials being more motivated by the perceived usefulness, and Generation Z more by social factors and perceived innovativeness. The literature shows that there are significant differences in adoption rates across socioeconomic groups, including income and education (Singh et al., 2024; Wang et al., 2025; Venkatesan, 2025). The identification of higher levels of barriers to adoption for low-income and less educated groups, and the lack of financial and digital literacy, is evidence that there is a need for interventions to address these barriers beyond providing access to the technology. This means for policymakers, ensuring that initiatives to encourage FinTech adoption with investments in digital education and financial literacy initiatives to make sure that the advantages of these technologies are available to all segments of society.

Conclusion

We conducted a systematic literature review on 37 empirical studies to identify the factors affecting consumers' mobile payment and financial technology (FinTech) adoption. The Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology has been widely used in Fintech research. The findings highlight the critical importance of consumer confidence in their security when using the practices, and the need for ongoing engagement and support with customer service to sustain their use of the practices. The indicators that policy-makers should watch for are that support for the adoption of FinTech should be comprehensive, including infrastructure investments, digital literacy programs, and supportive regulations with a particular focus on reaching the underserved population to ensure the benefits of mobile payments. In theory, our synthesis suggests a new model that is not based on TAM or UTAUT models but rather focuses on the concept of trust, risk and security.

Future studies should employ a longitudinal design to track consumer perceptions over time, as well as comparative cross-national designs to provide information on the generalizability of the findings, and study of the marginalized groups in which the adoption barriers matters. Additionally, as they become more influential in the FinTech services, the growing influence of these technologies as artificial intelligence and blockchain should be investigated and evaluated from the perspective of consumers' trust and risk perception. Finally, the unintended effects of general use of FinTech (data privacy, algorithmic bias, new forms of financial exclusion) need to be discussed and understood to create frameworks that shape responsible innovations which will yield the maximum social returns of mobile payment use, while safeguarding consumer welfare.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98972

Supporting Elementary Students in Solving Mathematical Word Problems through Integrated Classroom Interventions: An Action Research

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Abstract

This study has been carried out to support elementary students in solving word problems of Mathematics. Initially, students were unable to solve the word problems, left the problems without solving, did without understanding, and lacked the basic operations and problem of converting the words problem into a mathematical expression. To address this issue, this research identifies the problems faced by students while solving the word problems, investigates the effective ways of solving word problems, eliminates problems faced by students while solving word problems in Mathematics, and constructs and implements the plan, collecting feedback and developing a re-plan as per the need. The participatory action research was carried out in which the data was collected through task analysis, interviews, and result analysis. Several integrated interventions like the use of audio-visual materials, collaboration with English teachers, vocabulary instruction, storytelling, cartoon characters, peer teaching, a second teacher, quizzes, assignments, and a daily word problem were used. Each student's task was analyzed to identify where the students struggled to crack the verbal problems and express them in a descriptive way. The results of both the pre-test and post-test were analyzed by using simple statistical tool mean. For the triangulation of the data, interviews of students as well as fellow teachers and experts were taken. After the integrated classroom interventions, students were able to crack the word problems effectively, and their performance in the test scores also increased. This shows that students need strong language and vocabulary skills to crack the word problem. The findings suggest that teachers need to collaborate with English teachers as well as other fellow teachers to uplift the language and vocabulary skills of students using integrated classroom interventions.

Keywords: Verbal problems, action research, elementary Mathematics, integrated classroom intervention

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Introduction

Elementary age serves as the critical period for children to develop foundation skills in Mathematics, focusing the essential role of language proficiency, particularly through reading and comprehension abilities. During this phase, the fundamental mathematical language is essential because it enables students to interact with basic mathematical ideas, connect mathematical concepts into real-world situations and to solve mathematical word problems. Word problem solving is not an easy task for students who lack with higher level of understanding, vocabulary, logical thinking, and interpretation skills. Students who have trouble with reading, comprehension, and basic Maths skills also have trouble grasping and using mathematical ideas. The relationship between adequate language skills and mathematical problem solving underscores the nurturing of these competencies in elementary education. Students lacked practice, carelessness, exam anxiety, the difficult level of questions, less preparation and time pressure, and overconfidence were the problems (Pearce et al., 2013). Lacking fundamental skills in Mathematics as well as the ability to identify relevant information and translate word problems into mathematical expressions adversely affects students' confidence and competencies in solving mathematical problem.

While addressing the challenges associated with the solving words problem of Mathematics, integrated classroom interventions that incorporate a variety of teaching strategies are employed to address the diverse learning needs. Key strategies include the use of audio-visual materials, collaboration with English teachers, vocabulary instruction, use of worksheets, storytelling, use of cartoon characters, peer teaching, a second teacher concept, mathematics quizzes, assignments, rewards, punishment, project work, use of paper pizza, oral practice, modelling, and daily a word problem that contribute to a rich and supportive environment. These diverse strategies can create an engaging learning environment that facilitates effective way of supporting to solve of mathematical word problems. Within the context of my classroom, grade five students demonstrated difficulties in solving word problems of mathematics. The challenges were lacked mathematical vocabulary, poor reading comprehension, and difficulty of converting word problem into mathematical expression. According to classroom observations, students' written work, and assessment results, the necessity of integrated intervention is seen. The integrated classroom intervention creates to the learning requirements of the students. In order to support elementary students in solving mathematical word problems, this participatory action research has been carried out through ongoing planning, action, observation, and reflection.

Solving mathematical word problems is not an easy task for the early grade children in comparison to other problems (Teahen, 2015). In my class (grade five), I realized that most of the students faced the same problem. Students faced difficulty understanding and solving the word problem of mathematics. I had seen the same problem in grade four, as I was a mathematics teacher of those students. Students make negative and positive feelings towards some lessons so that it impacts the interest

towards learning specific topics of mathematics (Kuş & Tertemiz, 2022). In my class the same impact was seen when the older students conveyed the message that the verbal problem is difficult. Initially, I tried to solve it and convinced myself I could, but I could not solve the problem. Later on, I had done action research to solve this problem in last year. Somehow the improvement was seen. The students were able to understand and solve the simple verbal problems related to addition, subtraction, multiplication, and division; however, the calculation part still remained. When the contextual as well as tail questions and multiple linked questions were given, the students could not solve them. So, I started to do a new plan and implementation to solve this problem this year as well.

Several studies have been done related to this study. Barnes and Stephens (2019) studied on how early mathematics interventions support mathematics vocabulary learning and indicated that the basic vocabulary of mathematics instruction helps to learn mathematical skills, concepts and verbal problem especially for early grade students up to grade one. Likewise, Kuş and Tertemiz (2022) stated in their study the effect of teaching with verbal problems associated with children's books on mathematics lesson reduces the mathematical anxiety and encreasing engagements of students. Furthermore, story based verbal problem increased the positive perception of students towards learning mathematics of grade four. Similarly, Pearce et al. (2013) stated that grade two to five students had problems of comprehension and lacking vocabulary in mathematics. The study stated that the students' biggest problem is to read and understand the text. The students mainly confuse on the complex word and context of the problem. Situmorang (2022) stated in his study that the rewards and punishment improves third grade students' learning outcomes in mathematics. Pongsakdi et al. (2016) studies on improving word problem performance in elementary school students by enriching word problems used in mathematics teaching in Finland. The study focused on word problem enrichment program for fourth grade and sixth grade students. The teacher used self-made word problem and which improved the problem solving skills of Mathematics of students. Although the above studies have been done by the earlier researchers but this lack the problem of solving word problems in the contest of Nepal using integrated intervention. As far I know no studies have been done to support the students while solving the word problem of Mathematics in the context of Nepalese classroom. So I had to face the problem that my students had the problem of solving word problems of Mathematics in my teaching. So I choose to do an action research to minimize the problem.

Major Problems

It is essential to identify and recognize the major problems faced by students while cracking the verbal problem (Martins & Martinho, 2021). For this, first I found the major problems regarding this. In my school, the majority of the students come from different family backgrounds. Most of the students' prior school background was institutional or private, whereas few students were from public school. During

my classroom teaching, I found that, those students who came from public school had problems understanding and communicating in English. These students have low reading ability and neither can pronounce effectively nor understand the meaning of the verbal problems. I realized that students lacked prior mathematical knowledge as well because they struggled with basic operations of mathematics.

While teaching Mathematics in grade five, students listened interestingly and paid their interest to do mathematical work. But while solving word problems, they solved without reading and understanding. Mainly, the student faced the problem of cracking the contextual and multiple operations type.

"Sushil thought about goat rearing in his village. He has Rs. 35,750. His village municipality makes a policy of agriculture grants up to Rs. 50,000.

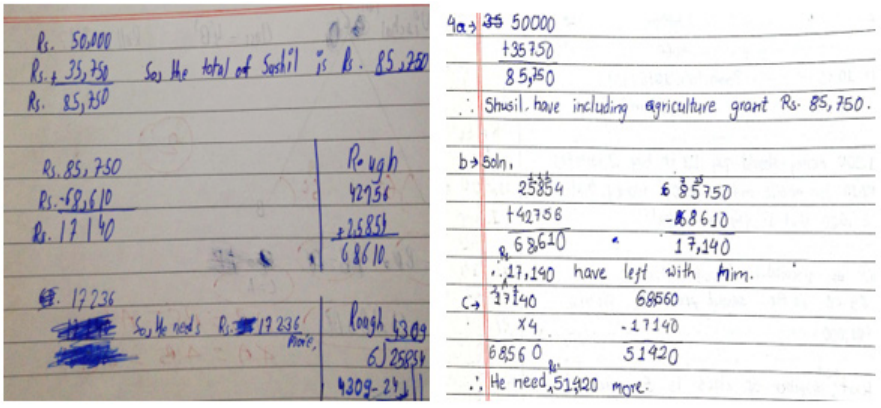
a) *Find out the total money that Sushil has, including the agriculture grant.*

b) *Sushil spends Rs. 25854 for 6 goat kids and Rs. 42756 to build a goat pen. Then, how much money does he have left?*

c) *If Sushil wants to add 4 more goat kids, then how much more money he need?" (CDC model questions grade 4, 2078)*

Figure 1

Students Solution over the Linked Questions



When I was teaching the given question, the majority of the students were able to solve first and second. But still the students did not understand the third questions. Again, I planned to solve this problem by taking different examples. The student made the same mistake. So, I started to do a new plan and action to minimize the errors while solving these problems for students. Finally, the main problem was; firstly, the students lacked the mathematical vocabulary and had a language problem. Secondly, they lacked the concept of basic operations of Mathematics like addition, subtraction, multiplication, and division. Students do not have a passion to read the verbal problems that they face to understand the multiple operation problems (Vessonen et al., 2024).

This study is based on the following theories which explain how do the integrated classroom intervention helps to solve the words problem of Mathematics. Polya states in his "problem solving by interpretation of theory" states that there are four steps of problem solving; understanding the problem, making a plan, carrying out the plan and looking back (Lee, 2016). Which focuses the steps of problem solving. Students carefully understand the problem then he makes a plan, work out the plan and finally check the process before solving the problem. Likewise, the dual coding theory of Paivio (1986) stated that learning Mathematics enhances through models, visualization, graph, etc. Mathematics learning is fruitful when verbal and visual information are presented together. Students think, share, discussed with peers and convert the word problem into mathematical expression and then solve it. Likewise Mayer's cognitive theory of multimedia learning is useful to this study that the use of multimedia and cartoon characters helped students to increase motivation to learn Mathematics and eager to solve the word problem, As the theory suggest use of visual models classroom demonstrations and multimedia resources leads to meaningful learning environment to the students (Alkhasawneh et al. 2012).

The main objectives of this study is to identify the problems faced by students while solving the word problems in Mathematics. The other objectives are to identify the effective ways of solving word problems, to eliminate problems faced by students while solving word problems in Mathematics and to construct and implement the plan, collect feedback and develop a re-plan as per the need.

Methods and Procedures

The participatory action research is used because it helps to address the immediate problem of solving the word problem of students in Mathematics. My own working institution was the main research area for this study. 35 students of grade 5 for the academic year 2081B.S. were taken as research participants where I was currently teaching throughout the academic year in that class. The data was collected through task analysis, interview, and result analysis. To see the student's language history, I consulted with the subject teacher who was currently teaching in grade five as well as the teacher who had taught them in grade four. Suggestions were given to focus on the specific students who were really weak in language. In addition, focus was given to recall the mathematical vocabulary and terminologies to understand the mathematical terms. Only one cycle was conducted because multiple interventions were applied one after another. To complete the cycle of action research plan, act, observe and reflect took nearly eight months.

Tools for Data Collection

Forty minutes of pre-test post-test consisting of 11 questions given from the grade 5 Mathematics book, including all the word problems, was taken. The questions were made by the researcher himself based on the model questions given by curriculum development centre. Their tasks were analysed in detail, and they were later interviewed

separately. Likewise, an interview was conducted with the teachers teaching in grade 5 Mathematics in the other two sections. Further, I consulted with a four experts in Mathematics regarding the issue of difficulty in solving the verbal problems.

Task Analysis

To test the initial level of a student's mathematical verbal ability, an individual test was taken. It evaluated how well students did on a particular task. This work helped to identify where the students were struggling to crack the verbal problems. It helped to explore the student's problem in a specific way. The initial verbal ability test was based on model questions issued by the Curriculum Development Centre. The task analysis was in the following steps. Students' language skills, understanding level of verbal problems, converting the verbal problem into a mathematical expression, application of mathematical operations and solution strategy.

Result Analysis

The technique of looking over and analysing student performance from tests or assessments is known as result analysis. From the test of 40 minutes of verbal problems, I identified particular areas where the students were struggling. This made me easy to implement the interventions and different techniques in the classroom. The exam result analysis was done and tabulated. It reviewed the student's performance regarding learning, the efficacy of instruction, and areas to improve. The results of the pre-test and post-test were analysed by using simple statistical tools. For the triangulation of the data interviews of 12 students, fellow teachers and few experts was taken. It was based on cracking verbal problems of students, their difficulties, ways of solving them, and regarding the further strategy to apply in the classroom. The interview was taken from four students who scored below 8, and two other students were selected who scored 8-12, 12-16, and 16-20 marks.

Organization of Findings

Result of Task analysis

From the task of students in the class, it was found that those students who scored low marks in the test left the verbal problem unsolved. They did not understand the verbal problem at all. Many students faced difficulties in understanding mathematical terminology and converting the word problem into mathematical expressions. They lacked foundational mathematical knowledge to grasp new concepts. Additionally, they struggled with basic operations such as addition, subtraction, multiplication, and division, which made problem-solving more difficult. Specific challenges like converting improper fractions to mixed fractions and vice versa also added to their struggles, which affected their overall mathematical proficiency. Similarly, the students also struggled to convert the decimals to fractions and vice versa.

Students are not able to understand the verbal problem, do not follow the information given by questions, and simply guess the answer and present it in the

paper (Zainiyah & Marsigit, 2019). Same as my students did minor errors, such as misreading verbal problems and numbers or missing steps, incorrect answers were seen. Some students rushed to complete their work without properly reading and understanding the problem, lacking concentration, and eager to finish quickly. As a result mistakes were seen in the exam paper.

Result of Score Analysis

A test of 20 full marks was taken and marked the paper carefully. The score of students in the pre-test are presented in Table 2.

Result of Interview

The interview was taken from twelve students separately in the school. The students responded that the questions were difficult and could not understand the questions. They reported that students need to read questions five to six times to understand. They lacked practice. They got confused while solving, even if they did not know the answer was wrong or right. The students who scored less than 10 marks reported that they did not understand the questions, so they did not solve the questions and did whatever they liked. Other academically average and sound students said that the questions were *Jeri batare jastai ghumeko* (जेरी बटारे जस्तै घुमेको).

An informal interview was taken from the teachers. The teachers said, "Nowadays students do not read at all." They added that students do not pay attention and do not understand the verbal problem. No matter how much they teach, they still don't understand. Some of my fellow teachers said, "Some students have no mathematical software, and students use mobile phones at home, parents do not guide their children, and there are problems of discipline."

The students suggested some strategies to minimize the errors while solving the verbal problems in the classroom. Minimize the classroom noise, use audio-visual materials in the classroom so that students can understand easily. The teacher has to be a bit strict. Provide the names of students in the word problem as well as child-friendly words like Doreman, Motu-Patlu, Ninja Hataudi, and Little Singham. Provide rewards and punishment in the class, take students outside the classroom to learn Mathematics, focus on practical, take tests after each lesson, provide special care for weak and last-bencher students, use more teaching materials, and change the way of punishment, like giving four times extra assignment work to those who violate the rule. Use more worksheets, stop providing project works before exams, and give project work only on holidays that are related to verbal problems. Finally, provide home tests on holidays and teach making stories as well as fun.

Major Findings

Based on the data collected, this study identified the major areas of concern from task analysis. Language problems for students, lack of mathematical knowledge, converting word problems into mathematical language, lack of basic operation of

Mathematics, and conversion of fractions of different forms as well as decimals. The conversion of measurement problems. Some minor errors were seen due to the carelessness of students, and students answered without reading.

Looking at the result analysis, 20 percent of students scored below 8, only 5.71 percent of students scored 16-20 marks, and the average mark was also 10.34. It was essential to improve results. Likewise, students were confused and felt difficulties understanding the word problem. Students felt the word problem was more difficult and confusing to apply the basic operation. The teacher blamed the students, saying that students do not pay attention in the class. But the experts said that the curriculum is good, the questions were good, but the teacher had to work more on making worksheets and use activity-based teaching approaches.

Students suggested using several strategies to minimize errors in solving verbal problems. They focused on reducing classroom noise and using audio-visual materials for better understanding. Teachers should be slightly strict, use child-friendly names in word problems, and implement a reward-and-punishment system. Additional recommendations include giving extra assignments instead of physical punishment, providing special care to weak students, using more worksheets, and scheduling project work only during holidays. Lastly, they suggested conducting home tests during holidays and using storytelling and fun activities while teaching.

Preparation and Implementation of Action Plan

This section contains action plan and implementation of action plan. Action plan are presented in tabular form and implementation of the plan are divided in four categories; improving mathematical language of the students, focusing on basic operations of Mathematics with conversions, converting the words problem in to mathematical expression and practice and drill with problem-solving strategies.

Action Plan

The action plan is presented in the Table 1.

Table 1

Action Plan

SN	Work plan	Responsible Person	Time duration	What should I do?
1	Improving Mathematical Language of the Students	English teacher, me myself and students' teachers	4 months	Taking help from English teacher and practicing basic vocabulary of Mathematics and use of audio-visual materials

2.	Focusing on Basic Operations of Mathematics with Conversions	Subject teacher and students; talent students	1.5 months	Group work, individual work pair and work, each one teaches one, second teacher method Reading and re-reading
3.	Converting the Words Problem in to Mathematical Expression	Subject teachers	1 month	highlighting keywords, identifying operation, visual representations, think and share, and real-life examples, project works and use of with audio-visual materials.
4.	Practice and Drill with Problem-Solving Strategies	Subject Teacher	21 days	Providing real life verbal problems and ask to solve and guiding step by step

Implementation of Action Plan

The plan was implemented according to the suggestions given by the students while taking interview. Majority of the activities are included by the choice of students. My students preferred to use the audio-visual materials in the classroom. Multimedia technology makes the students active, increase the motivation as well as enhance students' Mathematics learning (Rigzin, 2021).

Improving Mathematical Language of the Students

To improve the mathematical language skills of the students, I collaborated with the English teacher teaching in grade 5. She supported students in building vocabulary during her lessons. In Mathematics, to crack the verbal problem and comprehension skills, the language and use of vocabulary are essential. Those students having strong mathematical vocabulary have better mathematical achievement (Barnes & Stephens, 2019; Newton, 2017). So I created a math vocabulary list for four basic operations: addition, subtraction, division, and multiplication. For addition: sum, add, total, altogether, combine, increase, join, etc. For subtraction: difference, minus, less, taken away, left over, decreased by, deduct, subtract, etc. For multiplication: times, product, multiplied by, of, by, etc. And for division: divided by, quotient, distribute, share it equally, divide, split, parts, etc.

Similarly, key words, a chart, a word wall, definitions, and examples were

created with the help of students and displayed on the classroom walls. With the help of multimedia projector, I displayed and encouraged students to understand and use mathematical keywords such as "the sum of…," "difference of…," "product of…," "the quotient when… is divided by…," "years hence," "years ago," "twice," "thrice," etc. with examples. I maintained regular classroom conversations with students using such language. Furthermore, students were asked to create their own math stories involving word problems. Each student presented their story each day. This activity continued for approximately four months.

Focusing on Basic Operations of Mathematics with Conversions

To build up the understanding level of students' four fundamental operations (addition, subtraction, multiplication, and division) and unit and fraction conversions, I implemented the following strategies over 1.5 months.

Oral Practice: Simple and practical word problems were given to the students, and they were asked to solve them mentally. They found the answers mentally and answered orally. For example; 9 is subtracted from the sum of 5 and 8, the product of 7 and the quotient of 40 divided by 5, etc. When they were asked to write, they were still confused about what to write in their copies. And students were given the basic operation chart and follow accordingly. Later on they pasted it on the wall of their classroom.

Child friendly Verbal Problems: Word problems were created using names of popular cartoon characters such as Motu Patlu, Little Singham, Doraemon, Ninja Hattori, etc., to increase engagement and motivation of students. Especially involving four basic operations.

Modelling Activities: Making diagrammatic problems give the clear concept to understand and solve the verbal problems (Van Garderen et al., 2012). My students were asked to make a paper pizza and divide it into 8 slices. Several activities were practiced, like percentage, decimal, and calculation of costs.

> *If you eat 3 out of 8 slices, what fraction is eaten? If one slice costs Rs. 80, what is the total cost of the whole pizza? If you pay with a Rs.1000 note, how much change will you receive? If you get 3 out of 10 slices, what percent is eaten? Also convert it into decimal.*

Each One Teaches One: Problems involving addition, subtraction, multiplication, division as well as unit conversion and fraction conversion were given as classwork and asked each student to teach other students.

Help of Second Teacher: While giving practice questions, academically strong students complete their work very soon. I appointed at most three students as second teachers. They helped their peers to learn basic operations, fractions, and decimals. They were given the task to guide other students.

Every Day a Verbal Problem: Students were given 5 to10 minutes daily to solve one verbal problem each day, focusing on operations and conversions.

Converting the Words Problem in to Mathematical Expression

The students face the problem of converting word problems into mathematical expressions (Maulyda et al., 2020). To support the students in converting verbal problems into mathematical expressions, I used audio-visual materials in the classroom. In addition with this, project work was given to draw the steps of converting the word problem into mathematical form and given various verbal problems to solve according to the steps. I applied these strategies, taking 1 month of time.

Read and re-read activities: Students were asked to read the verbal problems multiple times and I asked, "What did it mean?" If they said correct, I said thank you and go further, and if they did wrong, I said, "Read again." This process was repeated many times to improve their reading and understanding ability.

Highlighting Keywords: After reading and rereading the word problem, students were guided to underline keywords like "sum", "difference", "product", and "quotient".

Identifying Operations: After highlighting the key words, students were asked to identify which operation had to do.

Start to Solve: After identification of the operation, students started to solve the problem step by step.

Share Students' Creation: Innovative self-created words problems improve the students' modelling and problem-solving skills (Pongsakdi et al., 2016). So, I gave them project work to create their own verbal problem, displayed in the classroom. They shared and explained their answers as well in the classroom.

Audio-visual lessons: Multimedia projector was used to teach fractions, decimals and converting the words problem into mathematical expression through audio-visual presentations. Additionally, some visual materials were displayed from OLE Nepal (E-Library/E-Pustakalaya).

Practice and Drill with Problem-Solving Strategies

Twenty one days were given for the practice and drill for solving the verbal problems. For that, the following strategies were applied.

Make your problem: It is essential to relate the word problem to the real-life modelling of students (Verschaffel et al., 2020). So, my students created their own word problems related to daily life involving basic operations, with extended questions. They made several problems by putting their favourite characters like Motu-Patlu, Little Singham, etc., and solved and presented them in class.

Mathematics Quiz: A Mathematics quiz was played in the class involving fully verbal problems.

Assignment and Practice: Additional assignments were given to the students as practice to do at home.

Reward and Punishment: Reward is the strategy used by the teacher to motivate and reinforce students while teaching and learning Mathematics (Situmorang, 2022). In my class the "Mo Mo" offer was given to those students who cracked the verbal problem without a mistake. Initially, they did not solve it and did not get that. Later on, after practicing for a week, they were able to grasp the sweets in the classroom as a reward. For the punishment, those students who did not do the given assignment were asked to solve the verbal problem four times.

Assessment and Test: Two class tests and a final exam were conducted to assess improvement in mathematical language and problem-solving skills.

Results

After the regular treatment for a couple of months, it was seen that use of mathematical vocabulary and keywords using audio-visual materials helped students to understand and interpret the terms such as "sum", "difference", "product", "quotient", "twice", "thrice", etc., and in their own problems and stories. Students showed their interest in storytelling and vocabulary-based activities. The paper pizza activity helped students develop a clear understanding of fractions, percentage, and conversions. Likewise, after the regular practice and drill, they could choose the correct mathematical operations, and their problem-solving strategies were systematic. Each one teaches one and second teacher activities helped a lot for the academically weak students to uplift their levels. Finally, class tests and final assessments showed improvement in students' performance, especially in solving word problems and applying correct operations. A test of 20 full marks was taken after the intervention was over. The details of the students' scores are presented in Table 2.

Table 2

Analysis of Test Result

Marks of students	Percentage of Students in Pre-Test	Percentage of Students in Post -Test
Below 8	20	0
8-12	28.57	22.85
12-16	45.71	37.14
16-20	5.71	40
Average Marks	10.34	14.80

Table 2 shows the analysis of pre-test and post test result of grade 5 students out of 20 full marks. 20 percent of students scored below 8 marks before the intervention, whereas no students scored below 8 marks after the intervention. The average marks

also changed from 10.34 to 14.80. This shows that there is a good impact of action research on the performance of test results of students.

Discussion

This study found that elementary students improve skills of solving word problem of Mathematics through integrated intervention. Students showed their confidence in understanding the words problem because of vocabulary instruction. They were able to convert the word problem in to mathematical expression. Likewise, after the several intervention on the basic operation, it helped to crack the words problem easily. Oral practice is the best strategy which helped to understand the words problem to visualize mentally and solving orally. Likewise, word problems created using names of popular cartoon characters such as Motu Patlu, Little Singham, Doraemon, Ninja Hattori, etc., to increased engagement and motivation of students. The problem solving strategies like read and re-read activities improve their reading and understanding ability, highlighting keywords like "sum", "difference", "product", and "quotient", identifying operations which operation had to do first and start to solve the problem improved the way of solving word problems. The finding suggest that the teachers should use multiple intervention specially use of vocabulary and audio-visual materials to improve the word problem solving strategies of students.

The findings of this study support the study of Barnes and Stephens (2019) which states that the systematic vocabulary instruction helps to understand the mathematical concepts easily for grade 1 and 2 in US elementary Mathematics. In this study, the use of vocabulary instruction helped students to understand the mathematical terms and terminology which ultimately helped the comprehension skills of students. Likewise, Van Garderen et al. (2012) stated that the skills of mathematical word problem solving depends upon the use of systematic diagram. The study supports the present study that the visual representation helps to improve the words problem solving strategy of students. Similarly, Maulyda et al. (2020) in their study analysis of students' verbal and written mathematical communication error in solving word problem focuses that students struggle to translate word problem into mathematical expression which was also unsystematic way. The study suggest that the strong guidance, systematics instruction and well-structured problem solving skills helps to solve the words problem of Mathematics. Finally, the findings of this study is related to the study of by Situmorang (2022) improving learning outcomes in Mathematics classes via rewards and punishments as the use of rewards and punishments significantly improves the motivation of students to wards Mathematics learning. Also, Verschaffel et al. (2020) in their studies word problems in Mathematics education expressed the process of solving words problem is the complex task which need strong language comprehension, metacognition skills, visual representation and mathematical reasoning. Students need multiple strategies to crack the word problem which support the study that this study also used multiple intervention to support the students to crack the word problem.

Reflection

I realized that the language and vocabulary played a vital role for developing reading habit and understanding level of students. Use of audio-visual materials and collaboration with the English teacher was great. Most of the students enjoyed audio-visual lessons especially a cartoon character. The paper pizza model motivated students to convert fractions to decimals and decimals to fractions. Likewise, using cartoon characters in the verbal problem, students paid attention to read the problem. The "each one teaches one" and "second teacher" approaches were really helpful to increase the skills of basic operation. Academically stronger students guided like teachers and build confidence, communication, and leadership skills and promote cooperative learning in the classroom. This study is limited to single school however the integrated classroom intervention helps to generalize the result.

Figure 2

Students' Reflection in the Post-Test

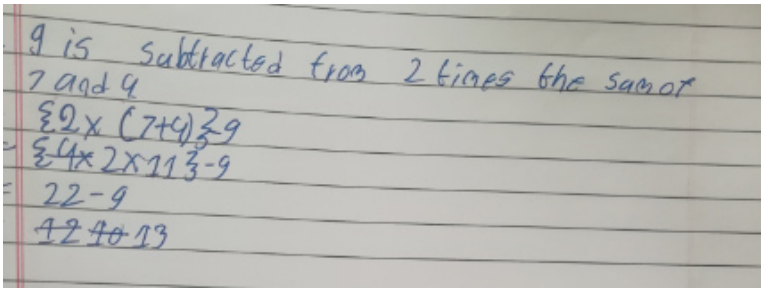


Figure 2 shows the students' reflection in the post-test. They were able to solve the word problem correctly. They made the mathematical expressions correctly, simplified and found the correct answer.

Figure 3

Problem of Students While Cracking Verbal Problem

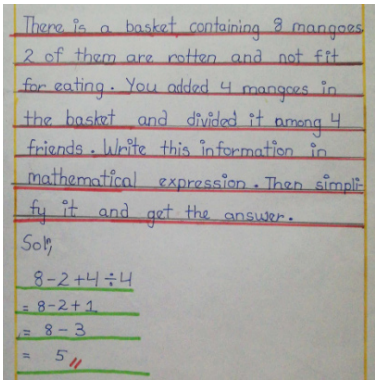


Figure 3 shows that a few students who scored 8-12 marks in the post-test have still trouble understanding the problem and converting the verbal problem into mathematical expression. While making verbal problems, they made it correctly. They said the answer correct, but while solving still made the same mistake. I felt that these mistakes could be removed by increasing the intervention time longer than I did.

Conclusion

This action research has been carried out to minimize the challenges faced by the students while solving word problem of Mathematics using audio-visual materials. The main problem was the majority of students struggled to crack the verbal problems. The students had language problems, a lack of prior mathematical knowledge, weakness in basic operations (addition, subtraction, multiplication, and division), weak reading and comprehension skills, and difficulty in converting verbal problems into mathematical expressions. Through the task analysis, result analysis, and interview, as well as suggestions given by other fellow teachers and experts, several strategies have been applied to minimize the problem: improving the mathematical language of the students, focusing on basic operations of Mathematics with conversions, converting the word problem into a mathematical expression, and practicing and drilling with problem-solving strategies. Students' motivation was on their favourite cartoon characters and use of audio-visual materials in the word problem.

Remarkable improvement was seen after the implementation of the plan. Students showed better performance in the post-test. The students' average marks increased from 10.34 to 14.80 out of 20 full marks. Further, the majority of the students were able to solve and understand the problem, convert the problem into a mathematical expression, and simplify it. But few of the students still have problem to solve. The effective strategies can be carried out in the classroom, making re-plan. I wanted to implement those plans, taking a bit more time for intervention. Finally, this action research is helpful for the teachers to support their students to solve the verbal problem. Even talented students may have trouble cracking the verbal problem of Mathematics. So, I recommend collaborating with English teachers as well as other fellow teachers to uplift the language and mathematical vocabulary skills of students using audio-visual materials.

Re-planning

I paid attention to the strategies that played a significant role in improving the student's verbal ability in my mind and continue in the coming classes and challenges, such as students' difficulty in understanding word problems due to weak mathematical vocabulary and limited engagement during the math classes. I decided to revise my teaching approach as well as to re-plan and implement those plans for better improvement.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98974

Hybrid Flood Resilience in a Tharu Riverbank Settlement: Community Adaptation to Disaster-Risk-Reduction Interventions in Western Nepal

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Abstract

Flood-prone indigenous communities increasingly face the challenge of sustaining traditional knowledge systems while adapting to externally introduced disaster risk reduction initiatives. This study explores the interaction between indigenous flood knowledge and externally introduced disaster risk reduction interventions among the Tharu, an indigenous people of Nepal along the Mohana River in Dhangadhi. Adopting a qualitative case study design, this study draws on semi-structured interviews, key informant interviews, focus group discussion and field observations to explore changes and community adaptations emerging through external interventions. The study is based on participants' retrospective accounts of the major flood events of 2064 B.S. and 2078 B.S. Thematic analysis revealed three interconnected themes: (1) external interventions and introduced changes for Disaster Risk Reduction, (2) community adaptation and hybrid flood resilience, and (3) outcomes, inequalities, and structural constraints. Findings show that external interventions have strengthened rather than replaced indigenous knowledge systems by enhancing early warning systems, residential protection, and institutional coordination. Tharu community leaders, appointed changemakers and local government play key roles in translating interventions into collective action, while community-driven measures, such as go bags, emergency savings, and flood-resistant housing, reinforce resilience. However, these outcomes remain uneven, as housing and agricultural land continue to experience fragmented protection in the absence of large-scale structural mitigation. Competing interests within the community and limited financial resources have constrained the implementation of permanent nature-based solutions, including tree-based protection and gabion walls. This study contributes to the growing literature on hybrid resilience by demonstrating that effective disaster preparedness emerges through the integration of indigenous knowledge, social networks, collective flood memory, and sustained institutional support.

Keywords: Indigenous community, flood resilience, disaster risk reduction, community-based disaster management

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Introduction

Nepal is among one of the most disaster-prone countries in the world. People's lives and livelihood are consistently threatened by annual monsoon floods, landslides, and riverbank erosion (Khanal, 2020). Floods, described as an overflow of water (International Federation of Red Cross and Red Crescent Societies [IFRC], n.d.), in particular have significant socio-economic impacts. Unmitigated flood disaster brings destruction to homes, agricultural lands, community resources, and at the same time puts disproportionate risk affecting marginalized groups (Acharya, 2023). Understanding communities' perception of flood risk and their coping mechanisms is essential for developing effective disaster risk reduction (DRR).

Flood resilience is known as the capacity of individuals, communities, and institutions to anticipate, prepare for, respond to, and recover from flood events. This capacity is increasingly recognized as a critical component of both DRR and climate adaptation frameworks (Pandey, 2025; Davis & Vulturius, 2014). Resilience is not only shaped by formal plans and programs but also by local knowledge systems. Governments and NGO programs work along with social networks and community leadership, which together enable communities to respond effectively to repeated hazards (Barquet et al., 2016; Varda et al., 2009).

The Tharu is an indigenous group residing along the riverbanks of the Terai plains of Nepal (Chaudhary, 2021). They have developed locally embedded techniques and strategies for coping with seasonal flooding. This knowledge is transferred intergenerationally and it includes traditional land-use practices, settlement patterns, and community-led disaster preparedness measures. While these practices have ensured survival and adaptation, the new practices are continually introduced to them through external interventions. The government and INGO/NGO-led DRR programs expose them to the additional resources, technologies, and governance mechanisms to support flood preparedness and response.

Similarly, the Sociological view on Disaster has transitioned from being focused on agents and tangible destruction by uncontrollable events to human-induced disruptions at individual, organizational, and social system levels (Perry, 2017). The Tharu Indigenous community resonates with the two fundamental theories on disaster: (1) acts of God and (2) acts of nature. These two theories see disasters as an uncontrollable event that are done onto humans.

However, the formal disaster risk reduction approaches with defined scientific knowledge resonate with the latter two fundamental theories on disaster: (3) joint effects of nature and society and (4) social constructions (Costine, 2015; Pradhan, 2016). These two theories are more focused on the human activities that harm nature, and which could be prevented with better technical solutions. The exposure of new schools of thought on disaster has brought the Tharu Indigenous community to new changes in their viewpoints towards a "natural" calamity and survival, making them

not only mitigate with technical, nature-based, and local solutions but also trying to totally adapt and change with the environment.

In that context, in Dhangadhi, one notable example is the Strengthening Urban Resilience and Engagement (SURE) program (2016-2021), implemented by the Nepal Red Cross Society (NRCS) and British Red Cross (BRC). This five-year program had multiple goals that included increasing disaster preparedness in marginalized and vulnerable populations. It popularized the concept of community advocacy, and furthermore strengthened institutional engagement at the municipal level by providing technical and financial support (British Red Cross and Nepal Red Cross Society [BRC & NRCS], n.d.-a).

The study site has Tharu Indigenous community interaction with the external DRR interventions and provides an opportunity to understand how flood resilience is shaped through the interaction of local practices and external DRR interventions. Social networks, learning platforms, and participatory advocacy are central to this process, enabling communities to adapt and implement externally introduced measures in more favorable ways to their local needs and capacities.

The study seeks to examine external interventions for local flood preparedness and resilience in the Tharu riverbank community of Kheda Tole emphasizing community adaptations. This study addresses the following research questions:

1. What flood-related practices and mechanisms have been introduced in the Tharu community through external DRR interventions?
2. How has interaction with external DRR interventions transformed flood resilience within the Tharu community?

Literature Review

Disaster Management and International Frameworks

The three United Nations (UN) world conferences on catastrophe risk reduction were at Yokohama in 1994, Hyogo in 2005, and Sendai in 2015 (United Nations Disaster Risk Reduction [UNDRR], n.d.). To discuss how to increase the sustainability of development by managing disaster and climate risks, world conferences bring together representatives from around the world, including participant nations, scholars, experts, and delegates. The discourse of these conferences is then relayed in a similar pattern to that of local governments, the corporate sector, NGOs/INGOs, and other stakeholders. The third UN World Conference formed the Sendai Framework for Disaster Risk Reduction 2015–2030, which has been used as a navigational tool for sustainable development, climate risk, and disaster management (United Nations [UN], 2015).

With the UN decade of the Disaster Risk Reduction 1990-2000 A.D., most countries of the world were updated on the necessity to have the basic know-how on disaster response (UNDRR, n.d.). Most nations complied with the UN on disaster risk

mitigation and management. Many prepared policies, plans, and programs, especially their national expenditure budgets, to comply with the assessment and need-based disaster risk reduction.

However, most nations have minimal progress in managing the underlying disaster risk drivers. The integration of catastrophe risk factors into development decisions was generally not made easier by institutional, regulatory, and policy frameworks. As a result, risk generation outpaced risk reduction in both higher- and lower-income countries, where vulnerability expanded more quickly than risk exposure.

The 2015's Sendai Framework lists out the priority areas where focused action is required by the local, national, and regional states and global networks to address the three dimensions of disaster risk: exposure to hazards, vulnerability and capacity, and hazard characteristics. Addressing the three dimensions of disaster risk should mitigate new and existing risks and build resilience (UN, 2015). In accordance with the priorities of the Sendai Framework for disaster risk reduction, local officials have begun to view communities and vulnerable groups as partners in the shared responsibility of disaster risk management, which has strengthened the capacity of both local government officials and communities.

Nepal and External DRR Interventions

In Nepal, there are more than 6,000 rivers with a total length of about 45,000 kilometers. It has been recorded that, due to floods, more than 4,000 people have lost their lives from 1971 A.D. to 2015 A.D. (MoHA, 2018). Furthermore, epidemics often spread after floods, specially making the poor the most vulnerable. Flood destroys crops and causes damage to human and material property. As the river flows to the south, extreme flooding causes inundation, fertile soil erosion, and downstream sand accumulation, depleting land quality (MoHA, 2018).

Responding to the disasters, the concept of Disaster Risk Management has been carried out by the Nepal government with the introduction of the Disaster Risk Reduction and Management (DRRM) Act 2017 (Khanal, 2020). The Act is enacted in cooperation with local governing bodies, NGOs, and INGOs. Similarly, the National Adaptation Plan (NAP) 2021-2050 focuses on community-based adaptation and enhancing resilience against disaster vulnerabilities (MoFE, 2025). One of the many disaster risk management strategies is the use of the local community: civil society, and their advocacy as a bottom-up approach to building local resilience towards disasters (Kato & Shaw, 2024).

The DRRM Act 2017 was enacted in 2017, and under this, disaster management committees are formed at the Provincial, District, and Municipal levels, replacing the traditional disaster rescue program with disaster preparedness. It also includes a National Disaster Risk Reduction and Management Authority (NDRRMA). This

department handles the task of disaster risk management. Specialist committees are formed to support technical expertise in disaster risk management planning, response, and recovery. And on top of it, this Act also instills that all government levels should have some allocated funds for disaster management (Kato & Shaw, 2024; Khanal, 2020).

In the Local Government Operation Act of 2017, rural and urban municipalities have a duty, responsibility, and right to perform all aspects of disaster risk reduction. It covers formulating, implementing, monitoring, regulating, and evaluating policies, plans, programs, and other DRR-related initiatives to create safer communities. The act also allows the local government to monitor and evaluate buildings constructed following national building codes and standards (Khanal, 2020).

SURE Programme and DRR Activities

The SURE program led by BRC and NRCS worked over five years (2016-2021) in seven municipalities across four of Nepal's major urban centers. The program's goal was to increase the ability of local governments, the NRCS, and residents, particularly vulnerable groups, in the seven municipalities targeted by the initiative to withstand the effects of urban disasters. SURE has employed a social network method to evaluate challenges and strengthen the overall disaster resilience of people in urban areas. It is used in assisting residents, vulnerable groups, municipal administration, and the NRCS (BRC & NRCS, 2017).

The best strategy to advance the voices of marginalized groups has been to develop a human resource pool of skilled DRR advocacy champions (changemakers) who could advocate for themselves and take advantage of local government services and resources. The community's appropriate decision-making body received 500 advocacy issues from champions between 2016 and 2020 (BRC & NRCS, n.d.-b). Their internal survey result shows 57% of advocacies have been addressed through either mitigation actions or increased investment in preventative measures. In 2019, the annual champion survey report found that 55% of the beneficiaries felt more confident about raising issues with local authorities. Similarly, the municipalities' expenses toward DRR programs reflected the value of readiness and importance of DRR. During the SURE program, three out of seven municipalities fully utilize the DRR allocation, with all municipalities spending at least 70% of the budget (BRC & NRCS, n.d.-b).

Tharu Indigenous Community and Flood Management

The Tharu indigenous community is a close-knit community. They practice democratic and social hierarchy with leadership roles. *Bhalmansa* or *Barghar* is the unanimously chosen leader and they play a key role in social cohesion, learning, and change in various aspects of their community life (Chaudhary, 2018; Chaudhary, 2021). The Tharu population, due to their residential settlements in flood-prone locations

and limited access to institutional disaster risk management systems, is especially vulnerable to the negative effects of floods (Pangali Sharma et al., 2022).

Deshar et al. (2021) records Tharu population residing in the flood-prone region heavily reliant on their knowledge of river dynamics, seasonal variations, and flood forecasts. The traditional practice of modifying crop planting schedules, crop kinds, water management, and routinely strengthening embankments in riverside areas has all been a second nature to them (Deshar et al., 2021; Chaudhary Tharu, 2021; Chaudhary et al., 2021). These customs have been passed down through the generations and are crucial in safeguarding from the effects of flooding, especially in a changing environment and climate change (Pangali Sharma et al., 2022).

Due to climate change, Tharu's agricultural livelihoods are more at risk by the increasing unpredictability of rainfall patterns and flood frequency. "For Tharu in Nepal, hens spreading their feathers under the balcony of a house is a sign of drought or flooding," (Dorji et al., 2024). They have responded to these unfavorable environmental changes by diversifying their farming systems, including traditional water management methods and crop types resistant to drought and flooding (Maharjan et al., 2011). It has been demonstrated that the *Tharu* Indigenous community has taken various initiatives to address climate change using both their traditional and newly acquired scientific knowledge.

In order to increase their resistance to the hazards associated with climate change, hybrid knowledge systems and practices are highlighted. It is important to study the changes brought from the external interventions and whether these changes have been beneficial to the community's flood preparedness, resilience and their social structure.

Methods and Procedures

The study adopted a qualitative case study design to explore how Tharu riverbank community of Kheda Tole, Dhangadhi, integrated indigenous knowledge with externally introduced DRR interventions to strengthen flood resilience. The case study approach was appropriate because it enabled an in-depth examination of resilience within its real-life social, cultural, and institutional context. The riverbank community consists of 29 Tharu households, totaling 160 residents (75 women and 85 men), who have lived along the Mohana River for decades. The community was purposively selected because it had experienced two historically significant flood events (2064 B.S./2007 A.D. and 2078 B.S./2021 A.D.) and had participated in the five-year SURE program (2016-2021 A.D.), providing an opportunity to examine how Indigenous flood knowledge and externally introduced DRR interventions interacted over time.

Primary data were gathered through our participants for Key informant interviews that included a local ward representative, a Female Community Health

Volunteer, an Indigenous community leader, and a Nepal Red Cross Society social mobiliser. It also included a focus group discussion including six women and two men, and 16 residents (seven women, nine men) for interviews including eight trained SURE program changemakers. Only six participants were overlapped in focused group discussion and individual interviews. The inclusion of multiple participant groups enabled triangulation of community experiences with institutional perspectives while maintaining the community as the primary unit of analysis.

Data were collected through semi-structured interviews and repeated field observations. Fieldwork was conducted over approximately two and a half years from October, 2022 A.D. to April, 2025 A.D. through five separate visits to the study area. Participants' recollections of the 2064 B.S. (2007 A.D.) and 2078 B.S. (2021 A.D.) floods were treated not simply as historical accounts but as expressions of collective flood memory that informed the community's evolving preparedness. Primary data were analyzed using thematic analysis (Braun & Clarke, 2006) and ethical considerations were included by obtaining informed consent from participants, ensuring confidentiality, and respecting the cultural sensitivities of the Tharu community. Similarly, to enhance the credibility, prolonged engagement with the study community through repeated filed visits enabled the researcher to build rapport and a deeper understanding of the local, social and cultural context.

Furthermore, secondary data were collected from journal articles, organizational reports, and program documents, providing theoretical and contextual support for understanding the interaction between Tharu indigenous community, community's flood management practices and external DRR interventions.

Results

The analysis generated three interrelated themes that explain how the Tharu riverbank community experienced and interpreted external DRR interventions alongside their existing Indigenous flood knowledge. The themes demonstrate a progression from externally introduced changes, to community adaptation through the integration of Indigenous and institutional knowledge, and finally to the structural conditions that continue to shape resilience outcomes. Throughout the findings, participants' narratives and quotations from semi-structured interviews and focus group discussion are presented to illustrate how community members interpreted these experiences and how these interpretations informed the development of hybrid flood resilience.

External Interventions and Introduced Changes for DRR

Previously, their community-based flood management heavily relied on their Indigenous knowledge and sustainable flood memory. They have adapted their flood preparations with each new flood experience they have had. However, many changes were introduced with the introduction of the SURE program, which successfully

ran for 5 years from 2016-2021. The DRR program brought new institutional, technological, and social mechanisms that have reshaped their local approaches to flood management.

The community claims that one of the most significant interventions was the formation of advocacy champions. Selected community members for the DRR program were trained to engage with local government institutions, articulate community needs, and participate in municipal planning processes. They received advocacy training and capacity-building in disaster risk knowledge. This marked a transition from their informal, community-based decision-making to more structured, institutionalized engagement with governance systems.

One advocacy champion reflected on this transformation by stating:

> *Before, we did not know how to approach the ward office. After receiving advocacy training, we learned how to raise our concerns and request support for flood-related problems.* (Advocacy Champion)

Rather than replacing existing leadership, the training expanded the community's capacity to engage with formal institutions while continuing to rely on traditional leaders such as the *Bhalmansa*. This suggests that external interventions strengthened institutional linkages without displacing local governance structures. This interpretation was consistently reflected across interviews, where participants described advocacy training as complementing, rather than replacing, the authority of traditional community leadership.

Additionally, the capacity-building programs held trainings in disaster preparedness, basic first aid, and water rescue. Residents who trained in this capacity-building program were given the title of CADRE for Community Action for Disaster Response. They were now the first responders in their community in any disaster events and were capable of supporting their community during emergencies.

A participant described this change as follows:

> *Nowadays, our advocacy champions have received disaster awareness training, including flood preparedness, water rescue, and rescue equipment from the Nepal Red Cross Society.* (Community Member)

The quotation illustrates that participants associated resilience not only with physical infrastructure but also with increased knowledge and practical response capacity. Training therefore became an important mechanism through which external interventions enhanced community preparedness. Across interviews, participants repeatedly linked these trainings with greater confidence in responding to floods and assisting other community members during emergencies.

The major tangible changes were seen in the infrastructure development for flood mitigation. Local municipal budget and the NRCS supported budgets for the

construction of gabion walls, drainage systems, elevated water pipelines, improved roads, and pump wells. These were the key physical improvements aimed at reducing flood impact. While these physical infrastructures did not fully eliminate flood risks, they contributed a lot to localized improvements in safety and mobility during the monsoon season. Field observations further confirmed the presence of these improvements, where sections of gabion walls, elevated water pipelines, improved roads, and drainage systems were observed across the settlement. However, observations also revealed that several agricultural areas remained exposed to seasonal flooding despite these localized infrastructural improvements.

Another major transformation was observed in the strengthening of early warning systems. Traditional methods of flood prediction relied on environmental indicators. Although they could be deemed orthodox, these nature signals were now complemented by technological systems. An early disaster monitoring station has been aided and run by NRCS and UNDP within the municipality's building. Weatherboards, mobile alerts, and FM radio broadcasts provide timely information to both authorities and community members on heavy rainfall predictions and rising river levels.

One participant recalled:

Whenever we receive flood warning messages, we go outside, even at midnight, to monitor the river. Everyone stays awake until we know it is safe. (Community Member)

Similarly, another participant stated:

We also makeshift a flag-pole in the river so we can gauge the rising water level from a safe distance. (Community Member)

Above both quotations demonstrate that technological warning systems did not replace Indigenous environmental observation. Instead, community members actively combined formal warning systems with their own monitoring practices, illustrating the emergence of complementary preparedness strategies. Across interviews, participants consistently explained that official warning messages were most useful when interpreted alongside their own observations of river conditions and environmental indicators, demonstrating the coexistence of Indigenous and institutional knowledge systems during flood preparedness.

Furthermore, the SURE program created opportunities for interaction between community members, local government officials, and humanitarian organizations through meetings, training sessions, and advocacy activities. These interactions strengthened both vertical relationships with formal institutions and horizontal relationships within the community, laying the foundation for the adaptive process discussed in the following section. Participants frequently described these interactions as opportunities to voice local concerns, strengthen relationships with government representatives, and collectively discuss community flood management priorities.

Community Adaptation and Hybrid Flood Resilience

Within the Tharu community, the interaction between pre-existing Indigenous knowledge systems and formal DRR programs led to the emergence of a hybrid model of flood resilience. The community, rather than passively adopting externally introduced practices, community members actively adapted to them to fit their existing socio-cultural and environmental context. Across interviews, participants rarely described these practices as entirely new; instead, they explained that externally introduced measures were adjusted to complement their existing flood knowledge and everyday community practices.

At the household level, flood preparedness practices became increasingly visible with emergency "go-bags." This technique was popularized during the SURE program, and the go-bag contained essential items such as official documents, food, and a basic first-aid kit, allowing residents to evacuate rapidly during flood events.

One participant explained:

> *Our go-bag is always kept on the upper shelf. When flood warnings come, we only have to take the bag and leave.* (Community Member)

This illustrates how preparedness had become incorporated into everyday household routines rather than remaining an emergency response learned only through formal training. The consistency of similar responses across participants suggests that preparedness practices had gradually become embedded within daily household behavior rather than being viewed solely as externally introduced interventions.

There were also changes to the structures of housing. The community members were open to structural modifications of their houses. They made physical changes that included raising the ground level of the house, reinforcing pillar and wall structures, and improving drainage around homes. These significant changes enhanced the durability of residential structures against flood impacts. One of the most significant changes includes a change in their cultural location of food storage, where now they have started putting crop harvest in the upper level of their houses or cattle sheds to prevent loss/damages during floods.

As one of the respondents explained:

> *After the big flood of 2064 B.S., we built the house higher and moved our traditional food storage from the main house to above the cattle shed so the water cannot reach it.* (Community Member)

These adaptions demonstrate that resilience was produced through the combination of Indigenous experience, collective flood memory, and eternally reinforced preparedness rather than through external intervention alone. Field observations further supported these accounts, where several households were observed storing harvested crops and essential household items on elevated platforms and upper storage spaces as

part of their routine flood preparedness.

At the community level, *Bhalmansa* and changemakers played a crucial role in facilitating this adaptive process. Similarly, community members' collective action remained central to flood resilience, through practices such as coordinated evacuation and shared labor during the recovery process. They are now more proactive in the communal resource distribution and run a community-based savings mechanism (*Samudayik Kosh*) to provide immediate financial support during emergencies without relying solely on external aid.

One participant reflected:

> *In the last two years, people have become more helpful. Earlier everyone worried only about their own family, but now we work together*. (Community Member)

The quotation suggests that resilience extended beyond physical preparedness to include strengthened social relationships and mutual support. Community adaptation therefore involved behavioral and social transformation alongside technical improvements. Similarly, participants in the focus group discussion described coordinated evacuation, shared recovery efforts, and the community savings mechanism as examples of strengthened collective action following DRR interventions, reinforcing that resilience was experienced as both a social and technical process.

Importantly, this adaptation process was not merely technical but also social. The Tharu community greatly involved themselves in these DRR programs and gained confidence among community members to engage with local authorities, articulate their needs, and demand resources. The advocacy practices enabled the community to participate more actively in local governance, influencing decisions related to infrastructure and disaster management. Participants consistently linked this increased confidence to repeated engagement with advocacy activities and interactions with local government representatives, reflecting a gradual shift from passive recipients of assistance to more active participants in local disaster governance.

Overall, these findings suggest that resilience emerged through an ongoing process of adaptation in which Indigenous knowledge remained central but was reinforced through externally introduced knowledge, institutional linkages, and collective learning. Taken together, the interview narratives, focus group discussions, and field observations indicate that community resilience developed through the integration of Indigenous knowledge with externally introduced practices rather than through the replacement of existing flood management traditions. This adaptive process provides the foundation for understanding the remaining inequalities and structural constraints discussed below.

Outcomes, Inequalities, and Structural Constraints

Even with the notable improvements in flood management, the outcomes

of external DRR programs and community adaptation remain uneven across the residents' social and economic aspects. The community boasts certain aspects of flood resilience, but at the same time, they still face significant challenges due to structural limitations.

One of the most prominent issues found is the uneven distribution of resilience across sectors. Residential areas have benefited the most from structural changes. Similarly, early warning systems provided them with safety evacuation plans. But the agricultural lands continued to remain highly vulnerable to annual monsoon floods. Even with the use of protective measures against floods: bamboo fencing and semi-aquatic plant barriers, the protection is often fragmented and insufficient to withstand large-scale flooding.

Participants repeatedly contrasted the improvements in residential preparedness with the continuing insecurity of agricultural livelihoods. One farmer explained:

> *About 50-60 houses were affected by the flood of 2064 B.S., but many more households lost crops in the agricultural fields. There was serious disagreement in the community about who should receive compensation- those whose houses collapsed or those whose harvest was destroyed. I feel that people whose crops were destroyed were still not compensated fairly.* (Participant)

This account illustrates that resilience outcomes were experienced unevenly across different livelihood groups. While housing reconstruction and emergency preparedness received greater institutional attention, agricultural losses remained difficult to document and compensate, creating perceptions of procedural unfairness within disaster recovery efforts. Similar concerns were expressed by several participants during both interviews and focus group discussions, who consistently distinguished improvements in residential protection from the continued vulnerability of agricultural livelihoods.

Additionally, inequalities and inequities in post-flood assistance were observed and also highlighted a degree of dependence on external actors. The participants stated that Municipality's relief-aid were not always distributed uniformly and they were confused about why some were chosen over others for the aid. Several participants explained that households with visible housing damage appeared to receive greater attention than those whose primary losses were agricultural, contributing to differing perceptions of fairness in post-flood assistance. The delay in aid distribution and verbal complaints against it show broader structural inequality within disaster response systems. Such disparities may bring distrust in institutional leadership and further exacerbate vulnerability among already marginalized groups. These perceptions were consistently linked by participants to uncertainty regarding the criteria used for relief assistance itself.

Participants also recognized that despite improvements introduced through

external programs, local solutions remained constrained by financial resource and competing interests.

As one participant reflected:

People still suffer losses every year because of flooding in agricultural land, but we have not been able to find a long-term solution together. (Participant)

This suggests that community resilience should not be interpreted as the complete elimination of vulnerability. Moreover, the poor adoption of risk-transfer tools like insurance is another drawback. While there is community knowledge on insurance but many have been unable to utilize it fully due to financial constraints, lack of access, and land tenure issues. This restricts the community's ability to mitigate economic losses resulting from floods. Across interviews, participants frequently associated these constraints with limited financial capacity rather than a lack of awareness regarding available risk-transfer mechanisms.

Furthermore, the financial and institutional constraints have limited the effectiveness of DRR programs. Field observation also indicated continued dependence on external support, as many of the structural and technical improvements were facilitated by external organizations such as NRCS and BRC. After the conclusion of the SURE program, residents have raised concerns regarding the sustainability of flood management and advocacy practices. Participants expressed concern that while community knowledge and organization had improved, maintain infrastructure, advocacy activities, and technical support would be difficult without continued institutional and financial assistance. These concerns were particularly evident during discussions about long-term flood mitigation measures beyond the community's financial capacity. Mostly, extensive gabion walls or river embankments require substantial investment and technical expertise. These exceed the periphery of mere local advocacy and municipal budgets. The large-scale infrastructural flood mitigations require state-level interventions and budgetary planning.

Overall, these findings demonstrate that external interventions have strengthened preparedness capacities but have not fully addressed deeper structural inequalities associated with livelihoods, compensation mechanisms, and long-term environmental management. Taken together, the interview narratives, focus group discussions, and field observations consistently indicate that while external interventions strengthened household preparedness and institutional coordination, participants continued to perceive resilience as constrained by broader structural, financial, and governance limitations beyond community control. The evidence suggests that resilience with the Tharu riverbank community is therefore unevenly distributed, with substantial gains in household preparedness existing alongside persistent institutional and socio-economic constraints.

Discussion

Davis and Vulturius (2014) describe resilience as an adaptive and learning-based process, and this is positively shown in the Tharu riverbank community in their flood management practices. Their exposure to the external DRR programs has enhanced specific dimensions of flood resilience. Instead of displacing their Indigenous practices, it became embedded within existing socio-cultural systems.

Similarly, the social networks and community learning have played a central role in this adaptive process. Varda et al. (2009) note that social networks help to facilitate coordination, flow of information, and collective action in disaster contexts. Participants consistently described the importance of advocacy champions, *Bhalmansa,* neighbors, and community volunteers in disseminating warnings, coordinating evacuation, and connecting residents with local authorities.

Furthermore, Barquet et al. (2016) emphasize the importance of social learning platforms in fostering resilience. Various DRR trainings and formal advocacy practice created opportunities for experiential learning and behavioral change. The SURE program's focus on advocacy, training, and participatory engagement created opportunities for experiential learning that extended beyond technical disaster preparedness.

The findings also demonstrate that resilience should be understood as a dynamic and negotiated process rather than a fixed outcome. Community members continuously interpreted new information through the lens of previous flood experiences, particularly the collective memory of the devastating 2064 B.S. flood and the comparatively lower impacts experienced during the 2078 B.S. flood. These historical events shaped how participants evaluated risk, trusted warning systems, and adopted preparedness measures, illustrating the importance of sustainable flood memory in strengthening adaptive capacity.

However, Chen et al. (2018) argue that financial and structural limitations often constrain disaster risk management, particularly in resource-limited settings, and it can also be seen in the Tharu riverbank community. Participants repeatedly expressed frustration regarding recurring agricultural losses, unequal compensation, and the absence of long-term structural solutions for protecting farmland. These findings indicate that resilience outcomes were unevenly distributed across livelihood sectors despite overall improvements in community preparedness.

Furthermore, the weak stakeholder coordination also undermines the effectiveness of DRR initiatives (Davis & Vulturius, 2014). Although the SURE program strengthened community capacity and institutional linkages, participants recognized that maintaining infrastructure, preparedness activities, and advocacy networks would require sustained commitment from local government without which, there is a risk that some of these gains may not be fully maintained. The findings therefore suggest

that externally supported resilience remains dependent upon long-term institutional ownership and continued investment.

An important contribution of this study is its demonstration that resilience cannot be evaluated solely through physical infrastructure or disaster-response capacity. The interviews reveal that resilience also encompasses social trust, collective learning, community leadership, advocacy capacity, and the ability to negotiate with external institutions.

Overall, this study contributes to the growing literature on hybrid resilience by demonstrating the effective flood preparedness is achieved through the interaction of Indigenous knowledge, collective memory, social networks, and external interventions. Rather than presenting Indigenous knowledge and formal DRR as competing systems, the findings show how communities actively combine both sources of knowledge to create locally appropriate preparedness strategies. The experience of the Tharu riverbank community therefore illustrates that resilience is not merely a technical outcome but a socially embedded, continually evolving process shaped by learning, adaptation, institutional support, and structural conditions.

The study has several limitations. First, the findings are based on a qualitative case study conducted in a specific Tharu riverbank community and therefore are not intended to generalize statistically to all flood-prone communities. Second the study relied on participants' retrospective accounts of two major historical flood events (2064 B.S. and 2078 B.S.) rather than real-time observations during flooding. The research therefore examines how collective memory, lived experience, and subsequent learning informed present-day preparedness and resilience. Third, although observations were conducted during multiple field visits over approximately one and a half years, the researcher visited the community after flood events rather than during active disasters. Finally, the study examined the long-term influence of the SURE program after its completion, meaning that participants' reflections represent perceived institutional legacy rather than direct program evaluation. Taken together, scholars like Tubbesing et al. (1990), Di Baldassarre (2013), and Tierney (2014) have warned that structural mitigation can bring a sense of security to the community. However, this confidence in technical solutions will lead to continued settlement in hazard-prone areas. They warn that disasters will continue to produce long-term structural, economic, and psychological impacts that may take years to recover from, even with the presence of an efficient early warning system and successful evacuation practices. It is recommended that future studies may benefit from longitudinal research that follows communities over time and compares different indigenous communities experiencing similar disaster contexts.

Conclusion

Overall, this study shows an indigenous riverbank community's adaptive reaction to the external DRR interventions. The findings demonstrate that the Tharu community exercised considerable agency in adapting external interventions to local

realities. Historical flood memory, Indigenous knowledge, community leadership, and social learning collectively shaped how preparedness strategies evolved over time. This resulted in a hybrid model of resilience in which traditional practices and formal disaster risk reduction approaches reinforced one another rather than operating as separate systems.

Acknowledgements

I thank Kheda Tole's Tharu riverbank community, Nepal Red Cross Society, British Red Cross, and Central Department of Sociology, Tribhuvan University for my fieldwork and research.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98975

Livelihood Dynamics in Squatter Settlements: A Sociological Study of the Manohara Settlement

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Abstract

Urban poverty and the growth of squatter settlements have together become major challenges, especially in rapidly urbanizing cities. This study examines the livelihood dynamics and challenges of urban poor households living in the Manohara squatter settlement. The study is mainly based on quantitative data collected through structured household surveys. The findings of this research show that the expansion of the settlement is closely influenced by internal migration. Unemployment, lack of affordable housing, and unequal urban development are equally associated with urban poverty, which is reflected in the Manohara squatter settlement. Most respondents in the Manohara squatter settlement were dependent on informal work and experienced unstable and insecure livelihoods. The study found that education, occupation, and poverty were closely associated with the livelihood strategy reflecting the complex and multidimensional nature of livelihoods in the squatter settlement. The level of squatter households was also positively associated with food sufficiency among them. Likewise, occupation and associated income influenced housing security and livelihood stability. Gender was also related to different livelihood challenges, which is significant to manage livelihood dynamics. The study shows that urban poverty within the settlement is complex and multidimensional. It is characterized by social exclusion, insecure housing, environmental vulnerability, and limited access to urban opportunities. The study concludes that effective urban policies for vulnerable social groups, who mainly live in urban squatter settlements, are important to address urban poverty in Nepal. Livelihood security, affordable housing, and participatory social protection programmes can help improve the living conditions of the urban poor, who mainly live in slums and squatter settlements.

***Keywords*:** Urban poverty, livelihood dynamics, urbanization, squatter settlement

Introduction

Urbanization has become one of the most important processes of social transformation with high level of chances of social differentiation and enlarging options of livelihood in the contemporary world. Cities are centers of economic, educational, and administrative activities in the process of urbanization and modern development. However, rapid urbanization has increased social inequality and

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unemployment, mainly in developing countries. It has also created housing shortages and environmental problems, mainly for marginal social group concentrated in slum and squatter groups concentrated in the peripheral region of urban settlement to slums in the urban periphery. These problems are manifested seriously in developing countries where urban growth is faster than the available infrastructure and services provided by the state agencies (Davis, 2006). One major consequences of unequal urbanization and uneven development is the growth of squatter settlements and remains as poor, located areas. Squatter settlements have become a defining feature of urban growth in developing societies in the form of urban poverty and marginalization. According to UN-Habitat, about 1.1 billion people live in slums and squatter settlements around the world as a form of urban poverty. These settlements often have poor housing and limited basic services which are persistently neglected by the government. They are mainly concentrated in South Asia, Sub-Saharan Africa, and Latin America, which are known as developing countries (UN-Habitat, 2022). Squatter settlements are the result of unequal urban development and exclusion from housing and employment opportunities due to the causes of low income level. Poor populations who are mainly migrants from outside the cities are often pushed toward slums and squatter settlements during rapid urban growth (Davis, 2006). Harvey (2008) argues that urban development does not benefit all people equally due to the causes of biased urban development planning and urban resources and opportunities are largely controlled by the capitalist elite. Thus, urban poverty reflects social and economic inequalities embedded in broader political and economic system which is important explaining the issues of urban poverty.

The expansion of squatter settlements and persisted as a form of squatter and slum settlements is also closely connected with internal migration, which is associated with poverty. Urbanization in developing countries is closely associated with dependent capitalist development, which is unsupportive of marginal groups. This process creates large populations engaged in squatter labor without adequate social protection and persists as a form of urban poverty (Castells, 1977). Squatter economic activities, mainly concentrated in urban centers, become survival mechanisms for urban poor people who are excluded from formal labor markets (Portes & Roberts, 2005). Squatter settlements, known as squatter settlements, are places where poor households face exclusion and deep insecurity in their life. Residents of the squatters also simultaneously develop different strategies to survive under difficult urban conditions and poverty situations.

Urban poor households live in cities; however often lack secure housing, social protection, and stable employment. They also have limited access to education, healthcare, and political participation due to the cause of low capabilities and low access on resources. Social exclusion theory explains urban poverty, which depends on exclusion and explains how marginalized groups are excluded from persistent economic, political, and social institutions. This exclusion in the long run, increases poverty and vulnerability among poor populations (Silver, 1994). South Asian countries such as India, Bangladesh, Pakistan, and Nepal are mainly affected by unemployment, population growth, and declining rural opportunities (Dupont, 2008). Studies in South Asian cities show that squatter settlement residents often face insecure housing, poor

sanitation, and unstable livelihoods (Banks et al., 2020). These settlements also provide livelihood opportunities mainly for low-income migrants. Many poor households depend on them for survival and daily wage income, and live in squatter settlements to minimize accommodation costs.

In Nepal, urbanization has rapidly increased during the last three decades, mainly after the 1990s, particularly within Kathmandu Valley. The growth of the urban population in Nepal has increased rapidly due to internal migration in the Kathmandu Valley. However, planned housing and urban services are lacking in the Kathmandu Valley to manage population pressure. This has pushed many poor households toward riverbanks and other vulnerable areas. These areas are unsafe for settlement in many ways. The lack of planned housing and urban services according to population pressure in the Kathmandu Valley has pushed many poor households toward riverbanks and other vulnerable areas. These areas are vulnerable to settlement. This may increase squatter settlements. Urban land prices and housing trends are rising since the 1990s. This has made formal housing inaccessible for low-income populations. Many poor households depend on squatter settlements for survival (Shrestha, 2013). Many rural migrants from rural areas in Kathmandu depend on wage labor because of limited education and the small size of the labor market (Timalsina, 2012). Urban poor households in squatter settlements of Kathmandu face unstable livelihoods with deep poverty situation. They suffer from insecure and unstable employment, inadequate urban services in squatter settlements, and environmental risks where they live (Dahal, 2017). They develop different coping strategies for survival in an unfavorable urban context.

Research on urban poverty in Nepal also concentrated on the importance of squatter economic activities associated with the squatter and slum people. People living in the urban squatter settlements depend on construction labor, domestic work, transportation work, and street vending for their livelihood. These occupations are major income sources for many urban poor households (Adhikari, 2018). However, these occupations usually provide low wages and unstable income, that make them further vulnerable. Workers also lack proper working conditions and legal protection because of the illegality of the settlement and a lack of awareness among them. However, squatter labor work remains an important survival strategy for poor urban populations who mainly live in slums and squatter settlements.

The Manohara squatter settlement near the urban location of Koteshwor represents one of the rapidly expanding squatter settlements. Residents of this settlement experience multiple forms of deprivation. They faced insecure housing, poor sanitation, unstable livelihoods, and environmental risks at the same time. They also had limited access to public services due to the cause of social and economic vulnerabilities and the illegality of settlements. Despite different uncertainties and challenges, they have adopted different livelihood strategies to overcome insecurity and sustain their livelihood. Labor diversification, social cooperation, and squatter networks were important survival mechanisms under uncertain urban life. Therefore, squatter settlements thus function not only as spaces of poverty and deprivation but also as an understanding of outsiders. It also serves as a space of resilience, adaptation,

and survival between urban poor households, which is significant to understand urban poverty and survival strategies in sociological research.

Previous studies in Nepal for urban poverty have examined migration, housing problems, and environmental risks associated with squatter settlements is important but not complete and integrated. Most studies focus mainly on housing and environmental issues of the urban poor, while giving less attention to the dynamics of livelihood patterns of the urban poor. Therefore, the main objective of this study is to examine the major causes behind the formation and expansion of the settlement. The study also analyzes the livelihood strategies of urban resilience adopted by residents of the squatter settlement to survive urban poverty and economic insecurity. In addition, it explores the social and economic conditions of people living in the Manohara squatter settlement. However, the interrelationship between formation of squatter settlements, livelihood strategies, and persisted socio-economic conditions of urban poor has received limited scholarly attention. This study addresses this gap by providing a comprehensive understanding of urban poverty in squatter settlements.

Literature Review

Existing studies provide useful insights into urban poverty and squatter settlements. However, they offer inadequate discussion of the broader structural factors shaping these conditions. The study of urban poverty and squatter settlements is related to broader theories of urbanization and political economy. Similarly, it is also related to social exclusion and livelihood vulnerability. Classical urban political economy explains that cities are influenced and constructed by unequal power relations, access to capital and land. Castells explains that urban poverty is caused by capitalism, which pushes poor people into marginal urban spaces due to limited access to basic services (Castells, 1977). Similarly, Harvey (2008) argues that capitalist urbanization creates unequal urban spaces for the poor and marginalized people. Poor populations are pushed into insecure and environmentally vulnerable areas due to the lack of access to resources and capitalist-biased urban development. Davis explains that the growth of slums and squatter settlements is caused by neoliberal urbanization and global inequality around the world. Unemployment and weak housing policies also increase these problems significantly (Davis, 2006). According to him, squatters and squatter settlements represent poor people who are excluded from the benefits of urban development, which is driven by the intention of the capitalist state (Davis, 2006). These theoretical approaches assume that squatter settlements are not only the cause of illegal living on public and private land. It is manifestations of unequal urban development and structural exclusion which is persisted by capitalist exploitation.

The livelihood approach in sociological literature also provides an important context for understanding survival strategies among urban poor households which can help to explore urban poverty. Livelihood as the capabilities, assets, and activities required for a means of living which is associated with poverty phenomena (Chambers & Conway, 1992). Similarly, the sustainable livelihood framework explains how poor households use different resources to survive. These include human, social, physical, financial, and natural capital in an integrated way (Scoones, 1998). Livelihood is often

insecure in urban squatter and slum settlements because residents primarily depend on unstable squatter work and limited access to urban services, and the right to enhance their capabilities.

Sen's capability approach is equally important in understanding urban poverty from a qualitative framework. He argues that poverty should not be understood only by economic criteria. It is associated with multiple deprivation of capabilities and opportunities necessary for dignified living and human wellbeing (Sen, 1999). Urban poor households may physically reside within cities rather than rural areas in an external understanding. Poor people remain excluded from secure housing, quality education, healthcare, stable employment, and political participation (Sen, 1999). Social exclusion theory also explains that marginalized people are often excluded from economic, political, and social institutions and persist in an accumulated form of poverty. This exclusion increases poverty and insecurity between social groups at different levels (Silver, 1994).

Recent poverty theories explain urban squatter settlements as a way of adaptation and survival. Squatter is not only a planning failure and unintended outcomes. It is also a social process through which poor people survive and resist unequal urban systems (Banks et al., 2020). This perspective is relevant for understanding squatter settlements like Manohara. People survive there through squatter work, community-based relations, community cooperation, and political negotiation to some extent. Livelihood theory is important because it helps to explain how poor urban households survive in difficult situations and make surviving strategies. These conditions include economic insecurity, social exclusion, and limited access to resources. Poor households often have limited financial and physical resources, making them additional vulnerable. Consequently, they depend on squatter work, social networks, and different livelihood strategies, including minimizing food and education costs.

The livelihood perspective, in general, helps explain urban poverty beyond the low-income approach. It also focuses on vulnerability, insecurity, coping strategies, and access to opportunities. Importantly, Moser argues that urban poor households continuously adapt their livelihood strategies in response to economic crises and social risks (Moser, 1998). Livelihood diversification is an important survival strategy for poor households. Different family members engage in different economic activities to reduce risk and support household needs is significant to overcome social and economic uncertainty. Urban livelihoods are closely linked with migration, squatter labor markets, housing access, and social support systems. These factors become important in rapidly growing cities to explore urban poverty (Rakodi, 2002). It shows that urban poverty, mainly concentrated on slum and squatter settlements, is an intentionally constructed phenomenon by the biased development practice. It is shaped by unequal access to resources, insecure jobs, weak social protection, and exclusion.

In the context of exploring urban poverty in Nepal, livelihood approaches mostly help explain how poor households in squatter settlements survive. Many migrants from different rural areas in Kathmandu Valley belong to the lower class. They depend on squatter work because of limited education, low income, and lack

of formal job opportunities (Timalsina, 2012). Urban poor households that mainly live in squatter settlements in Kathmandu adopt livelihood diversification to sustain their life. They developed and practiced distinct coping mechanisms through squatter networking, mobility, and social cooperation to overcome economic insecurity and unstable urban life (Dahal, 2017). Dahal (2017) further discusses coping mechanisms and finds that they change food habits, practice mutual cooperation, borrow, and seek new livelihood opportunities to cope with economic insecurity and unstable urban life. So, the livelihood framework for this research provides an effective perspective for examining how residents of the Manohara squatter settlement survive in their day-to-day life and fight against urban poverty and crisis. It also helps explain their situation within structural inequality and the unjust urbanization pattern.

In South Asia, the rapid trend of urbanization and rural-to-urban migration pattern has led to an increase in squatter settlements. Urban redevelopment and slum demolition often displace poor people without solving their housing and livelihood problems (Dupont, 2008). Similarly, squatter economic activities become important survival strategies for urban poor households, who are excluded from formal labor markets due to marginalization in the cities (Portes & Roberts, 2005). Recent urban studies explain that squatter settlements are not only a space for dumping poverty, but it is also reflected in the livelihood options of marginalized people. Urban squatter reflects poverty and exclusion struggling within unequal urban systems (Banks et al., 2020). In Nepal, squatter settlements are closely associated with migration, poverty, and weak housing policies, mainly in urban areas for the underclass. Many poor people in Kathmandu Valley settle in vulnerable public spaces because of a lack of affordable housing and the absence of a supporting mechanism for the excluded social group by the state (Shrestha, 2013).

Squatter people are highly exposed to flooding, poor sanitation, pollution, and inadequate urban services because of their living is concentrated in risk and vulnerable marginal land. This is because of weak urban governance and unplanned development mainly in squatter areas (Shrestha et al., 2020). Low-income urban populations in Nepal mainly survive through squatter work (Adhikari, 2018). Another vulnerability exposed with squatter people is that they are mainly dependent on construction work, domestic work, and transportation work with low income. Despite this, they face unstable income and poor working conditions (Acharya, 2024). Recent studies on squatter settlements show that health and nutrition problems in squatter settlements of Kathmandu Valley are on a significant trend which is ignored by the government. It is expressed in child malnutrition, poor sanitation, and overcrowding in the Kathmandu Valley. Limited healthcare access is also common among squatter people (Médecins du Monde France Nepal, 2025).

Previous studies have discussed migration, housing insecurity, environmental vulnerability, and squatter labor while exploring urban poverty in Nepal. However, limited sociological research has analyzed livelihood dynamics that are significantly associated with urban poverty in the context of Nepal. Therefore, this study examines livelihood strategies, income, social security, and community participation as

interconnected social processes in urban poverty and sustaining practices. The study is based on primary information collected from respondents of the Manohara squatter settlement of Kathmandu valley, Nepal.

Methods and Procedures

The study examined the influence of selected socioeconomic variables on the livelihood conditions of squatter households of Manahora squatter. Education, occupation, household income, migration status, and housing security were considered independent variables in this analysis. Similarly, livelihood conditions squatter household constituted the dependent variable. This study primarily used a quantitative research design to examine the livelihood dynamics of urban poor households living in the Manohara squatter settlement. It focused on measuring the socioeconomic conditions of settlement residents in a comprehensive way. The study also examined livelihood patterns, occupational structure, income status, access to services, and livelihood challenges to explore urban poverty dynamics. Therefore, the study followed both descriptive and analytical research designs. The descriptive analytical framework presented the demographic and socioeconomic characteristics of the respondents living in Manohara squatter settlements. Similarly, the analytical research design examined the relationship between livelihood conditions, migration, income, housing security, and urban poverty, which make possible to show multiple relations for urban poverty. The study was mainly based on livelihood theory and the theory of political economy. Housing security in this research was measured using three response categories: *feel secure*, *feel insecure*, and *highly insecure*. These three categories were designed to collect respondents' perceived at the time of interview. The categories reflected respondent's level of security regarding their current housing situation. Respondents selected the option themselves that best reflected their current housing situation. No additional response options were included to ensure consistency among participants and maintain comparability.

The study was conducted in the Manohara squatter settlement, which is located mainly in the Jadibuti, located in the Kathmandu Valley, Nepal, from September to October 2023. The settlement lies along the Manohara River corridor near to the market centre. It is one of the rapidly growing and largest squatter settlements in Kathmandu Valley. Manohara, is the largest among the 65 identified slum and squatter settlements in the Kathmandu Valley. It comprising 575 households with a total population of 4,037 (K.C. & Pahari, 2011). The settlement was started among these total households. The area was selected purposively because it reflects the diverse characteristics and widely expanded settlements in the Kathmandu Valley.

The target population of the study consisted of households residing within the settlement based on gender, duration of residence, and vulnerabilities. A total of 105 respondents were selected purposively for the study. Household heads or economically active adults were selected as respondents to collect data. The purposes of this selection assume that they had information about livelihood, migration, occupation, income, and survival strategies. The study used both primary and secondary sources of data. A structured interview schedule and observation were used while collecting

data. It helped to collect demographic and socioeconomic information collectively. It tried to gather information on livelihood challenges and faced the reality of them. Household surveys were conducted through face-to-face interviews with selected respondents. Observation was also used to understand settlement conditions and their day-to-day life-sustaining patterns. Interaction with settlement residents of Manahora helped support the interpretation of the quantitative findings with personal experiences to some extent. The collected data were edited, coded, classified, and analyzed systematically to present the livelihood pattern of people living in urban squatter settlements. Descriptive statistical tools such as frequency distribution, percentage, tables, and cross-tabulation were used when analyzing the primary data. The findings of this research were interpreted in relation to theories of urban poverty, capability, and livelihood adaptation. To maintain its reliability and validity assured through a cross-check method based on triangulation through survey, observation, and squatter interaction. Ethical considerations were maintained throughout the study as per research ethics. Respondents were informed about the purpose of the research before data collection. Similarly, confidentiality of information was maintained during the time of data collection and analysis.

Results

Educational Status and Occupational Structure of Respondents

Education is an important factor influencing occupation and livelihood conditions among squatter people. Low educational attainment often highly chances to limit access to formal employment and other life chances. It increases dependence on unstable conditions and insecure squatter work among urban poor populations. Previous studies in Kathmandu Valley show that low education among squatter settlement residents is closely associated with squatter occupations, which is significant on this research. These occupations mainly include construction work, domestic labor, transportation work, street vending, and small businesses. Table 1 presents the relationship between educational status and occupational involvement among respondents of the Manohara squatter settlement. It helps to explore the nature of spatial poverty in the city's periphery.

Table 1

Educational Status and Occupation of Respondents

Educational Status	Wage Labor	Domestic Work	Street Vending	Small Business	Transport Work	Total	Percentage
Illiterate	18	9	4	1	2	34	32.4%
Primary Level	15	6	5	3	2	31	29.5%
Secondary Level	8	3	7	6	4	28	26.7%
Higher Secondary and Above	1	0	2	5	4	12	11.4%
Total	**42**	**18**	**18**	**15**	**12**	**105**	**100%**

Source: Field Survey, 2023

Table 1 clearly shows that variations in occupational involvement of squatter people occur according to educational status. In this study, wage labor refers to daily wage work including domestic and household work mainly involved in informal sector. Small business refers to petty trade, street vending and transport work includes driving and related services. These occupations which are unsecure, represent the major livelihood activities of the respondents. Among 34 illiterate respondents, most were engaged in wage labor and domestic work, which is insecure. Only a few respondents were involved in small businesses and transportation occupations, which signifies the role of literacy. Similarly, data shows that respondents with only primary education were mainly concentrated in wage labor and domestic work sectors. This shows that education is important for livelihood opportunities, which justifies the capability approach, as explained by Amartya Sen. Respondents with secondary and higher educational attainment showed relatively greater participation in street vending, transport work, and small business activities, which also justifies the importance of education on sustainable and dignified livelihood. Among respondents with higher secondary education and above, very few were involved in daily wage labor, which is significant evidence of the impact of education in the work and occupation. These findings show relations between education and occupation in shaping livelihood. Educational attainment influences occupational opportunities and livelihood patterns among settlement residents. It should be considered when exploring urban poverty.

The study indicates that education plays a crucial role in shaping livelihood opportunities within squatter urban economies among people of urban squatters. It also shows that dependence on insecure labor due to low educational capability increases economic vulnerability and livelihood instability among urban poor households. Similarly, urban labor markets seem to favor people with education, skills, and social capital. Poor migrants and settlement residents with limited education are mainly concentrated in an insecure and exploitative squatter labor sector. The findings also support Amartya Sen's capability approach, which explains that poverty is not only a lack of income. It is also associated with a lack of opportunities and capabilities (Sen, 1999). Data shows that a low level of education limits access to formal and secure jobs. It increases urban poverty and occupational vulnerability and limits social and economic mobility. Similarly, Pierre Bourdieu's concept of cultural capital explains that educated individuals have better access to stable livelihood opportunities (Bourdieu, 1986). Data from the present study showed that educational inequality significantly contributes to occupational insecurity and livelihood vulnerability within the Manohara squatter settlement.

Migration Background and Livelihood Adaptation

Migration is one of the major processes of social change contributing to urbanization and development. The growth of squatter settlements in developing countries is accelerated after squatter urbanization and migration. Rural to urban migration generally occurs because of poverty, scarce resources, and the lack of development in rural areas. So, structurally, poor and marginalized social groups and people are generally affected by unemployment, landlessness, and unequal regional

development. Migrants mainly belonging to the underclass who enter cities frequently face difficulties in securing formal employment and affordable housing. It leads to forcing them into squatter settlements and remaining in insecure livelihood practices. Table 2 shows the relationship between migration reasons and livelihood patterns among respondents in the Manohara settlement. It explains how migration reasons influenced their livelihood activities and survival strategies.

Table 2

Relationship between Reason for Migration and Livelihood Type

Reason for Migration	Wage Labor	Squatter Business	Domestic Work	Transport Work	Total	Percentage
Poverty and Unemployment	29	8	11	5	53	50.5%
Education of Children	6	5	2	2	15	14.3%
Conflict and Displacement	10	2	4	1	17	16.2%
Better Urban Opportunities	9	7	1	3	20	19.0%
Total	**54**	**22**	**18**	**11**	**105**	**100%**

Source: Field Survey, 2023

Domestic work and street vending were grouped under the business category because both primarily involve informal income-generating activities in this analysis. Poverty and unemployment refer to migration driven by the lack of employment and income, particularly in the place of origin. Similarly, in present research context, better urban opportunities refer to migration in search of improved employment, business, education, and other livelihood opportunities available in urban areas. Table 2 shows that poverty and unemployment were the major reasons for migration among respondents from their place of birth. About 53 respondents migrated to the city due to poverty and unemployment. They may face difficulties with urban constraints after arriving in the city. The majority were involved in wage labor and domestic work, which is insecure and low paid. Similarly, respondents displaced by conflict and instability in the place of origin were also concentrated in low-paying squatter work in the city. Respondents who migrated for better urban opportunities were more involved in squatter business and transport work. This shows a significant association between migration motives and livelihood patterns. Those who migrated for their children's education had more diversified livelihood activities.

The primary data taken from the Manahora squatter settlement indicate an association between migration reasons and livelihood patterns. It indicates that a migration background strongly influences livelihood adaptation patterns among residents of Manohara settlement. The study shows that the causes of migration were mainly for survival purposes. It is driven by poverty, unemployment, conflict, and limited rural opportunities, which have increased dependence on squatter labor. Poor

migrants were mainly concentrated in wage labor and domestic work due to limited capabilities, which is associated with the theory of Sen (1999). Similarly, it supports Manuel Castells's explanation that dependent urbanization in the modern context creates large squatter labor populations, who are excluded from formal economic systems mainly for economic reasons (Castells, 1977). Migrants are excluded from secure housing, employment, and institutional support. This exclusion exists both in their place of origin and in the destination location. The findings show that migration and livelihood adaptation are closely related to structural inequality influenced by biased urban development for squatter people.

Household Income and Food Sufficiency

Food security is one of the most important and primary indicators for livelihood stability and household well-being, which may help measure the level of vulnerability. Low and unstable income frequently limits access to adequate food and nutrition. It excludes people from basic household needs. Urban poor households often depend on daily earnings from the squatter labor sectors, which are often unstable and insufficient. The situation is making their food consumption highly vulnerable, which may increase illness and vulnerability, and it makes further economic instability and insecurity. Studies on urban poverty indicate that food insecurity is strongly associated with unstable employment. Table 3 presents the relationship between monthly household income and food sufficiency among respondents living in the Manohara squatter settlement. It shows how household income influenced their food sufficiency condition which is associated with poverty in a squatter settlement.

Table 3

Relationship between Household Income and Food Sufficiency

Monthly Household Income	Food Sufficient	Sometimes Insufficient	Frequently Insufficient	Total	Percentage
Below NPR 15,000	5	23	19	47	44.8%
NPR 15,000–30,000	14	21	7	42	40.0%
Above NPR 30,000	13	3	0	16	15.2%
Total	**32**	**47**	**26**	**105**	**100%**

Source: Field Survey, 2023

Table 3 shows a clear relationship between household income and food sufficiency at a significant level. Around 44.8 percent household earning below NPR 15,000 monthly. Many of them experienced frequent food insufficiency. Among them, some also experienced occasional food insufficiency. Only a very small number of households within this income group reported sufficient food availability throughout the year. Similarly, 40.0 percent of household earnings are between NPR 15,000 and 30,000 Food insufficiency was less frequent in this income group than among households earning below NPR 15,000. Therefore, they were described as experiencing a moderate level of food insecurity compare to income above thirty thousand. They experienced a moderate level of food insecurity in their life. However, the situation obtained data and

personal experiences was comparatively better than in lower income households. Most families earning above NPR 30,000 reported satisfactory food sufficiency. It shows a positive relationship between income or earnings and food sufficiency. This pattern of data indicates that household income significantly influences food security and overall well-being is also associating to poverty situation.

The study shows that income instability directly affects the ability of urban poor households of Manohara squatter to meet basic survival needs. Households with lower income levels face acute food insecurity due to unstable wages from irregular employment opportunities and low wages. It reflects the complex nature of urban poverty that persisted in the squatter settlements. Poverty in squatter settlements includes food insecurity, and poor living conditions are common. These faced realities of insecurity support Amartya Sen's capability approach, which explains that lack of food sufficiency reflects deprivation of basic human capabilities (Sen, 1999). Urban poor households are engaged in daily wage labor and lack savings, making them economically vulnerable and food insecure.

Occupation and Housing Security

Housing security is one of the most critical and significant dimensions of urban livelihood stability. Residents of Manohara squatter settlements often face housing insecurity. It signifies the nature of urban poverty is different in the poor social group. Lack of legal land ownership and fear of eviction threats from urban authorities make them insecure in their homes. Environmental risks, mainly in riverbank zones, also increase insecurity. Unstable living conditions because of low and unstable income further make them insecure in their homes. Occupation and income of squatter people influence housing security among squatter households. Table 4 below presents the relationship between occupation and experienced housing security among respondents living in Manohara squatter settlements.

Table 4

Relationship between Occupation and Housing Security

Occupation	Feel Secure	Feel Insecure	Highly Insecure	Total	Percentage
Wage Labor	13	23	12	48	45.7%
Domestic Work	3	10	5	18	17.1%
Street Vending	4	9	5	18	17.1%
Small Business	2	6	1	9	8.6%
Transport Work	6	4	2	12	11.4%
Total	**28**	**52**	**25**	**105**	**100%**

Source: Field Survey, 2023

In this analysis, feel secure' refers to respondents who had no immediate fear of eviction by authorities and feel insecure' denotes to those who had some concern about their housing stability. Similarly, 'highly insecure' refers to respondents who felt they were at high risk of eviction or political displacement in any time. Table 4 shows

that respondents who engaged in wage labor and domestic work experienced higher housing insecurity. It reflects income-based vulnerability among squatter families. Those involved in transport work and small business activities stated comparatively lower housing insecurity which denoted that they had comparatively stable and better income. The majority of respondents involved in wage labor felt insecure or highly insecure about their housing conditions due to unstable work and income.

Data shows that those involved in small business activities showed comparatively greater feelings of housing security. Similarly, transport workers stated relatively better perceptions of settlement stability compared to wage laborers. This indicates that squatter people felt housing security differently. The findings of this research indicate an association between occupation and housing security among squatter people. The findings of this research support the argument of David Harvey. He theorizes his research under the critiques of capitalist development and uneven urbanization that pushes marginalized people into insecure and vulnerable urban areas (Harvey, 2008). Therefore, squatter settlements become homes for poor populations. They frequently experience both economic and residential insecurity in their lives. The glamorous urban development initiated by government agencies does not greatly affect them.

Gender and Livelihood Challenges

Urban poverty affects men and women differently. Gender inequality, unequal access to resources, wage discrimination, and household responsibilities create different livelihood challenges for them in the same household. Women living in squatter settlements often face double work burdens. They are responsible for both income generation and domestic work, including reproductive work. Gender thus, may significantly impact livelihood experiences and vulnerability. The following Table 5 shows the association between gender and major livelihood challenges. It is based on the experiences of squatter people living in the Manohara squatter settlement.

Table 5

Relationship between Gender and Livelihood Challenges

Major Livelihood Challenge	Male	Female	Total	Percentage
Unemployment	26	11	37	35.2%
Low Income	17	24	41	39.0%
Housing Insecurity	10	7	17	16.2%
Health Problems	3	7	10	9.5%
Total	**56**	**49**	**105**	**100%**

Source: Field Survey, 2023

Table 5 shows significant gender variation in livelihood challenges that persisted in squatter people. According to data given in the table 5, male respondents

more frequently identified unemployment as their major challenge, whereas female respondents more commonly told of low income and health-related difficulties. Female respondents also experienced greater health vulnerability compared to males. However, data show that housing insecurity affected both genders. The result of this research indicates a significant relationship between gender and livelihood challenges. It shows that urban poverty affects men and women differently within the settlement.

Similarly, the findings show the gendered nature of urban poverty, which is associated with unstable livelihood conditions. Male respondents were more concerned about employment availability. Men are generally expected to play the primary income-generating role in households due to the cause of gender socialization. Women more frequently experienced low income and health-related problems. They are mainly involved in low paying work like domestic work. Similarly, they also manage domestic responsibilities, which are associated with gender socialization.

Discussion

The findings of this research show that livelihood dynamics in the Manohara squatter settlement are strongly influenced by structural inequality. This depends on the state's intentions towards the comprehensive development of squatter settlements. Similarly, social exclusion also impacts to the livelihood conditions of residents living in urban squatters known as the urban poor. The study found relationships between education, occupation, migration, income, and gender. These factors determined the livelihoods of squatter people living in the Manohara squatter settlement. The findings of this research are positively related with the argument of Amartya Sen's capability. Urban poverty is multidimensional and social in nature (Sen, 1999). Similarly, the study strongly significant with Harvey's theories of political economy. In which he claimed that capitalist urbanization produces unequal access to urban resources and opportunities. It is pushing mainly for marginalized populations to capture public space for securing basic livelihood in the marginal urban spaces (Harvey, 2008). The Manohara squatter settlement represents an unequal urban space where poor migrants occupy public land. They were served with low-income and insecure squatter work. Rising land prices in Kathmandu Valley pressure the urban poor to choose squatter settlements, which are significantly associated with economic reasons. Limited economic opportunities and low level of capabilities both increase dependence on wage labor, domestic work, and other squatter occupations. This situation repeatedly weakens their economic condition and further excludes them.

The urban livelihood of underclass people is multidimensional and complex. The findings of this research also support Mike Davis's argument. He explained that squatter settlements are the byproduct of unequal development, which does not depend on the condition of individual failure (Davis, 2006). The present study found that the majority of respondents migrated because of poverty. Similar migration patterns and problems they have faced in South Asian cities have contributed to the growth of squatter settlements (Dupont, 2008). In Nepal, river corridor settlements have expanded due to poor people's settlements because poor populations cannot access affordable formal housing in the core areas of the city due to the accelerated prices (Shrestha, 2013).

The study showed that educational attainment influences occupational opportunities among squatter people. Low education status limits access to secure employment and stable income among squatter people, which is associated with the theory of capability (Sen, 1999). Similarly, the study found a positive relationship between household income and food sufficiency among marginal people living in urban squatter. Lower income households in the study area experienced higher food insecurity and higher livelihood vulnerability. Housing insecurity was another important dimension of urban poverty within the Manohara settlement. Respondents involved in unstable occupations were greatly associated with greater fear of eviction and residential insecurity. The study also identified that gendered dimensions of unstable livelihood conditions are another aspect of urban poverty. The findings thus indicate that the Manohara settlement reflects broader realities of livelihood patterns among the urban poor. It is associated with the unequal urbanization since the 1950s and development practices initiated by the government of Nepal since 1990s.

Conclusion

The study examined the livelihood dynamics and complex nature of urban poor households in the Manohara squatter settlement. The findings show that urban poverty within the settlement is closely related to the migration of poor people, mainly from rural areas, and their dependency on squatter labor. It is also associated with different factors such as insecure housing, low education, food insecurity, and social exclusion. Most respondents migrated to the settlement because of poverty, unemployment, and landlessness. However, after migration, many households remained dependent on unstable work and informal occupations. Many of the respondents based on wage labor, domestic work, transport work, street vending, and small business. The jobs with low income and low social status are mostly unstable in terms of work regularity and income. This was mainly due to their limited ability to access urban opportunities. The study found that education influenced occupational opportunities and livelihood stability among residents of Manohora settlements. Respondents with low educational attainment were mainly concentrated in insecure and low-paying occupations, which is associated with the personal capabilities that are also influenced by structural bias. Relatively educated respondents had more diversified livelihood opportunities, which is related to the modern discourse of the importance of education in poverty reduction. Household income of the urban poor was also strongly associated with food sufficiency and livelihood security. Lower-income households of Mnahora squatter settlements experienced greater food insecurity and economic vulnerability. It is also affected by unstable employment and irregular income. Housing insecurity was another major problem among squatter people, especially among households' dependent on daily wage labor and unstable wage labor and low-paid occupations. High and unstable urban house rents were another factor that pushed many low-income households to settle on peripheral land, such as Manohara squatter settlement. Their low wages and unstable employment made rented housing unaffordable in the capital city. Additionally, limited education and low skill levels further reduced access to better-paying jobs. This increased the risk of unemployment and persistent poverty.

The study also identified gender differences in livelihood challenges as another issue of urban poverty, which is basically ignored in poverty research. Male respondents mainly faced unemployment problems in their daily life means they had limited work opportunities and unstable income. Whereas female respondents were impacted by low income, health problems, and work burden in both public and private spheres. The findings of this research based on Manohara squatters support David Harvey's argument that liberal development limits access to resources for underclass people which is reflected in people living in the squatter settlement of Manohara. Unequal urbanization in the process of development pushes marginalized populations toward insecure urban spaces, which is a result of capitalist development practiced since the 1990s in Nepal. The Manohara settlement represents an unequal urban space characterized by poverty and exclusion. This occurs in the name of modern development and a modern city expansion program initiated by municipal bodies. The present study also partially relevant to Amartya Sen's capability approach. It explains poverty as deprivation of opportunities and basic capabilities rather than economic factors which is seen in the study area. The study concludes that urban poverty within the Manohara squatter settlement is a structural consequence of unequal urbanization in an unjust way. This research suggests the need for integrated urban policies to address problems of marginal social groups. It also emphasizes rural development in places from where people migrate to the cities to sustain their lives and seek better opportunities.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98976

Socioeconomic Impact of Foreign Employment on Households in Bheemdatta Municipality, Nepal

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Abstract

This study investigates the social and economic effects of foreign employment among households in Bheemdatta Municipality Ward 13 in Kanchanpur district of Nepal, with a view of looking into its economic, social, and agricultural effects. For this research, exploratory mixed-methods approach was utilized with a census study of 500 households, of which 250 were remittance-receiving and 250 non-remittance households. Quantitative data was collected through structured household questionnaire, and qualitative data was collected by conducting focus group discussions, key informant interviews, case studies, and direct observation. The survey findings indicate that remittance-receiving households had higher income, having 57.4% earning between NPR 20,000 and NPR 40,000 monthly, higher savings (65% being regular savers), better housing (38.8% households having permanent houses), and better access to financial services than non-receiving households. On the contrary, socially, remittances account for higher enrollment in private schools (40.8%), higher involvement of women in household decision making, and proportion of ownership of household assets. However, foreign employment has also led to shortage of agricultural labor (68%), abandonment of farmland (42%), and decline in crop production, and increased migration-related debt (65%). In general, offshore jobs help families gain well-being and encounter particular social and farming problems. The findings emphasize connections but not causal relations and stress the importance of elaborating measures to improve workforce efficiency and skills, financial literacy, family support, and agrarian revival.

***Keywords*:** Foreign employment, remittances, socioeconomic impact, family support

Introduction

The phenomenon of foreign employment has taken roots as one of the major aspects of labour migration and an important means of living within many developing nations. Globalization, differences in income, and inequality in job opportunities have

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prompted hundreds of thousands of migrant workers to search for foreign employment (Rijal, 2022; Ullah, 2022). In the context of Nepal, foreign employment is one of the most important socio-economic trends of the last two decades. Lack of adequate opportunities for finding job in the country expands the number of workers migrating, especially to the Gulf, Malaysia, and India, seeking better prospects (Pasa & Kharel, 2022; Nepal Economic Forum, 2022).

There exist manifold impacts from foreign employment even though they may be viewed largely in positive terms. While remittances help in increasing welfare and limiting poverty of households, an overdependence on migration may result in economic vulnerability, contributing to the widening of income gaps between rich and poor people, limiting the availability of labor force for agricultural sector, and impeding domestic investments in production (Kharel et al., 2023; Nepal Economic Forum, 2024).

Migration has also several significant social consequences, among which changes in family composition, roles of men and women in families, their duties regarding caring for other family members, and the feeling of emotional well-being of relatives left at home should be highlighted.

Many common theoretical approaches explain the reasons for the dynamics of migration. In accordance with the Push–Pull Theory (Lee, 1966), migration occurs due to factors like low wages, unemployment, and emergence of better opportunities in other countries. The theory of Livelihood Diversification (Ellis, 2000), Human Capital Theory (Becker, 1964), and the New Economics of Labor Migration (Stark & Bloom, 1985) emphasize the notion that migration is a strategic move taken by households to diversify income, manage risks, and secure long-term stability of financial welfare.

Studies carried out at the national and global levels have shown a positive correlation between remittances and poverty alleviation, higher incomes of households, and better access to education and health services (Kalim & Shahbaz, 2009; Javid et al., 2012). The studies also indicate that the usage of remittances is skewed towards household consumption rather than productive investments (Kalim & Shahbaz, 2009; Javid et al., 2012). The studies conducted in Nepal revealed similar results and concluded that even though foreign employment has contributed to improving the socio-economic condition of several households, migrant workers continue suffering from serious issues like debt and exploitation, and social and economic reintegration problems (Bhattarai & Paoletti, 2022; Karki, 2020).

Both benefits and challenges of labor migration have led to the establishment of numerous legal and policy measures in Nepal, for example, the Constitution of Nepal (2015) and the Foreign Employment Act (2007) which were amended several times to protect the rights of migrant workers. Even though, the implementation of these measures is difficult due to the weak institutional framework, improper regulation of recruitment companies, lack of reintegration programs, and insufficient local

government support (Upreti & Shrestha, 2017; Tiwari & Bhattarai, 2011).

There has been a growing trend in previous studies utilizing mixed methods approaches to analyze both the economic and social aspects of migration in its investigations (Creswell & Plano Clark, 2018). Nonetheless, a considerable number of studies are focused on countries or regional trends in migration. This has resulted in insufficient empirical information to understand the consequences of foreign employment on households' life conditions within a certain locality.

This research will help fill this geographical gap by conducting a detailed household-level evaluation of the socio-economic impact of foreign employment within Bheemdatta Municipality. More particularly, the study will investigate the socio-economic characteristics of migrant and non–migrant households, assess the primary factors affecting foreign employment, as well as evaluate the economic and social contexts resulting from foreign employment. Thus, the study is intended to provide the knowledge that can be used in local development planning.

Methods and Procedures

A mixed-methods research design was applied in this study to investigate the socio-economic effects of foreign employment on the household level in the case of Ward No. 13 of Bheemdatta Municipality in Kanchanpur District of Nepal. By employing this design, the study integrated qualitative and quantitative approaches to generate both evidential and contextual data regarding migration and its impact.

The study utilized all households in Ward No. 13 of Bheemdatta Municipality as the population. The population consisted of 500 households. Out of them, 250 received remittances and 250 did not receive remittances. A census was also carried out for all households to make the comparison easier.

Primary as well as secondary data were used in the study. The quantitative data was obtained through structured questionnaire that was given to the heads of households or one of the adults. Qualitative data were collected through tools such as Focus Group Discussion (FGDs), Key Informant Interview (KII), case study, and direct observation.

The research adhered to ethical principles. The participation was voluntary, all participants gave their consent to take part, and confidentiality was ensured and the data was used for research purposes only.

The quantitative information was examined with both descriptive and inferential statistics. The qualitative data were transcribed, coded, and analyzed through thematic content analysis to supplement quantitative results.

Results and Discussion

This part gives the findings of the socio-economic effects of foreign employment at household level in Bheemdatta Municipality. These findings have been presented

in accordance with the research objectives and incorporate both quantitative and qualitative data. The study has analyzed the socio-economic attributes of households, causes of migration, and socio-economic effects of remittance.

Socio-economic Impact of Foreign Employment

Foreign employment, particularly foreign employment in Nepal, is one of the most important sources of livelihood, mainly due to the scarcity of domestic opportunities. Foreign employment has a positive impact on income and development, but at the same time, it has negative repercussions in terms of social disorganization and dependency.

Educational Status

Education improves the quality of life through the acquisition of knowledge and skills necessary for growth. Education is one of the most important indicators of human development, where primary education becomes the basis for engagement in society. This can be seen from the illustration below in Table 1.

Table 1

Distribution of Remittance Receiving and Non-receiving Households by Educational Attainment Level of Household Members

Level of Education	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Illiterate	10	4.0	45	18.0
Primary	40	16.0	55	22.0
Lower Secondary	63	25.0	70	28.0
Secondary	65	26.0	38	15.0
Higher Secondary	50	20.0	35	14.0
Above +2	22	9.0	7	3.0
Total	250	100.0	250	100

Source: *Field Survey, 2026*

From Table 1, there is a clear discrepancy in education: illiteracy is higher and achievement levels are lower in non-remittance households than in remittance households, where secondary and higher levels of education are attained more often. This implies that remittances facilitate education investments.

Table 2

Distribution of Remittance Receiving and Non-receiving Households of Children (Aged 4 to 18) by Using Types of Schools and Educational Attainment

Type of School	Remittance Receivers		Remittance	Non-receivers
	Number	Percent	Number	Percent
Government School	90	36.0	148	59.2

Community School	58	23.2	77	30.8
Private School	102	40.8	25	10.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

According to data displayed in Table 2, children who come from households receiving remittance payments have a higher chance of enrolling in private educational institutions (40.8%) than children from households not receiving remittance payments (10.0%). In addition, many more children from non-remittance-receiving households attend government institutions (59.2% vs. 36.0%) and community schools (30.8% vs. 23.2%). These observations indicate that having remittances helps families to invest in private schooling.

Use of Remittance on Educational Pattern

In Nepal, remittances play an important role in the lives of rural families, with a considerable number using remittances to educate their children. Analysis of their utilization can help to understand how migration can enable the provision of education, human capital formation, and other advantages.

Table 3

Distribution of Remittance Receiving and Non-receiving Households Based on Educational Expenditure as a Percentage of Total Monthly Household Income

Expenditure	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
No Expenditure	14	5.5	45	18.0
Below 5	62	25.0	88	35.0
5-10	68	27.0	62	25.0
10-15	56	22.5	33	13.0
15-20	38	15.0	15	6.0
Above 20	12	5.0	7	3.0
Total	250	100.0	250	100.0

Source: Field Survey, 20226

From Table 3, remittance-receiving households show a greater amount of expenditure on education, as evidenced by the 5.5 percent that made zero expenditure on education compared to 18 percent for non-receivers, while 25 percent spent below 5 percent against 35 percent. Higher expenditures include 22.5 percent (10-15%) against 13 percent, 15 percent.

Source of Drinking Water

The availability of safe drinking water represents the condition of the health and socio-economic wellbeing of the households. This research attempts to explore

the relationship between foreign employment and remittances with respect to the improvement in the availability of safe drinking water.

Table 4

Distribution of Remittance Receiver and Non-receiver of Households by the Source of Drinking Water

Sources	Remittance Receiver		Remittance Non-receivers	
	Number	Percent	Number	Percent
Piped Water	180	72.0	145	58.0
Hand Pump	63	25.0	93	37.0
Well, / Other	7	3.0	12	5.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2023*

As can be observed from Table 4, there is improved access to water by remittance receiving families, where piped water usage is more common (72% compared to 58%), hand pump water usage less common (25% compared to 37%), and well water usage rare (3% compared to 5%).

Status of Decision-Making Process

Foreign employment has strengthened household decision-making in the study area through remittances, improving economic well-being and influencing key decisions related to education, healthcare, and overall quality of life.

Table 5

Distribution of Remittance Receiving and Non-receiving Households by Women's Participation in Family Level Decision Making

Status Decision Making	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Open Communication	153	61.2	113	45.2
Active Listening	140	56.0	130	52.0
Involvement in Decision Process	136	54.4	87	34.8
Involvement in Family Meeting	145	58.0	100	40.0
Consensus Building	141	56.4	105	42.0
Respect for Family Member	142	56.8	166	64.8
Knowledge and Information Sharing	141	56.4	100	40.0

Celebration of Achievement	133	53.2	97	38.8
Delegate Responsibility	145	58.0	128	51.2
Celebrating the Special Days	135	54.8	89	35.6

Source: *Field Survey, 2026*

Table 5 demonstrates that families who receive remittances are characterized by higher incidences of open communication (61.2% compared to 45.2%), women's participation in decision making (54.4% compared to 34.8%), participation in family meetings (58.0% compared to 40.0%), consensus formation (56.4% compared to 42.0%), information exchange (56.4% compared to 40.0%), delegation of tasks (58.0% compared to 51.2%), and achievement celebrations. This suggests a more participatory household decision-making process.

However, family members' respect is lower in cases where remittances are received (56.8% compared to 64.8%). Since respect for family members is related to family relations in general, not just women's decision making, this difference can be explained by the effect of family separation and changes in household roles.

Landownership and Landholding Size of Respondents

Size of land holding and ownership status can be considered important criteria for measuring the socio-economic status of the rural and semi-urban population. The findings reveal that families that receive remittances invest in land development or acquisition and also have larger land holdings compared to those families which do not receive any form of remittances.

Table 6

Distribution of Remittance Receiving and Non-receiving Households by Land Ownership and Landholding Status

Category	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Own Land	175	70.0	150	60.0
Rented	75	30.0	100	40.0
Landless	25	10.0	38	15.0
1-5 Kattha	65	26.0	85	34.0
6-10 Kattha	100	40.0	87	35.0
Above 10 Kattha	60	24.0	40	16.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

The comparative study regarding the landholding size and ownership between remittance-receiving households and non-remittance households proves that the foreign labor market participation and remittance flows play an important role in the creation

of assets. The percentage of landowners among the remittance receiving households is 70 percent, whereas among the non-remittance receiving households, this percentage comes out to be 60 percent. This means that people who receive remittances are more likely to own land compared to those who do not get any remittances.

Regarding the landholding size, the share of remittance-receiving households owning large parcels of land is higher than that of non-remittance households. For instance, the percentage of land holding of more than 10 Kattha is 24 percent among remittance households, whereas for the non-remittance households, this percentage is only 16 percent. Similarly, 40 percent of the remittance receiving households belong to the 6-10 Kattha category, whereas this percentage is only 35 percent for the non-remittance households.

Residential Housing Quality

Housing refers to ensuring access to adequate shelter for all members of society. In the Nepalese context, the type of housing structure reflects an individual's economic and social status (Table 7).

Table 7

Distribution of Remittance Receiving and Non-receiving Household types and Condition

Housing Condition	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Pakki	97	38.8	66	26.4
Ardha Pakki	111	44.2	82	32.8
Kachhi	42	17.0	102	40.8
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

Housing status comparisons between remittance earning and non-earning households indicate clear distinctions in housing structure. As observed, out of the sample population of 250 non-remittance earning households, 26.4 percent, 32.8 percent and 40.8 percent live in permanent (Pakki), semi-permanent (Ardha Pakki) and temporary housing (Kachhi) respectively. In comparison, from the sample group of 250 remittance earning households, 38.8 percent, 44 percent, and 16 percent live in permanent, semi-permanent and temporary houses.

This comparison suggests significantly higher percentages of permanent housing (46.9%), semi-permanent houses (37.8%), and reduced percentage of temporary houses (60.7%) for remittance earning than non-earning households. Thus, the above observations imply that there is a correlation between remittance earning and better housing quality.

Ownership of Households Amenities

Positive contributions that remittances make to the economy include savings, investments, consumption, economic growth, and more equal income distribution. They help stabilize the economy by contributing to the country's current account and minimizing risk in the face of dwindling foreign exchange reserves or increasing external debts. Remittances also create multipliers at the local levels through job creation and infrastructure developments (Table 8).

Table 8

Distribution of Remittance Receiving and Non-receiving Households Being Ownership of Household Amenities

Amenities	Remittance Receivers (n=250)		Remittance Non-receivers (n=250)	
	Number	Percent	Number	Percent
Motorcycle	194	77.6	119	47.6
TV / Radio	241	96.4	216	86.4
Smart phone	250	100.0	162	64.8
Furniture	241	96.4	119	47.6
Refrigerator	196	78.4	85	34.0
Biogas	60	24.0	50	20.0
Computer	168	67.2	92	36.8
Washing Machine	51	20.4	36	14.4

Source: Field Survey, 2026

From Table 5 above, remittance-recipient families perform better on material well-being and household asset ownership than the non-recipients. For instance, motorcycle ownership among remittance households is much higher (77.6%) than in the non-receivers (47.6%). This shows improvement in terms of mobility. On the other hand, the percentage of furniture ownership among remittance households (96.4%) is much higher than non-recipient families (47.6%), thus, an indication of improved living standard.

In addition, access to technology is more among remittance households since they own 100 percent smart phones against 64.8 percent among non-receivers. Refrigerator ownership (78.4% vs 34.0%), computer (67.2% vs 36.8%), washing machine (20.4% vs 14.4%), and TV/Radio (96.4% vs 86.4%) is more among remittance households while bio-gas use (24.0% vs 20.0%) is marginally more.

Access to Financial Service

Financial services availability indicates household empowerment and economic inclusiveness when analyzing the socioeconomic effects of foreign employment. Remittances motivate household members to utilize financial services through banks and cooperatives for the receipt, savings, and investment of money. Some households without enough resources still resort to informal sources or have no access at all. Nevertheless, it clearly shows how foreign employment encourages financial inclusion and resilience within the study site (Table 9).

Table 9

Distribution of Remittance Receiving and Non-receiving Households by Access to Financial Services

Financial Services	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Bank Saving	100	50.0	75	30.0
Land Purchase	75	30.0	60	24.0
Business	50	20.0	40	16.0
Others	25	10.0	75	30.0

Source: Field Survey, 2026

It can be observed from Table 9 that households that receive remittances have better access to financial services as compared to households that do not receive any remittances. Bank savings stand at 50.0 percent for families that receive remittances and 30.0 percent for families that do not, which suggests that remittance receivers are more financially included than non-receiving ones. Moreover, remittance-receiving households invested significantly more in land (30.0% vs. 24.0%) and business (20.0% vs. 16.0%). On the other hand, households that do not receive any remittances depend on other financial acts (30.0% vs. 10.0%).

Income Increase in Households

Household income variations play an essential role in analyzing the effect of labor migration. The comparison between 250 families who received remittances and 250 families that did not receive any remittances reveals that income improvement due to remittances help enhance the quality of life through investments in housing, education, health care services, and consumption. Additionally, remittances provide families with a reliable source of income, reducing poverty and vulnerability.

Table 10

Distribution of Remittance Receiving and Non-receiving Households by Monthly Household Income

Income	Remittance Receivers		Remittance Non-receivers		Differences
	Number	Percent	Number	Percent	
Below 20,000	27	10.8	90	36.1	70.1
20,000-40,000	144	57.4	115	45.9	25.1

40,000-60,000	42	17.0	28	11.1	53.1
60,000-80,000	27	10.8	17	6.9	100
Above 80,000	10	4.0	00	00.0	00.0
Total	250	100.0	250	100.0	

Source: *Field Survey, 2026*

In terms of income comparison, the remitting households have been found to be more economically stable than the non-remitting households. The ratio of remitting households earning NPR 20,000-40,000 is relatively higher than that of non-remitting households, which stands at 57.4 percent and 45.9 percent, respectively. Similarly, for a higher level of monthly income, the performance of remitting households becomes better as 17 percent of the households earn NPR 40,000-60,000 (against 11.1% of non-remitting households), while 10.8 percent earn NPR 60,000-80,000 (against 6.9% earn over NPR 80,000 (a category absent from non-remitting households). In contrast, a larger proportion of non-remittance-receiving households were concentrated in the lower income categories, indicating comparatively weaker economic conditions.

Annual Households Income from Different Sectors

The paper will analyze the extent to which foreign labor displaces traditional income-generating activities such as farming. Even though farming is the most common occupation among the rural population, foreign remittances may decrease dependence on agricultural activities, or in some instances, increase dependence by investing in farmland, irrigation, and implements. Analyzing annual earnings from farming will enable the researchers to establish if foreign labor complements or replaces traditional livelihoods (Table 11).

Table 11

Distribution of Remittance Receiving and Non-receiving Households by Involvement in Different Income Generating Sources

Involvement	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Agriculture	49	19.6	166	66.4
Business	25	10.0	50	20.0
Employment in Nation	29	11.6	26	10.4
Foreign Employment	142	56.8	00	00.0
Others	5	2.0	8	3.2
Cereal Crops	120	48.0	168	67.2
Cash Crops	80	32.0	47	18.8
Live Stocks	50	20.0	35	14.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

A comparison of livelihood strategies reveals distinct trends between remittance and non-remittance household types. For remittance households, foreign employment constitutes the main source of income generation in 56.8 percent, whereas agriculture contributes the highest income for 66.4 percent of non-remittance households. Business enterprises play an important role in livelihood creation among non-remittance households (20%) compared to remittance households (10%), while participation in local employment by remittance households exceeds that of non-remittance households slightly (11.6% versus 10.4%).

Among agricultural practices, non-remittance households practice cereal cultivation in more cases (67.2% compared to 48.0%), but remittance households engage more in raising livestock (20.0% compared to 14.0%) and cash crop farming (32.0% versus 18.8%). All in all, the data shows that remittances lead to greater livelihood diversification and movement from subsistence farming to income-oriented economic activities.

Saving Status of Households

Saving trends among households are an important determinant of economic sustainability and stability in the long term. In this study, there was a comparison of 500 households (250 households receiving remittances and 250 households not receiving remittances). The results of this investigation will enable us to know if foreign employment leads to better financial practices, stability, and future planning, thus achieving the research objective.

Table 12

Distribution of Remittance Receiving and Non-receiving Households by their Monthly Saving Status

Saving Status	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
No Savings	30	12.0	105	42.0
Below 5,000	115	46.0	100	40.0
5001-10,000	75	30.0	38	15.0
Above 10,001	30	12.0	7	3.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

Monthly savings data in Table 6.12 shows clear differences between remittance-receiving and non-receiving households. Only 12 percent of remittance households reported no savings compared to 42 percent of non-receiving households (−71.42%), indicating higher saving capacity among migrant households.

In lower savings (below NPR 5,000), 46 percent of remittance households saved compared to 40 percent of non-receivers. In the mid-range (NPR 5,001–10,000), 30 percent of remittance households saved versus 15 percent of non-receivers. At higher

levels (above NPR 10,000), 12 percent of remittance households saved compared to only 3 percent of non-receivers, showing a 300 percent difference. Overall, the data indicates that foreign employment significantly enhances household saving behavior, contributing to improved financial stability and long-term economic planning.

Saving Habits of Migrants

Saving behavior is an important measure of the financial habits of a household and their ability to plan. As the study region has many people working abroad, savings behavior analysis can help understand the socioeconomic impact of such remittances. This analysis is important for fulfilling the objectives of the study because it shows improved financial practices, stability, and investment potential (Table 13).

Table 13

Distribution of Remittance Receiving and Non -receiving Households by Monthly Saving Habits

Saving Behavior	Remittance Receiving HHs		Remittance Non-receiving HHs	
	Number	Percent	Number	Percent
Regular	163	65.0	100	40.0
Occasional	62	25.0	88	35.0
No Saving	25	10.0	62	25.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

The remittance-receiving households presented in the table are better savers compared to the non-receiving households. A greater proportion (65.0%) of remittance-receiving households saved on a regular basis while only 40.0% of non-receiving households could be seen to do so. On the other hand, infrequent saving appeared to be more common in non-receiving households (35.0%) than it was in the remittance-receiving households (25.0%). Similarly, the percentage of very poor saving households was again greater in non-receiving households (25.0%) than in remittance-receiving households (10.0%). All in all, it can be concluded that remittance income is able to trigger more regular saving behavior and improve household financial situation.

Annual Households Expenditure

The results indicate that households receiving remittances have higher yearly incomes, implying more financial muscle. Nevertheless, most of the money received from remittances is spent on consumption and not investments, suggesting poor financial planning. Only a fraction of the money is invested in ventures yielding income, possibly restricting future development and financial sustainability. In addition, income from remittances seems to discourage engagement in laborious economic activities such as farming. Therefore, although remittances boost immediate well-being, they could restrict sustainable development due to their focus on consumption and not investment (Table 14).

Table 4

Distribution of Remittance Receiving and Non-receiving Households by Annual Average Household Expenditure

Household expenditure	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
Durable Goods	14	5.5	13	5.0
Foods	30	12.0	37	15.0
Cloths	12	4.9	15	6.0
Alcohol	3	1.2	13	5.0
Tobacco	1	0.6	10	4.0
Festival	9	3.5	12	5.0
Home Purchase and maintenance	19	7.5	1	0.5
Transportation	6	2.5	18	7.0
Land Purchase	41	16.4	00	00.0
Education	36	14.3	37	15.0
Health	6	2.3	25	10.0
Others	3	1.2	8	3.0
Saving	70	28.1	61	24.5
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

According to Table 14, there are variations between the household expenditures of households receiving remittances and those not receiving remittances annually. Households receiving remittances tend to spend higher amounts on goods that last long (5.5% vs. 5.0%), home purchase and maintenance (7.5% vs. 0.5%), purchase of land (16.4% vs. 0.0%), and savings (28.1% vs. 24.5%), which means they are better in managing their finances. At the same time, households not receiving remittances spend more on food, clothes, education, alcohol, tobacco, festivals, transport, health, and other daily expenses. It means that in general, remittances increase savings and investment while households not receiving remittances tend to consume.

Occupation Shifting Before and After Foreign Employment

Occupational change prior to and post-migration provides insight into economic and social developments. Before migration, most household occupations were involved in low-income and traditional forms of occupation such as subsistence agriculture and manual work. With remittances, there has been a shift from manual occupations to business occupations, skilled occupations, and improved agriculture. Occupational change is indicative of the benefits of foreign employment, thus improving income stability and livelihoods (Table 15).

Table 15

Distribution of Remittance Receiving Households by Changning Occupational Status Before and After Foreign Employment (n=250)

Occupation	After Foreign Employment		Before Foreign Employment	
	Number	Percent	Number	Percent
Agriculture	75	30.0	125	50.0
Daily Wage Labor	25	10.0	63	25.0
Business	75	30.0	37	15.0
Service Sectors	75	30.0	25	10.0
Total	250	100.0	250	100.0

Source: *Field Survey, 2026*

There is an obvious change in the type of livelihood activities as seen through the effects of migration and remittance payments. Agricultural activity dropped by 40 percent from 50 percent to 30 percent. The number of people involved in daily wage activity dropped by 60 percent from 25 percent to 10 percent.

The percentage of people involved in business activities increased from 15 percent to 30 percent. Similarly, those involved in the service sector increased from 10 percent to 30 percent.

Economic Vulnerabilities of Foreign Employment

Economic risks are associated with financial distress, such as debts incurred through migration, income insecurity, dependence on informal employment, restricted access to banks, and selling assets. Households receiving remittances usually have trouble paying off their migration debts and experience fluctuations in the amount of money received from family members abroad, while those not receiving remittances find it harder to meet their basic needs and gain access to formal financial systems.

Table 16

Distribution of Remittance Receiving and Non-receiving Households by Economic Vulnerabilities Faced by Respondents (n = 250)

Economic Vulnerabilities	Remittance Receivers		Remittance Non-receivers	
	Number	Percent	Number	Percent
High Migration Debt	163	65.0	75	30.0
Struggle to Meet Basic Needs	90	36.0	160	64.0
Dependency on Informal Sector Work	70	28.0	120	48.0

No Access to Financial Institutions	40	16.0	100	40.0
Income Volatility	145	58.0	100	40.0
Asset Liquidation for Debt	70	28.0	25	10.0

Source: Field Survey, 2026

Table 16 depicts different levels of financial risks faced by remittance-receiving and non-receiving families. Remittance households have a much higher level of debt due to migration (65%, 163) than non-receivers (30%, 75). However, non-receivers struggle more to meet their basic requirements (64% versus 36%) and use informal employment (48% versus 28%). Non-receivers have less access to financial institutions (40% versus 16%), implying that remittance households are more financially included.

While there are advantages, remittance households experience income insecurity (58% versus 40%) and resort to selling their possessions to clear debts (28% versus 10%).

In conclusion, remittances alleviate poverty and increase financial inclusion but expose households to other risks like indebtedness and income instability.

Gender-Specific Outcomes of Foreign Employment

Consequences unique to gender reflect the heavier burdens faced by women within migrating families, such as domestic responsibilities, emotional strain, lack of access to healthcare services, social exclusion, and even early marriage. Women usually run the household alone, resulting in low welfare and engagement. An awareness of these consequences is necessary in order to understand the costs of migration from a social perspective rather than economic gain and develop policies accordingly.

Table 17

Distribution of Remittance Receiving Households by Gender-Specific Negative Outcomes

Impacts	Remittance Receivers (Male)		Remittance Receivers (Female)	
	Number	Percent	Number	Percent
Force Early Marriage	9	5.0	19	25.0
Increased Domestic Workload	44	25.0	61	82.0
Limited Health Care Access	49	28.0	31	42.0
Mental Health Issues	70	40.0	50	68.0
Social Isolation	75	30.0	41	55.0

Source: Field Survey, 2026

Note*: Total RRHHS=250 Out of them Males were: 176 and Females were 74*

The table clearly reflects significant differences between males and females in terms of negative consequences. Compulsory early marriages have been experienced by 25 percent of women versus 5 percent of males, showing a difference of 80 percent. Increased domestic responsibilities have affected 82 percent of women compared to only 25 percent of males.

Moreover, the access to healthcare services is more limited in women (42% vs. 28%), the incidence of psychological disorders among women is higher (68% vs. 40%), and social isolation affects 55 percent of women against 30 percent of men.

Adverse Impacts of Foreign Employment on Agriculture

Negative consequences of foreign employment on agriculture involve labor shortage, decreased agricultural operations, decreased output of crops and livestock, and loss of traditional agricultural skills because young people leave their homes in search of better opportunities abroad. In places such as Bheemdatta Municipality, agriculture is impacted by the fact that remittances from foreign employment are spent on personal consumption and not on agriculture.

Table 18

Distribution of Remittance Receiving and Non-receiving Households by Negative Impacts on Agriculture Practices

Impacts	Remittance Receivers		Remittance Non- receivers		Differences
	Number	Percent	Number	Percent	
Shortage Family Labor	170	68.0	65	26.0	161.5
Increased Reliance on Hired Labor	140	56.0	55	22.0	154.5
Farmland Left Fallow or Abandoned	105	42.0	30	12.0	250.0
Reduction in Crop Production/Yield	90	36.0	35	14.0	157.1
Decline in Livestock Rearing Activities	95	38.0	40	16.0	137.5
Decrease in Dairy and Meat Production	85	34.0	38	15.2	123.7
Reduced Investment in Agricultural Inputs	88	35.2	42	16.8	109.5
Neglect of Irrigation and Farm Infrastructure	70	28.0	30	12.0	133.3

Loss of Traditional Agricultural Knowledge/ Skills	110	40.0		50	20.0	100.0
Less Participation in Farmer Cooperatives/ Groups	98	39.2		38	15.2	157.9

Source: Field Survey, 20226

Remittance recipient households suffer more negative consequences for agriculture compared to non-recipient households, according to data collected from 250 households (Table 18). Labor shortage is relatively higher in the former (68% compared to 26%), implying higher dependence on hiring farm labor (56% compared to 22%). Land abandonment is also relatively high (42% compared to 12%), suggesting a lower priority for farming activities.

Agricultural productivity is lower in the former households with higher percentages of lower crop yield (36% compared to 14%) and lower livestock production (38% compared to 16%). In addition, the use of farm inputs is lower (35.2% compared to 16.8%) as well as lower meat and dairy production (34% compared to 15.2%) and farm infrastructure investment (28% compared to 12%). Moreover, loss of farming skills (40%) and low membership in farming associations (39.2% compared to 15.2%) are relatively higher among remittance recipient households.

Death, Disability, Missing on the Based on Age (Last 5 Years).

Age-based classification of deaths, disability, and missing migrants can help determine who the most vulnerable groups are based on age due to accidents, sicknesses, exploitations, or unsafe working conditions while abroad.

Such classification of migrants' death, disability, and disappearance is significant since it underscores the importance of protecting human lives through proper policies regarding safe migration. Moreover, such classification also recognizes the economic implications of such phenomena within families when a member of the household dies or falls ill during their time abroad.

Table 19

Distribution of Remittance Receiving and Non-receiving Households by Death, Disability and Missing according to Age Groups. (Last 5 Years)

Age Group	Remittance Receivers			Remittance Non-receivers		
	Death	Disability	Missing	Death	Disability	Missing
20-29	1	3	2	1	1	00
30-39	1	2	1	0	0	1

40-49	3	5	00	1	2	00
50-59	1	2	1	0	1	00
60-69	0	0	00	0	0	00
Above 70	0	0	00	1	0	00
Total	6	12	4	3	4	1

Sources: Field Survey, 20226

Table 19 is the comparison of deaths, disabilities, and missing persons by age category between remittance recipients and non-recipients over the last five years.

Among the 20 to 29 age group, remittance recipients reported one death, three disabilities, and two missing persons (non-receivers reported one death and one disability). For the 30 to 39 age group, there was one death, two disabilities, and one missing person for remittance recipients compared to one missing person for non-receivers. Remittance recipients had a significant increase in the 40 to 49 age group with three deaths and five disabilities (one death and two disabilities for non-receivers). For the 50 to 59 age group, remittance recipients reported one death, two disabilities, and one missing person compared to one disability for non-receivers. There were few cases in the 60+ age category.

Conclusion

This study emphasizes the impact of foreign employment on the economy of the Bheemdatta Municipality. Remittances have led to more income among households (57.4% of the households are getting NPR 20,000–40,000), better housing (38.8% of the houses are made of permanent materials), and more enrollment of kids in private schools (40.8%). However, meanwhile, foreign employment has caused labor shortage in the agriculture sector (68%), because there are unutilized lands (42%), migration-related loans (65%), as well as increased psychological distress (68%) among females and heavy workload (82%). On the one side, remittances have significantly increased living standards of people; on the other side, their reduced utilization for effective investments can negatively affect sustainability in the future. The study advises implementing financial education, stimulate investments, offer advising to migrants to families, support agriculture through mechanization, and develop skills, and advance integration program for returning migrants.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98977

Stress, Isolation and Coping in Simulated Space Environments: A Qualitative Study

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Abstract

While technical reliability is important, psychological reliability is needed for long duration space exploration because people in isolated, confined and extreme environments need to be psychologically hardy. Some of the other spaces that can be simulated to study stress, social isolation, monotony, diminished privacy, communication delays and other psychosocial issues prior to the actual long-duration mission are space-analogue habitats, polar stations, confinement chambers and mission simulations. A qualitative study which adopts thematic synthesis approach was conducted to review literature since 2020 to explore the experience of stress and isolation of simulated space environments, and the coping mechanism that is consistently linked to wellbeing and performance. The analysis resulted in five themes: (1) stress is perceived as a cumulative and phase-sensitive demand, (2) isolation is perceived as change of connection, not as separation, (3) coping is assisted by structure, routine and self-regulation, (4) coping processes in the environment and online need to preserve autonomy, privacy and trust, (5) team coping is a process of collective protection and adaptation. The results suggest that coping is not just a sole individual psychological ability, but a multilevel phenomenon affected by aspects of the habitat, mission programmes, autonomy, communication, norms, social support and access to meaningful activities. This study suggests that adaptation to the psychological aspects of long duration missions needs to be built as a whole package, with a mix of individual coping strategies, supportive team procedures, environmental design and reliable technological countermeasures.

Keywords: Simulated space environments, isolation, stress, coping mechanisms, qualitative thematic synthesis

Introduction

Future manned lunar, Mars and other deep space missions will require extended missions over distance, autonomy, isolation, confinement, operational pressure and

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limited real-time communication with Earth. These are not solely technical issues. They also present psychological and social problems as the crew members have to perform, regulate their emotions, cooperate, sleep, be motivated and make decisions in a very controlled environment and small space. In recent years, the field of space psychology has thus studied behavioural health as a mission-critical problem, with a specific focus on stress, disrupted sleep, social friction and decreased support, which can impact both the individual's wellbeing and collective performance (Pagnini et al., 2023; Stahn et al., 2023).

While many of the psychological risks involved in deep space missions can be simulated in these environments, simulation is not possible for many. Analogue operations, including Antarctic stations, underwater missions, isolated habitats, Human Exploration Research Analog-type facilities, SIRIUS-type confinement studies, and Mars-like analogue missions enable researchers to study isolation, confinement and monotony, team interaction, stress responses, communications, sleep, workload, autonomy, and coping under controlled or semi-controlled conditions. Despite the fact that these analogues are not necessarily perfectly accurate, they are nevertheless significant for behavioural health research and allow for repeated observations of human adaption before crew members can go to greater distance and risk during real explorations (De la Torre et al., 2024; Schlosser et al., 2025).

There has been impressive new research in the measurement of stress, sleep, cognitive functioning, physiological measures, social support, and communication in spaceflight analogues. Despite the critical role of subjective, interpersonal, environmental, and operational experiences in the development of mental health, methodological fragmentation, analogue fidelity, small sample size, and the lack of integration of these experiences have consistently been identified as limitations in behavioural-health research (Pagnini et al., 2023; De la Torre et al., 2024; Schlosser et al., 2025). Much of the evidence reporting the meaning participants attribute to confinement, decreased privacy, boredom, delayed communication, interpersonal dependence, and feelings of control is scattered across various research fields (Palinkas & Suedfeld, 2021; Dunn Rosenberg et al., 2022; Tonon et al., 2024). There is therefore a need for a theory-informed qualitative synthesis that would link up the findings and consider stress, isolation and coping as interwoven individual, interpersonal, environmental and organisational processes. To close this gap, the present study provides an interpretation of the recent published literature as documentary qualitative data, and synthesises the meaning that is similar across the simulated and analogue space environments.

The study is also pertinent to the ongoing space science and technology development process in Nepal. With the launch of NepaliSat-1, the first satellite launched by Nepal in 2019, space development came into national discussion and Nepal's participation in space-related education, research and capacity building has emerged (United Nations Office for Outer Space Affairs [UNOOSA], 2022). But

the importance of behavioural-health research doesn't have to stop in the realm of crewed space travel. In turn, Nepalese learning about isolation, confinement, restricted privacy, team interdependence, communication restrictions and psychological self-regulation may help prepare and support personnel for work in Nepal's high-altitude environments, as well as in field and remote research sites, disaster response, military assignments and other high-stakes isolation and confinement situations. The study is, therefore, both space-science relevant and has a strong local interest and value in understanding human adaptation in remote, confined and extreme environments.

This investigation thus focuses on the subjective perception of stress in an artificial space environment, on the effects of isolation on emotional, social and operational functioning, and on those coping responses that seem to be most appropriate in space for keeping the individual well and performing effectively both at the individual and team level, as well as in the environment and technology. It also discusses implications of these results for psychological preparation, crew training, communication systems, habitat design, and support for the behavior health and wellbeing of future long-duration missions.

Literature Review

Simulated Space Environments and Behavioural Health

Simulated or analogue space environments are not completely representative of actual spaceflight, but they do simulate the aspects of spaceflight that can be controlled, including confinement, time delays in communication, high workload, lack of privacy, limited crew size, sensory isolation, and limited movement. They hold the potential to allow researchers to investigate behaviour, team dynamics, operational performance, autonomy, habitability, and adaptation in controlled environments, such as those with fewer stressors (De la Torre et al., 2024; Schlosser et al., 2025).

Isolation, as well as distance, altered gravity and radiation, are among the key risks to human health and performance in space missions identified by NASA. Extended isolation can result in cognitive, behavioral and psychological changes that impact the crew member's wellbeing, performance, relationships, and mission success (NASA, 2025, 2026). Thus, stress and isolation are defined as "operational risks" that need to be addressed in mission planning and habitat design.

The stress in space analogue environments is a result of the interplay between several factors such as workload, uncertainty, sleep disturbance, lack of privacy, communication, sensory failure, lack of autonomy and dependence on a group of limited size. Stress can affect adaptations, interpersonal relationships, cognition, and emotions, and is a dynamic process that is impacted by the environment and the individual and team response (Palinkas & Suedfeld, 2021).

Stress, Sleep and Cumulative Strain

Stress can vary over the course of a mission, not just at the beginning and end of the mission. Early stages can include novelty, adjustment, and workload; later stages can include monotony and fatigue, interpersonal tension, and decreased motivation. Stress appears to be affected by mission phase, the length of the mission, workload, adaptation, and social interactions within the mission, as stress was found to be higher during the first month and the middle of the analogue mission by Dunn Rosenberg et al. (2022). Another important pathway is sleep disruption, which is caused by chronic stress and impacts wellbeing and performance. Isolated, confined and extreme (ICE) environments can lead to poor quality and quantity of sleep, impacting attention, emotional regulation, decision making and teamwork (Zivi et al., 2020).

There has been more recent research on objective indicators of stress via technologies like fNIRS and EEG during longer (incarceration) periods. Al-Shargie et al. (2023, 2024) proved that neurophysiological methods have great potential for stress response monitoring. Physiological indicators, however, do not account for the experience of stress, coping strategies or preferred types of P.O.S. for individuals.

Isolation as Relational and Operational Separation

Isolation in simulated space environments includes physical isolation, reduction in social interaction, limited sensory input, limited movement, lack of privacy, and constant interaction with a small crew. Isolation was consistently associated with psychological stress, with duration of isolation, uncertainty, confinement and lack of support predicting psychological stress, as demonstrated by Tonon et al. (2024), which underscored isolation as a multifaceted social, emotional and operational state. Communication delays can add to the feeling of isolation as it decreases immediate help from ground crews. Supolkina et al. (2021) demonstrated that delayed communication affects crew–ground interaction and demands more crew autonomy, reinforcing the importance of good communication practice, conflict management and emotional support strategies. Social support is an important protective factor in remote areas. According to Bell et.al. (2025) crewmate support is of great importance due to challenges, workloads, and living conditions experienced by crew members. This support helps build teamwork, trust, morale and psychological safety.

Coping Mechanisms and Psychological Countermeasures

There are individual and system level strategies for coping in simulated space environments. Individual strategies focus on emotional regulation, mindfulness approaches, physical exercise, humor, sleeping routines and engaging activities, and system-level strategies on effective scheduling, privacy, leadership, communication, crew composition, and habitat design. Gatti et al. (2022) point out coping, adaptation, resilience and stress management are all interdependent processes that need support from both the individual and mission systems.

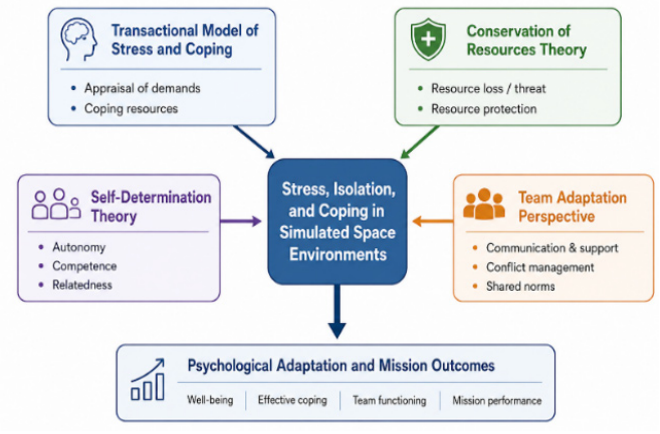
Psychological countermeasures are increasingly being studied, such as mindfulness and relaxation techniques. They can enhance attention, emotional regulation and adaptation whilst confined (Le Roy et al., 2023). In an analogue mission team, Skorupa et al. (2025) identified positive associations between mindfulness and feelings of job satisfaction, positive emotions and emotional balance. But these strategies need to be supported by other ones like workload control, sleep support and conflict management.

Automated Psychotherapy and mindfulness apps can be used alongside digital tools and provide extra support during missions of longer duration. Smith et al. (2023) note that ensuring privacy, autonomy, trust, and acceptance are the critical aspects of such technologies is essential. Virtual reality (VR) and artificial intelligence (AI) are also being explored for relaxation, training and emotional support, but these tools are not seen as a replacement for relaxation, training or emotional support, because of the fact that they can cause cybersickness, variable user responses and lack of evidence (Thomas, 2023; Sharp et al., 2025).

Theoretical Framework

Figure 1

Integrated Theoretical Framework for Stress, Isolation and Coping in Simulated Space Environments



Developed by the author based on Lazarus and Folkman (1984), Hobfoll (1989), Ryan and Deci (2000, 2022), Burke et al. (2006), and Marcinkowski et al. (2021)

The stress and coping theory, conservation of resources theory, self-determination theory, and team adaptation theory are used to provide a theoretical framework for this study. These are two theories that together account for how individuals perceive mission requirements, allocate resources, sustain their motivation, and adjust as a group in isolated and confined space environments.

According to the transactional model, which was proposed by Lazarus and Folkman (1984), the consequences of stress are influenced by how people appraise environmental demands and cope with them. Environmental conditions like workload, confinement, isolation, and communication delays can be experienced differently by human subjects based on individual resources, fatigue and mission phase in simulated space conditions.

Conservation of resources theory emphasizes that stress happens when valued resources are threatened or depleted, which includes stressing resources like sleep, privacy, energy, social connection, and personal control (Hobfoll, 1989). Relationships, activities, time and routines are resources that are maintained by protective factors: supportive relationships, meaningful activities, predictable routines and recovery opportunities.

In this regard, self-determination theory (SDT) highlights the roles of autonomy, competence and relatedness in the areas of motivation and wellbeing (Ryan & Deci, 2000, 2022). May be a challenge to these needs in space analogue environments through limited choice, challenging tasks, social separation and coping strategies that are effective, supportive relationships and flexible.

Space mission teams require consideration of 'team adaptation perspectives' because human performance and well-being rely on the ability of team members to support each other. Communication, shared understanding, flexibility of roles and conflict management are all important factors in the resiliency of the team, and individual stress levels can affect the entire crew (Burke et al., 2006).

These theories all offer a multilevel framework whereby individual appraisal, resource management, psychological needs and team processes all influence stress and coping and ultimately adaptation. This framework was used to analyze certain themes such as cumulative stress, social isolation, self-regulation strategies, autonomy-supportive interventions, and the coping of teams in simulated space environments.

Methods and Procedures

Research Design

A document-based qualitative thematic synthesis was used in this study. The design was chosen due to the intent of the study, which was to identify, compare, and interpret common patterns in stress, isolation, and coping in research conducted in simulated and analogue space environments, and not to calculate pooled effect sizes. Articles, reviews, and pertinent institutional documents were considered documentary sources and findings, concepts, and interpretive statements were drawn from these sources for qualitative analysis.

Systematic familiarisation with the data, coding, theme development, theme review and interpretation of patterned meaning (Braun & Clarke, 2006, 2022; Ayre & McCaffery, 2022; Ahmed et al., 2025) guided the study. It also made use of thematic-

synthesis procedures where findings that were reported in various publications were coded and then described and analyzed into theme (Thomas & Harden, 2008). This approach proved suitable as literature could be found in several different subjects such as space psychology, behavioural health, human factors, team research, isolation studies and technological-countermeasure studies. The design thus allowed for the evidence to be examined within these fields, but also had the potential to keep contexts and limitations of the studies themselves in mind when interpreting the evidence.

Data Sources and Selection

The literature search in this study was not systematic but instead was purposeful and based on relevance. Open access sources, reference screening, and official NASA and ESA sources were used to search for English-language, full-text sources published from January 2020 to July 2026. Simulated space environment, isolation, stress, coping, behavioural health, sleep, social support, communication, psychological countermeasures were all terms included in the search.

Sources were selected if they discussed the effects of simulated or analogue space environments or conditions similar to space environments, isolated, confined, and extreme environments, and/or topics related to stress, adaptation, teamwork, environmental design, and/or psychological support. Sources that were not behaviourally relevant, detailed, full-text or scholarly in nature were omitted. This process is more transparent, but may have resulted in language and access bias.

A total of 37 sources were kept. Of these, 13 were used as support for the theoretical and contextual discussions and 24 (21 peer-reviewed articles/reviews and three NASA documents) were used directly in the thematic analysis. Grey literature included institutional documents, while unpublished theses and commercial webpages and non-scholarly reports were not included.

There was no screening process based on the PRISMA and so search yields, duplicate numbers and exclusion numbers were not reported. Thus the study is not a comprehensive systematic review, rather a purposive qualitative thematic synthesis.

Data Analysis

The analysis process was used which is similar to that of themed analysis (Braun & Clarke, 2006, 2022; Thomas & Harden, 2008; Ayre & McCaffery, 2022; Ahmed et al., 2025). Structured extraction and coding matrix was used to extract and code the text manually. The matrix included for each of the 24 publications, information regarding

the source, the study context, relevant finding, initial code, descriptive category and final analytical theme.

The codes were limited to those codes that directly related to the focus of the study. This comprised results and conclusions about stress, loneliness, coping, sleep, communication, social support, team working, privacy, environmental factors, and mindfulness and technological countermeasures. Background information, purely technical information, references and results that were unrelated to the behavioural health were not coded.

This analysis was in four steps. Firstly, very close reading of the publications was done and text relevant to it was extracted. Second, the material extracted was sorted into 10 codes, which were replicated: loss of control, decreased privacy, communication delay, crew support, monotony, sleep disruption, self-regulation, mission meaning, digital countermeasures and team adaptation. Third, codes which were related were grouped together into five descriptive categories: cumulative mission requirements, modified social relationship, planned personal coping, environmental/technological assistance, and group team adaptation. Fourth, these categories were translated in terms of the integrated theoretical framework and five analytical themes were created.

Every theme was analysed and compared to the material extracted to give consideration to the support of the theme to ensure that the theme was unique and not duplicated with other themes. Special attention was given to evidence which was not equally distributed over missions, including time of stress and emotional change which was different from mission to mission. This allowed for the analysis to be used without the problem being seen as a "one-size" problem. The inter-coder reliability of the study is not high because the information was coded by only one person but it can be enhanced by the use of coding matrix, multiple comparison with the documents researched and the explanation of the connection between the codes, categories, evidence and themes.

Table 1

Development of Codes, Descriptive Categories and Analytical Themes

Initial Codes	Descriptive Category	Final Analytical Theme
Monotony; sleep disruption; loss of control	Cumulative mission demands	Stress Is Experienced as Cumulative and Phase-Sensitive Demand

Communication delay; reduced privacy	Altered social connection	Isolation Is Experienced as Altered Connection Rather Than Simple Separation
Self-regulation; mission meaning	Structured personal coping	Coping Is Supported by Structure, Routine, and Self-Regulation
Digital countermeasures; reduced privacy	Environmental and technological support	Environmental and Digital Countermeasures Must Protect Autonomy, Privacy, and Trust
Crew support; team adaptation	Collective team adaptation	Team Coping Functions as a Collective Safety and Adaptation Mechanism

Ethical Considerations

The study examined the published literature available in public domain and official documents from various institutions without recruiting, observing and participating directly with human subjects. Informed consent of the participants was not necessary, therefore. However, ethical care was upheld by correctly reporting the results of the original studies, citing the original studies, avoiding generalising without justification, and recognising the use of small or context-specific analogue samples. Thus, the analysis was designed to not consider participants in simulated environments as equal astronauts when they actually fly in space, as analogue environments vary in terms of mission duration, participants, operational risk, environment fidelity, and research design (De la Torre et al., 2024; Schlosser et al., 2025).

Results and Discussion

Overview of the Thematic Findings

The five themes and their relationships were developed through the thematic synthesis process to represent how stress, isolation and coping function in simulated space environments at the individual, interpersonal, environmental, technological, and team level. The analytical meaning of each theme at its core, the main pieces of evidence in the literature, the theoretical interpretation, and its connection to the research focus of the study are shown in Table 1. While separate for analysis, the themes should be understood as interdependent processes that impact or affect each other during various phases of a simulated mission.

Table 2

Overview of Themes, Evidence, Theoretical Interpretation and Research Focus

Theme	Core Analytical Meaning	Principal Evidence from the Literature	Theoretical Interpretation	Research Focus
Theme 1: Stress Is Experienced as Cumulative and Phase-Sensitive Demand	Stress develops through the accumulation of repeated psychological, interpersonal, environmental, and operational demands. Its intensity may change across mission stages according to workload, sleep, monotony, perceived control, and available coping resources.	Dunn Rosenberg et al. (2022) reported changing biobehavioural and psychosocial stress patterns across long-duration analogue missions. Skorupa et al. (2024) also found that negative emotional changes did not follow one uniform temporal pattern. Sleep disruption and environmental demands may further affect emotional regulation and operational functioning (Zivi et al., 2020).	The transactional model explains how stress depends on the appraisal of demands and perceived coping ability (Lazarus & Folkman, 1984; Obbarius et al., 2021; Faryabi et al., 2022). Conservation of resources theory explains how repeated demands may gradually deplete privacy, sleep, energy, control, and social resources (Hobfoll, 1989; Farkash et al., 2022).	How stress is experienced and interpreted in simulated space environments.
Theme 2: Isolation Is Experienced as Altered Connection Rather Than Simple Separation	Isolation combines reduced contact with family, society, and familiar environments with continuous exposure to a small and highly interdependent crew. It therefore changes the form, availability, and intensity of social connection.	Tonon et al. (2024) associated prolonged isolation, confinement, limited interaction, and inadequate support with psychological stress. Supolkina et al. (2021) identified changes in crew–ground communication during simulated interplanetary missions. Bell et al. (2025) showed that support differed across crewmates, family and friends, organisations, and the public.	Conservation of resources theory explains how separation from familiar relationships and reduced privacy may threaten social and emotional resources. Self-determination theory highlights the importance of relatedness, while team adaptation perspectives explain how restricted external communication increases dependence on internal crew relationships.	How isolation influences emotional, social, and operational functioning.

Theme 3: Coping Is Supported by Structure, Routine, and Self-Regulation	Predictable schedules, meaningful activities, sleep routines, private time, humour, mindfulness, relaxation, and role clarity create stability and limited areas of personal control within a restricted environment.	Gatti et al. (2022) described coping and resilience as continuing dimensions of affective health. Le Roy et al. (2023) identified mindfulness as relevant to adaptation, while Skorupa et al. (2025) found positive associations between mindfulness, job satisfaction, and positive emotions. Pagnini (2024) also identified mindfulness, relaxation, training, and psychological-support tools as possible countermeasures.	Self-determination theory explains how structured but meaningful routines may support autonomy and competence (Ryan & Deci, 2000, 2022). The transactional model explains how routines and self-regulation may change the appraisal of demands, while conservation of resources theory explains their role in protecting energy, sleep, control, and emotional stability.	Which individual coping mechanisms support wellbeing and performance?
Theme 4: Environmental and Digital Countermeasures Must Protect Autonomy, Privacy, and Trust	Habitat design and digital technologies can support coping by providing privacy, sensory variation, relaxation, psychological assistance, training, and connection. Their value depends on whether they are acceptable, voluntary, trustworthy, and non-intrusive.	NASA (2022) identifies privacy and habitability as relevant to behavioural health. Thomas (2023) and Sharp et al. (2025) describe potential applications of virtual reality and artificial intelligence for relaxation, mood support, training, exercise, and habitat evaluation. Smith et al. (2023) emphasise autonomy, privacy, trust, and user acceptability in off-world mental-health technologies.	Self-determination theory explains why tools that support autonomy and competence may be beneficial, while compulsory or intrusive technologies may frustrate psychological needs. Conservation of resources theory explains how habitat design and digital support may protect privacy, recovery, emotional energy, and environmental variety.	How environmental and technological coping systems can support wellbeing without increasing surveillance or loss of control.

Theme 5: Team Coping Functions as a Collective Safety and Adaptation Mechanism	Coping is a shared process in which the stress and behaviour of one member affect the whole crew. Shared routines, fair workload, mutual monitoring, supportive communication, flexible roles, conflict repair, and psychological safety contribute to collective resilience.	Marcinkowski et al. (2021) reported that conflict in isolated, confined, and extreme teams differs from ordinary workplace conflict because crew members live and work together with limited opportunities to withdraw. Bell et al. (2025) and Supolkina et al. (2021) demonstrate the importance of crewmate support and adaptive communication in isolated mission environments.	Team adaptation perspectives explain how crews recognise changing demands, coordinate responses, redistribute workload, repair conflict, and maintain performance (Burke et al., 2006). The transactional and conservation of resources perspectives also explain how team behaviour can either strengthen or deplete the coping resources of individual members.	How collective coping and team processes support emotional, social, and operational functioning.

Table 3

Representative Literature Evidence Supporting the Analytical Themes

Analytical Theme	Representative Evidence From the Analytical Corpus	Source
Stress Is Experienced as Cumulative and Phase-Sensitive Demand	Stress varied across long-duration analogue missions, with relatively high levels during the early mission period and around the midpoint, while psychosocial strain showed evidence of accumulating over time. Emotional changes did not follow one identical temporal pattern across all participants or missions.	Dunn Rosenberg et al. (2022); Skorupa et al. (2024)
Isolation Is Experienced as Altered Connection Rather Than Simple Separation	Prolonged isolation, confinement, restricted interaction, and inadequate support were associated with psychological stress. In simulated interplanetary conditions, increasing autonomy and communication delay altered crew–ground communication, while crewmate support became especially relevant because crew members shared the same immediate environment and demands.	Tonon et al. (2024); Supolkina et al. (2021); Bell et al. (2025)

Coping Is Supported by Structure, Routine, and Self-Regulation	Mindfulness was associated with positive emotions, emotional balance, and job satisfaction among analogue mission participants. Mindfulness, relaxation, structured activity, and psychological preparation were identified as potentially useful components of coping and behavioural-health support.	Le Roy et al. (2023); Pagnini (2024); Skorupa et al. (2025)
Environmental and Digital Countermeasures Must Protect Autonomy, Privacy, and Trust	Virtual reality may support relaxation, mood, exercise, training, and restorative experiences, although cybersickness, user preference, and limited artificial-intelligence evidence remain concerns. Mental-health technologies may be less acceptable when privacy, trust, autonomy, and data use are unclear.	Thomas (2023); Smith et al. (2023); Sharp et al. (2025)
Team Coping Functions as a Collective Safety and Adaptation Mechanism	Conflict in isolated, confined, and extreme teams differs from ordinary workplace conflict because crew members live and work together with limited opportunities to withdraw. Crewmate support, adaptive communication, mutual assistance, and coordinated responses therefore contribute to both wellbeing and operational functioning.	Marcinkowski et al. (2021); Supolkina et al. (2021); Bell et al. (2025)

Stress Experienced as Cumulative and Phase-Sensitive Demand

Dunn Rosenberg et al. (2022) demonstrated that stress levels differed across the analogue missions (8–12-month missions) with higher levels of stress during the first month and mid-mission stress, with psychosocial stress building with time. Likewise, Skorupa et al. (2024) reported that the emotions did not change in a consistent manner. This can also be attributed to sleep disruption, due to workload, confinement and environmental factors, which could further increase the level of cumulative strain (Zivi et al., 2020). This research shows that stress is related to mission phase, workload, fatigue, social factors and personal factors.

Stress occurs when demands are put together, like lack of privacy, lack of variety, communication delay, inability to sleep and interpersonal tension. NASA (2022) lists habitability, workload management, privacy and behavioural-health support as important factors to consider when entering confinement. Lazarus and Folkman (1984) proposed the transactional model which states that the demands are not uniformly processed and evaluated by all individuals, making human responses to demands variable.

Conservation of resources theory also proposes that continued demands can lead to depletion of resources like sleep, energy, privacy, social support and personal control and also make individuals more vulnerable to future stressors (Hobfoll, 1989). These resources can be restored through protective factors like recovery time, meaningful activities, supportive relationships and predictable routines.

In general, stress in simulated space situations is stressful and phase-dependent, resulting from dynamic appraisals and from the balance of loss and gain of resources. Monitoring of behaviour should then continue and be flexible to workload, sleep, social interaction and individual differences.

Isolation Experienced as Altered Connection Rather than Simple Separation

Loneliness, isolation, limited social contact and poor support have been related to psychological stress by Tonon et al. (2024). Isolation is the separation from family and society, and the constant interaction with a small crew, which results in the reduction of outside contact, and increase of inside dependence in simulated space. Another modification of social relationships, which also affects communication, is the reduction in immediate assistance from Earth-based teams. Supolkina et al. (2021) demonstrated how communication restrictions and need for increased internal problem solving and emotional management lead to increased crew autonomy.

The role of the various sources of social support is different. Bell et al. (2025) noted that crewmate support is important due to crewmate's working environment, work load and challenges. This can include emotional validation, assistance with the practical aspects and better team functioning. Isolation may pose threats to social, emotional and environmental resources, and self-determination theory makes relatedness and meaningful connection a central concern (Hobfoll, 1989; Ryan & Deci, 2000). The team adaptation perspective also indicates that the ability to communicate, trust, manage conflict, and work together to make decisions is critical to keeping everyone's performance level high (Burke et al., 2006).

In general, isolation in simulated space situations may be considered as the change in conjunction, not the mere separation. The outcome will be mediated by quality of communication, social support, privacy, trust and the adaptability of the crew as a whole.

Coping Supported by Structure, Routine and Self-Regulation

Environmental support for coping in simulated space situations is based on routine daily practices rather than on one-off psychological interventions. Gatti et al. (2022) state that a number of factors are intertwined in long duration mission health: coping, adaptation, resilience, and stress regulation. Predictability and perceived control can be enhanced by having predictable schedules, clear roles, sleep routines, physical activity, private time, meaningful work, humour and leisure activities.

After using mindfulness and relaxation techniques, further support for emotional regulation and adaptation may be achieved. Pagnini (2024), Skorupa et al. (2025), and Le Roy et al. (2023) recommend that mindfulness based practices and psychological training are able to enhance attention, emotional balance and coping skill prior to and during missions.

Other practices shape the way crew members think about and respond to demands in difficult situations, making them appear more manageable (Lazarus & Folkman, 1984) and thus, easier to handle. In terms of self-determination theory, good routines need to foster autonomy, competence, and relatedness, not too much, or too little control (Ryan & Deci, 2000). Another theoretical perspective on stress and strain is given by the conservation of resources theory which emphasizes the importance of sleep, privacy, recovery time, and meaningful activities for the conservation of psychological resources (Hobfoll, 1989).

It is the individual's coping, however, that doesn't replace appropriate mission design. The management of workload, the habitability, privacy, and trustworthy support systems continue to be important (NASA, 2022; Smith et al., 2023). Overall, coping in simulated space environments is related to structured autonomy, i.e., a combination of personal coping strategy and space mission support to sustain wellbeing and performance.

Environmental and Digital Countermeasures Must Protect Autonomy, Privacy and Trust

New studies and research are pointing to virtual reality (VR), artificial intelligence (AI), automated psychological support and digital wellbeing tools as possible countermeasures to isolation and confinement. VR can offer restorative experiences, emotional stimulation, relaxation, and training and communication assistance for long-duration missions (Thomas, 2023; Sharp et al., 2025). Yet, there are still some restrictions like cybersickness, personal preference, and the lack of evidence for the applications of AI.

Automated psychotherapy, mindfulness tools, relaxation strategies and psychological training are potential behavioural-health supports that have been mentioned by Pagnini (2024). Digital tools should be used in addition to effective workload management, sleep support, conflict resolution and mission conditions.

Smith et al. (2023) point out that autonomy, privacy, trust and user acceptance are all critical for the protection of psychological technologies. The use of mood, sleep and/or behaviour monitoring systems could be added stressors if feeling intrusive or associated with performance measurement.

Self-determination theory emphasizes the importance of technology enabling autonomous, competent, and related experiences (Ryan & Deci, 2000). Additionally, resources like privacy, recovery, emotional energy and personal control should be

maintained as a principle of countermeasures based on conservation of resources theory (Hobfoll, 1989). Hence, the design of the habitat (privacy, lighting, variation of senses, restorative spaces), is also important (NASA, 2022).

Overall, digital and environmental countermeasures are useful, provided they do not decrease autonomy and trust and increase wellbeing. Effective systems should be clear, flexible and be connected to mission-focused and supportive habitat design.

Team Coping Functions as a Collective Safety and Adaptation Mechanism

Studies have found that coping is also a communal process in isolated, confined and extreme environments. Marcinkowski et al. (2021) emphasize that the lack of privacy, constant interaction, and limited ability to get away from the situation can exacerbate conflict in these environments. This can then impact the entire crew on issues of trust, workload, and performance due to individual stress, fatigue, or communication issues.

Social support and communication are key elements of team coping. As the crewmate support is a very special one, as the crewmates share the same environment and operational pressures; Supolkina et al. (2021) illustrated that communication patterns change as crew autonomy grows. Good teams establish routines and norms, divide the work evenly, support one another, deal with conflict, and engage in open discussion.

The team adaptation process includes recognizing changing demands, establishing team understanding, coordinating responses, and adapting to changing conditions (Burke et al., 2006). Supportive communication enhances individual stress appraisal, helps to conserve resources and promotes trust and cooperation (Lazarus & Folkman, 1984; Hobfoll, 1989).

In addition, self-determination theory states that psychologically safe teams foster autonomy, competence, and relatedness, and a lack of leadership and/or conflict resolution can negatively affect wellbeing and performance (Ryan & Deci, 2000). In general, team coping acts as a group protection mechanism to help cope, to protect the resources, and to accomplish the mission. All of these aspects of communication, conflict management, fatigue recognition, shared decision making and psychological safety should be considered essential for preparing for long duration missions.

Conclusion

This thematic synthesis, which is of a qualitative nature, shows that stress, isolation and coping in simulated space environments are intimately related. Stress is not the biological response, or a reaction to a single event. It emerges as a result of evaluations and re-evaluations of workload, uncertainty, and limited control, loss of privacy, loss of sleep, limitations in communication, interpersonal conflict, and psychological and social support. Isolation is also more complicated than being separated from the outer planets or from the rest of humanity. This includes limited

exposure to external relationships and constant exposure and reliance on a small group of people within the group.

Five interrelated findings were generated in the synthesis. Stress is additive, not evenly distributed across a mission, and is sensitive to the phase. Second, isolation is felt as a change in connection – it's a decrease in external connection, but an increase in internal social connection. Third, coping is facilitated through structure, routine, meaningful activity, adequate recovery and self-regulation. Fourth, the countermeasures that are helpful are those that support autonomy, privacy and trust in the environment and in digital context. Fifth, team coping is a process that protects and adapts the team as a whole via communication, mutual support, sharing, conflict management and adaptable coordination.

The results of this study indicate that the ability to cope is not just a psychological skill that is the sole responsibility of the individual. It is a complex process caused by a variety of factors, including personal abilities, crew dynamics, leadership, communication systems, mission timetables, habitat design, privacy and technological support. Future research would benefit from the qualitative diary, interview, reflective record and observation alongside the psychometric, behavioural and physiological measures, both in terms of understanding when stress changes and also why this is and what types of support participants find to be useful.

Limitations of the study include limitations in the literature used and the fact that only published and freely available literature was used, analogue missions vary in the level of fidelity and length, as well as the participant characteristics, research design and outcome measures. The results should, therefore not be considered broadly applicable to all crews, or directly comparable to the experience of astronauts in space. Despite this, the synthesis offers a comprehensive analysis of the common and repeated evidence, and points to a need for additional qualitative and mixed-methods studies.

Individual coping preparation, supportive team practices, protected privacy, appropriate habitat conditions, effective communication, and trustworthy technological countermeasures are all essential components of a psychological readiness to go on long-duration missions, and should be seen as a system instead of as the responsibility of individual crew members.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98978

Women Empowerment through Participation in Indian Politics with Special Reference to Rajasthan

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Abstract

Women empowerment is an essential feature of social development, promoting gender equality and fostering a fair and inclusive society. The contribution of women's participation in Indian politics has lagged behind the country's female population. Women are underrepresented in administrative processes in the country because of a diversity of socioeconomic and cultural factors. However, the constitution provides the equal rights to women for participation in democracy with equal political representation. An authentic democratic representation encourages sufficient involvement of women in politics. Gender equality is a crucial indicator in democratic governance to confirm the representation of women in the Indian Parliament. This study is based on election commission's report on electoral participation and representation of women in Indian Parliament from first election after independence to recently held general elections in 2024 and also to narrow things down, 40 decades of state legislative elections in one state, Rajasthan, were studied to see how women's representation has changed over time. The analysis was done based on data collected from the recorded documents. The finding was obtained after a detailed analysis of women's political participation and representation from being electorate to voters from women as candidate to women as political representatives in parliament of India and assembly of Rajasthan state. This study looks at how representation of women in India's parliament has improved since independence. It assesses patterns in involvement of women as elected representatives; the consequence of legislative reforms of the Women's Reservation (Nari Shakti Vandan) Act, and the specific dynamics of Rajasthan's electoral politics. While representation has grown modestly, structural challenges continue to limit meaningful empowerment.

Keywords: Indian parliament, women empowerment, women participation

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Introduction

Neither the chains of dictatorship nor the fetters of oppression can keep down the force of freedom for long. - Angela Markel, the Chancellor of Germany (Afridi, 2013)

The term "women empowerment" remained in debate since so long extended years of political representation (Sharma, 2019). The meaning of political involvement is exercising the right to vote, power of sharing, electoral campaigning, political activism, membership of political parties, focusing party meetings, grasping party positions, contesting election, co-decision making, co-policymaking at all levels of governance of the state. In other words, it is a process for individuals to penetrate in political life deciding the common goals of the society and shaping the best way to achieve it (Roja, 2022). Democracy is a system of government where people, participate either directly or indirectly in the procedure of governance. For effective governance, women's involvement in decision making system should be essential with adding the problem of low involvement of women of special concern (Naik, 2017).

Political empowerment opens door to more opportunities for women. Since past few years, gender ratio has been abbreviated world-wide in various fields such as education, job opportunities, access to health facilities, political participation, etc. But in India, the scene is different. India is still far behind in achieving gender equality especially in politics (Sarkar & Parvin, 2021). India is the largest and one of most resilient parliamentary democracies in the world with a female population of 662.9 million and ranked 144th globally in terms of women's representation in national parliaments (Inter-Parliamentary Union data).Comparatively, countries like Rwanda (61.3%) and Sweden (47%) have demonstrated the potential of gender focused policies to ensure better representation (Yasmeen, 2024).

In the recent Lok Sabha elections, out of 543 members only 78 women were elected. While this marks an increase from previous years, the pace of progress remains slow. While in the Upper House (Rajya Sabha) has been seen similar trends, with women holding only 31 seats out of 238 members. These numbers highlight require for systematic reforms to promote gender parity at the national level (Yasmeen, 2024).

Women played an instrumental role in politics. They not only contributed to freedom struggle but left deep imprints in the people's mind. Although persecutors did not heard their voices but their sacrifices made them the glorified names in the history of India. Every freedom movement or conspiracy led by men against east India Company equally, constitute women in it. Protuberant names like Rani Lakshmi Bai, Begum Hazrat Mahal, Vijayalakshmi Pandit ,Sarojini Naidu, Aruna Asaf Ali, Rajkumari Amrit Kaur, Annie Besant, Sucheta Kriplani, Bhikaji Cama and many other unsung female heroes who equally played their part in the freedom struggle made India a diversified nation where men and women together worked for a peaceful tomorrow. After conquering Independence, the position of women has enhanced incredibly. Many

political women leaders have arise in India. In this context, Pratiba Patil became the first female President and Meera Kumar as the first speaker for Lok Sabha. Vijaya Lakshmi Pandit became the first ever President of United Nations General Assembly of free India and the race continued recording some noted names in the annals of Indian history. From Suchitra Kriplani, the first chief ministers of an Indian state (Uttar Pradesh) to Indira Gandhi, the first women Prime Minister of India brought golden days to India, she was known to be the most fierce and strong women holding such a prestigious position with utmost grace and responsibility. She is known to be amongst the few Prime Ministers who not only shaped Indian political space but brought a revolution to the Indians subcontinent with her course of action and international tie-ups (Nayeem & Bhat, 2021).

The involvement of Women in politics has significantly improved in the era of liberalization, privatization and globalization i.e., since 2014 till date. On an international context, Cloudia Sheinbaun became the first female President of Mexico (2024), Svetlana Tikhanovskaya, face of opposition leader of Belarus, Giorgia Meloni the first female Prime Minister of Italy (2022), Kamala Haris the first female Vice President of USA (2021), Jacinda Arden become Prime Minister of New Zealand in 2017 who has widely praised her leadership during national crises COVID-19 pandemic, Ursula Von der Layen the first women President of European Commission Union in 2019, Sanna Marin the youngest Prime Minister of Finland at the age of 34 elected in 2019 and Gordana Siljanovska-m Devekova the first female President of North Macedonia elected in 2024 are arisen as global leaders.

In the context of national level, various woman political Indian leaders have arise in these years namely Jailalita, Mamta Banerjee, Mayawati and Soni Gandhi in the area of 1991 to 2014 where as during the period of 2014 to 2024, Smriti Irani, Nirmala Sitaraman, Droupdi Murmu, Anupriya Patel, Annpurna Dev, Mahua Moitra, Bansuri Swaraj, KanganaRanout, PriyaSaroj and Iqra Hassan have been the recent examples of this alteration in Indian context.

The state of Rajasthan, known for its rich cultural heritage and historical significance, has also been a significant arena for political activity in India. Women's participation in electoral process in Rajasthan is a crucial indicator of state's progress in terms of gender equality and democratic inclusiveness (Poonia, 2024). Rajasthan is the one of the India's largest state with 200 constituencies, data processing was challenge due to time constraints, therefore, only the first 70 years after independence and sixteen assembly elections were examined (Muniyappa, 2022).

The present study is focused on the objectives which explore electoral participation and representation of women in Indian Parliament from first election after independence to recently held general elections in 2024 and also to narrow things down, 70 decades of state legislative elections in one state, Rajasthan, were studied to see how women's representation has changed over time. It is also highlighted how

important it is to representation of women in lower house as well as upper house of Indian Parliament and in state assembly of Rajasthan in order to achieve gender equality and the democratic government in India. The research objective is based on research question was answered and analysis was done based on data collected from secondary sources. This paper analyzes developments especially with the concerns of women employment through political representation in Indian Parliament till 2024, additionally with state politics of Rajasthan assembly.

Literature Review

Kumar (2026) revealed how India's first past the post voting system has stayed strong despite rising voter participation and the growth of regional political groups, while also showing a trends towards more completion among multiple parties. Saima (2024) examines the crucial topic of women's reservation in India, emphasizing how it can help close the gender gap in political representation. The historical context, legislative developments, implementation challenges, and overall effects of women's reservations in the nation are all thoroughly examined in this research study. The study evaluates the efficacy of these reservation regulations and looks at societal perceptions of women in politics by using empirical data and previously published academic literature. Additionally, it suggests ways to improve gender equality in political decision-making.

Reddy (2024) studied on political participation of women and representation in politics as a case study. Sengupta (2025) focused her study on parliamentary performances of women MPs in the 18th Lok Sabha in which she analyzed through their participation in debates and questions. Mukhopadhyay and Chattopadhayay (2025) analyzed the trends of women participation in Lok Sabha followed by analysis of trend of women's participation in Rajya Sabha in section V. Section VI makes a review of women's participation at the international level and finally, in Section VII we make some concluding observations. Karia (2024) investigate women's political leadership in both the lower and upper house of parliament, the percentage of women voters nationwide, and women's political awareness.

Sharma and Kumawat (2025) follow a specific approach, combining qualitative and quantities techniques to access the impact of various empowerment initiatives. A judgmental sampling technique was used to ensure representation from different socio economic back grounds. The primary data source was collected from various women registered under women empowerment programme. Sharp et al., 2003, emphasizes their studies on issues and problems of women's assault keen on political affairs across the world and empowerment of women. However most of the researches have been determined to measure the political empowerment of women. Political empowerment provides power to women and supports the economic growth also. In a study, a connection is found between political and economic development and the results found to be positive and satisfactory (Duflo, 2011). In a study it has been observed

that political empowerment and economic privileges are indirectly interlinked with each other (Chakeraborty, 2017). Khatri, 2016 stated that an empowered woman contributes to the progress of the nation. Women in political affairs reflects as long term commitment according to a holistic approach (Harverd Kennedy School: Women and Public Policy Program, 2018; OECD, 2018). So, political empowerment denotes the provisions of a platform for all the women to enable them to actively indulge in the political domain and helping them in acknowledging their worth as an agent of alteration and development at the national as well as international level.

Chattopadhyay and Duflo (2004) discover that female village council heads prefer to channelize infrastructure spending on aspects relevant to women. Zetterberg (2006) had observed that the interlink-age between gender quotas and women's political engagement had not been sufficiently addressed. Domestic obligations and insufficient financial support are increasingly significant obstacles in women's political paths (Times of India, 1998). Iyer and Mani (2019) revealed that females were less inclined to contribute in other electoral activities such as campaign participation, attending speechless or joining political parties.

The emphasis is primarily towards the association between gender norms and rights (Htunand Jones, 2002) or for that matter, the response of women to an overall improvement in their political empowerment (Joshi & Olsson, 2021) after a comprehensive peace arrangement. Comparing state level crime rate in the pre and post-reservation for women, Iyer et.al (2012) find that increased women representation in politics of local government in India positively impacts women violence. These conclusions were also noticed in US, wherein the findings indicate a strong and positive correlation between county rape rates and female socio-political power (Johnson, 2014).

Rosen (2017) shows that reserved seat quotas with a 30% threshold are typically most effective in least developed economies. Bhalotraet et al., (2018) determine that sitting female legislators are more likely to re-contest their seats. Many global conferences, including the Cairo Conference on Population and Development (1994), Fourth World Conference on Women (1995), and World Summit for Social Development (1995) have recognized that, despite the progress made globally in improving status of women, gender disparities still exist, especially with respect to involvement in electoral politics.

Methods and Procedures

This research paper follows a qualitative research design with literature review and case studies to gain a widespread perceptive involvement of females in Parliament of India from 1952 to 2024. The research is based on research question was answered and analysis was done based on data collected from the appreciate secondary data from the sources including Election Commission of India's reports, Parliamentary reports, Governmental websites, Rajasthan State Assembly reports, scholarly articles,

diverse array of published resources including research papers published in prestigious academic journals, official reports, legislative documents and biographies of women political leaders in India, are utilized to gather relevant data and insights.

The secondary data for Rajasthan was gathered from constituencies election followed to determine the gender candidate and the constituency from which the women candidate run. In 1957, 1962, 1967, 1972, 1977, 1980, 1985 and 1990, 1993, 1998, 2003, 2008, 2013, 2018, and 2023, the same procedure were adopted to collect the data. After that, an analysis was prepared on the total number of seats and the total number of women candidates elected to those constituencies. Furthermore, a conclusion was come out based on an understanding of the finding of the present study investigation.

Results and Discussion

Women's are the world's largest excluded group in political arena. 21.9 % of the members of national parliament worldwide are women. Women hold 16.0% seats in Arab state, parliaments and 21.8% seats in Sub Saharan's African nation's parliament. In Americas women holds 26.6%, whereas in the developed nations of USA, France and Japan 18.3%, 26.2%, 8.1% respectively representatives in Lower House of Parliament are comprised of women. In India, women comprised only 11.4% of National Parliament (Naik, 2017).

Women in Indian Legislation

Indian parliament is multi- party, with secular based democracy focused on the principles of pluralism and highest decision making body comprising of two houses known as lower house and upper house just similar to the British Parliament. Lower house (also known as Lok Sabha) is the more influential than the upper house (Rajya Sabha) in India. The Lower chamber has the five years tenure and Upper House is a continuing body with six years tenure where one third of the members retires in every two years. The political party holding the majority of the lower chamber constitutes the government and executes its electoral mandate. The parliament of India is considered as most prestigious for Member of Parliament (MPs) in political sphere of India. India has effectively held eighteen elections for the Lok Sabha or Lower House till now. The parliamentary elections of India are measured as the supreme events in human history, with millions of people taking in a single occasion. Indian's democracy is progressing towards maturity through regular and peaceful elections by ensuring smooth transfers of power after every election. However, the table-1 presents the status of gender equality in the Indian Parliament until the present elections.

Women Representation in Indian Parliament as Lower House (Lok Sabha) and Upper House (Rajya Sabha)

Ever since India's after independence, a pattern of alteration has been observed in the circumstances of women. The women become to contribute in national and state

politics. The first assembly had only 2% of women. Subsequently women won 4-5% of seats in lower house (Lok Sabha) and improved up to 4-8%.

Table 1

Representation of Women in Lok Sabha and Rajya Sabha members of Indian Parliament (1952-2024)

LokSabha						Rajya Sabha		
Year	No of Seats	Total Number of Candidates	Women Candidates	Women Elected as MPs	% of Women MPs	No of Seats	Women MPs	% of Women MPs
Frist(1952)	499	1874	43	22	4.41	219	16	7.31
Second (1957)	500	1518	45	27	5.4	237	18	7.59
Third (1962)	503	1985	70	34	6.76	238	18	7.56
Forth (1967)	523	2369	67	31	5.93	240	20	8.33
Fith (1971)	521	2784	86	22	4.22	243	17	7
Sixth (1977)	544	2439	70	19	3.49	244	25	10.25
Seventh (1980)	544	4621	142	28	5.15	244	24	9.84
Eight (1984)	544	5574	164	44	8.09	244	28	11.48
Ninth (1989)	517	6160	198	27	5.22	245	24	9.8
Tenth (1991)	544	8969	325	39	7.17	245	38	15.51
Elewenth (1996)	543	13952	599	39	7.18	223	19	8.52
Twelth (1998)	543	4750	274	43	7.92	245	15	6.12
Thirteen (1999)	543	4254	278	49	9.02	245	19	7.76
Fourteen (2004)	543	5405	355	45	8.28	245	27	11.1
Fifteen (2009)	543	7054	476	59	10.86	245	22	8.97
Sixteenth (2014)	543	8251	556	61	11.23	241	28	11.62
Seventeenth (2019)	545	8048	726	78	14.4	224	24	10.71
Eighteenth (2024)	543	8360	797	74	13.6	245	42	17.14

Source: Election Commission of India (https//www.cci.gov.in)

Table 1 reveals that the depiction of females in 18th Lok Sabha in India (2024) is 74 female members comprised only 13.6% of the entire Lok Sabha MPs. Although it has risen from 11.23% in 2014 followed 14.4% in 2019 (17th Lok Sabha), it is almost the world half average of 22.2%. The Upper House (Rajya Sabha) does not much better representation, with just 42 women member (MPs) comprising 17.1% of the total members of parliament in 2024. Again, while this is an improvement from 2019 figure is 10.71% followed by slightly declining 11.62% in 2014, which is far underneath the world average of 19.6%.

Currently 2 women are cabinet ministers namely Nirmala Sitaraman (Minister of Finance and Minister of Corporate Affairs) and Anupriya Patel (Minister of Women

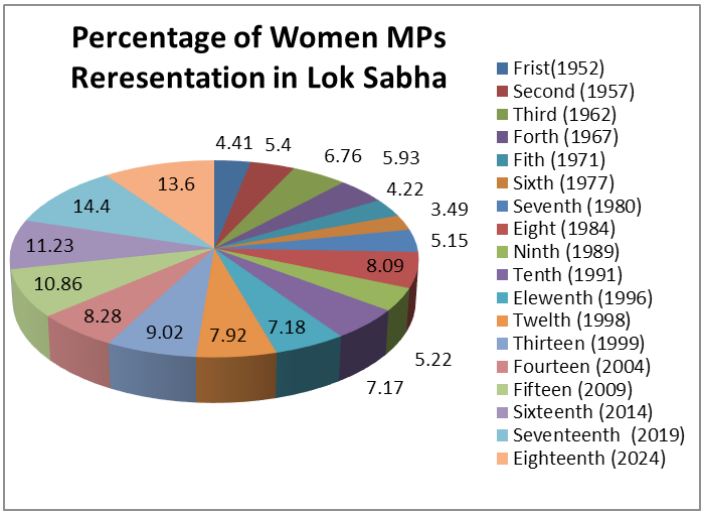
and Child Welfare) and other 7 are Ministers of State namely Anuupriya Patel, Shobha Karandlaje, Nimbun Bambhaniya, Raksha Khadse and Savitri Thakur in the present government of India with Prime Minister Modi administration.

It observes as no surprise that India is ranked 141th in the world rankings of women in national parliaments, compiled by the inter-parliamentary union. India's rank is lowest in the region and its falls below her neighboring countries i.e. Nepal ranked at 40th, Afganistan at 45th, China at 71th, and Pakistan 86th.

Table1 presents the representation of women in the two legislative chambers of Parliament. The above table reveals the percentage of women in Lok Sabha (Lower House) and Rajya Sabha (Upper House) in comparison to the total number of seats. Independent India had its first constitutional multiparty election in 1952 on the basis of universal adult franchise. As mentioned earlier the Indian constitution guaranteed gender equality to women in every sphere of life. However, as reflected in the table the first election resulted in only 4.4% of women being elected to the Lok Sabha. Further, the following elections did not show any significant rise in women's representation. For example, the proportion of women increased marginally in 1957 from 4.4 to 5.4%, and further to 6.7% in 1962. Nevertheless, the percentage declined in 1967 (5.9%), dropped again to 4.2% in 1971, decreased to 3.4% in 1977 which was the lowest level, and then improved slightly to 8.09% in 1984. Thereafter, it increased marginally to 7.1% in 1991, 7.9% in 1998, and 9% in 1999, but declined to 8.28% in 2004.This table indicated that the percentage of women representatives in the Lok Sabha remains very low, and women's representation did not exceed 14.4% during the 17th Lok Sabha in 2019 till date. However graph of percentage declined 13.6% in 2024 during Eighteenth Lok Sabha.

Figure 1

Women Representation in Lok Sabha of Indian Parliament (1952-2024)



The 2019 general elections witnessed an imperative improve in the number of females elected to the Lok Sabha. A record breaking 78 females were elected, comprising approximately 14% of the entire seats. That period was the maximum number of women's MP's in the history of Indian Parliamentary elections. It is also important that these figures reflect the national average, and there are variations in women's representations across different states and political parties. Efforts are ongoing to deal with the sex ratio differences and promote better political involvement of women and depiction in the democracy of India. The proportion of women in different Lok Sabha elections after independence from 1952 to 2024 has been well represented in Figure 1.

The existence of females in the Rajya Sabha (Upper House) has been faintly higher compared to Lower House (Lok Sabha) in Indian democracy, possibly due to indirect voting and recommendation of women members. Since independence, the number of women MPs increased to 78 in the 17th Lok Sabha elections held in 2019 was the highest ever in which 17 MPs are aged below than 40 years comprising 6 MPs from Congress and 40 from BJP women members representing 14% of total house. The table 1 further indicates that the current women representation in the Indian Parliament is merely 13.6%, i.e. out of 8360 members of Lower House or Lok Sabha, only 797 are women. However, the general proportion of women representation is comparatively higher in the Upper House, i.e. 17.14 percent in parliament during the 2024 that reveals the male-dominated Indian society is still not prepared to contribute to the key of power and position to women.

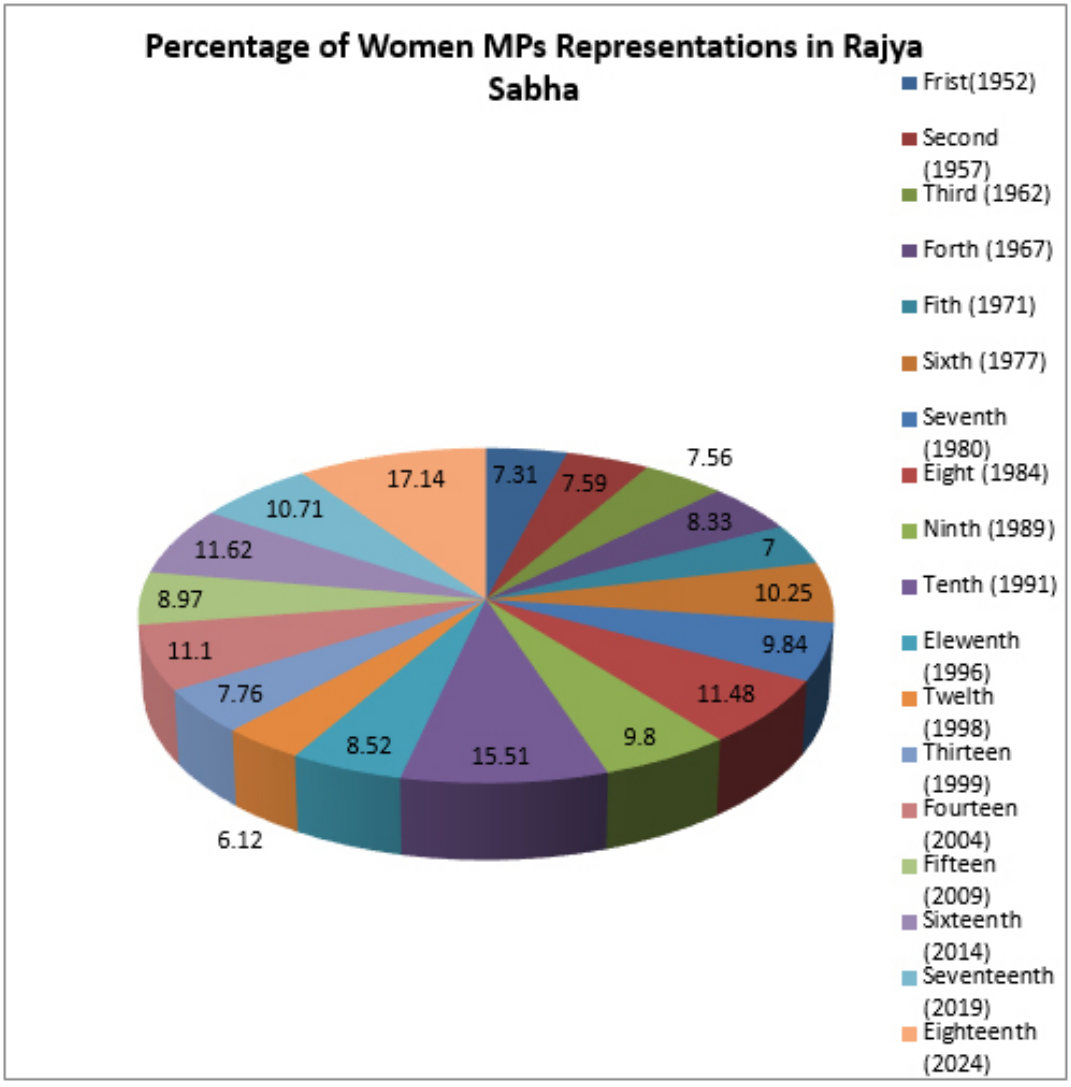
Recently in 2024 election, total 42 women (17.14%) were elected for 245 seats in Rajya Sabha. On the contrary, there has been improvement in women's representation in Rajya Sabha since 1952 to till date (Figure 2), achieving gender parity still remains a challenge. Efforts are ongoing to enhance the women's political participation and increase their depiction in the upper house of Indian Parliament. By investigating the facts from table, it has been observed that participation of women is too much lower in Lok Sabha. So legislatively they have substantial disadvantage in power politics. So still there should be a requirement to be reliable policy to assurance an adequate contribution of women in central legislative and other political institutions. However, some superficial measures have been adopted by center and state governments, not so much to recuperate the circumstances of women but to prevail their support for election purposes. The reservations of 33% seats for women are just one electoral plank. The government has introduced a women's reservation bill, which seeks the 33% reservation of seats for women in Parliament and State Assembles to guarantee efficient involvement and strengthening the positions of women in democratic institutions. However, the Political Parties came from the promised 33% reservation of seats Assembles.

By the above discussion and analysis from table 1, it is concluded that a positive correlation is found between the contested candidates and winners in the elections

since by analyzing the past elections. If we see the history from 1952, first election to 2024, the last elections, women have been repudiate appreciate seats for fighting the consecutive elections by the political parties.

Figure 2

Women Representation in Rajya Sabha of Indian Parliament (1952- 2024)



Therefore, it is not achievable for female candidates to absorb a number of seats which reveals the male conquered political structure in Indian democracy including political parties. It is fascinating to observe that the national parties i.e. NC (National Congress) and BJP (Bhartiya Janta Party) parties have not given so much emphasis to the female candidates in party. Whereas, local parties such as UP centric of BSP (Bahujan Samaj Party), INAICTC/TMC (All India Trinamol Congress) of West Bengal

and AIADM (All India Anna Dravida Munnetra) of Tamil Nadu centric are headed by three powerful women leaders, they also have not shown their authenticity in allocate equivalent representations to the women folk which is million dollar question.

Whereas women participation in politics by nationwide and local parties in the Eighteenth Lok Sabha Election-2024, women candidates represent 16%, 13%, 13%, 8% and 38% by BJP, INC, CPI/M, BSP and AITC/TNC respectively. So in 2024 elections, top regional parties by women representation, West Bengal topped the list of higher number of women MPs (11), followed by Utter Pradesh (7) and Maharashtra (7). Rajasthan has historically elected only three women MPs in recent elections 2024. Among these, Sanjana Jatav (INC) from Bharatpur gained attention as youngest MPs from the state.

Women Representation in State Legislative Assembly Elections: A Case Study of Rajasthan

Rajasthan state is recognized for its rich heritage and historical importance. With addition, this state has a significant arena for political activity in India. Women participation in the electoral process in Rajasthan is an essential indicator of the state's progress in way of sex ratio equality and democratic inclusiveness (Poonia, 2024). The Rajasthan State Assembly Elections are commonly referred as the Rajasthan Vidhan Sabha Elections. 'Vidhan sabha' is the Hindi term of Legislative Assembly, which is the lower chamber of the state legislature, comprising 200 members directly elected by people. Table 2 reveals the depiction of Women in State Assembly Elections of Rajasthan (Rajasthan Vidhan Sabha) during the total sixteenth legislative assemblies till now since independence.

First Legislative Assembly Elections (1951): Rajasthan had held total 16th legislative elections till now in which its first legislative assembly elections was run in 1951 for 140 constituencies in which only two women fight the elections from constituencies of Phagi and Udaipur city among 140 constituencies. No women candidate has success for the victory during this election.

1957s and 1962s: in 1957s and 1962s, women's representation in Rajasthan Vidhan sabha witnessed a gradual increase from 5.88 to 7.95 percent. Total 20 women has represented and ran the elections for the constituencies of Pilani, Kishanpole, Ramgarh, Bhilwara, Pushkar, Karanpur, Sujangarh, and Degana. Only 8 out of 20 women has elected during the 2ndlegsislative election in 1957 and during this period, the number of assembly constituencies was decreased to 136 in 1957. Whereas in 1962 during 3rd assembly, the number of constituencies was expanded to 176 with 14 women who fight the elections for the constituencies of Jhunjhunu, Bairath, Ramgarh, Pushkar, Chabbra, Bhilwara, Bhim, and Degana and all of were won the elections with women representations of 7.95%.

1967s and 1972s: The women's representation decreased from 3.26 % to 2.17%

in 1967 followed by 1972. In 5th assembly elections of Rajasthan in 1967, only 6 female candidates out of 11 have been selected from the following constituencies i.e. Kolayat, Jhunjhunu, Pushkar, Bhum, Pachpadra, and Degana whereas, in 1972 (6th Assembly) there were 184 constituencies contested in this election, with women candidates running in 5 of them. Women won four of the five constituencies, including Dudu, Weir, Pushkar, and Bhinai.

1977s and 1980s: In 1977 the progress for women representation increased 12% while decreased 5% in 1980. : The number of assembly constituencies was expanded to 200 in 1977, with 24 of them being contested by women. Jhunjhunu, Amber, Jaipur rural, Sanganer, Bairath, Kapasin, and Pachpadra were among the seven constituencies won by women candidate out of the total of 24. While the same 200 constituencies were contested by 27 women candidates in 1980, with only 10 women winning seats in Amber, Jaipur rural, Sanganer, Bairath, weir, Bhinai, Pushkar, Sagwara, Chorasi, Bhim, Ahore.

1985s and 1990s: In 1985, same 200 constituencies were contested by 38 women candidates in the 1985 election, with 16 seats won by women candidates in Churu, Pilani, Mandawa, Jaipur rural, Sanganer, Bairat, Alwar, Deeg, Dholpur, Tonk, Bhirai, Sagwara, Udaipur, Pali, Sumerpur, and Shergarh. In the 1990 elections, 60 women ran for 200 seats, but only 11 were elected in the following districts: Nohar, Pilani, Jaipur rural, Sanganer, Deeg, Hindoli, Sagwara, Pali, Sirohi, Gudamalani, and Jodhpur.

1993s, 1998s 2003s and 2008s: Women representations in these elections were 90, 69, 118 and 154 while only 10, 14, 12 and 28 women candidates were elected representing the 5%, 7%, 6% and 14% for the same 200 constituencies in respective years of 1993, 1998, 2003 and 2008.

2013s, 2018s and 2023s: The 2013 general elections witnessed a highest increase of 12.5% of women representation in Rajasthan Vidhan Sabha where 25 women were elected among 166 women candidates for 200 constituencies. Total 24 out of 189 won the election comprising 12% of women representation in 2018. Whereas, only 20 out of 183 women candidates elected constituting the 10% participation in Rajasthan 16th assembly elections.

Before the 2023 state polls, in 2008 of 13th State Assembly Elections, Rajasthan recorded around 28 women MLAs out of 154 women representation (14 %) in a 200 member Assembly, one of the higher proportions among Indian states, although still low comparative to the proposed 33 % quota. In the last recently conducted 2023 Rajasthan Assembly elections, only 20 women MLAs were elected, representing just 10 % of members indicating a decline from previous assemblies and notably below women's formal political representation goals.

Initiative of Government for Women Empowerment

Mhatma Gandhi National Rural Employment

Guarantee Act (MGNREGA)

Swayam Siddha

Swadhar

Indira Gandhi Matrina Sahyog Yojna

Janani Suraksha Yogna

Government of India consolidated all programs under National Mission of Empowerment of Women (NMEW). The present Indian government focuses on women-led development through initiatives like Mission Shakti**,** Beti Bachao Beti Padhao, Pradhan Mantri Ujjwala Yojana, and Lakhpati Didi. Key economic and social empowerment schemes include Namo Drone Didi**,** Stand-Up India, Mudras Yojana, and Sukanya Samriddhi Yojana.

Table 2

Representation of Women in State Assembly Elections of Rajasthan (Rajasthan Vidhan Sabha) since 1951 to 2023

Assembly Elections	Year	No of Constituencies	Women Representation	Women Elected	Percentage
1st	1951	140	2	0	0
2nd	1957	136	20	8	5.88
3rd	1962	176	14	14	7.95
4th	1967	184	11	6	3.26
5th	1972	184	5	4	2.17
6th	1977	200	24	24	12
7th	1980	200	27	10	5
8th	1985	200	38	16	8
9th	1990	200	60	11	5.5
10th	1993	200	90	10	5
11th	1998	200	69	14	7
12th	2003	200	118	12	6
13th	2008	200	154	28	14
14th	2013	200	166	25	12.5
15th	2018	200	189	24	12
16th	2023	200	183	20	10

Source: Oxfaminda.org

Case Studies: Successful Exemplary Women Leaders of Rajasthan

Vasundhara Raje Scindia: Vasundhara Raje Scindia, is a prominent Indian politician and a key leader of BJP, which promotes Hindu nationalism and economic reforms. She graduated from Sophia College, Mumbai, with a degree in economics and political science before entering politics in 1984. She served as Rajasthan's first female Chief Minister (2003–2008, 2013–2018), driving reforms like the Ladli Yojna for girl child welfare and boosting tourism. A five-time Lok Sabha member from Jhalawar Baran and former Union Minister of State for External Affairs, she is known for her administrative acumen and regal persona.

Diya Kumari: Diya Kumari, is a prominent figure in the politics of India and serving currently as the Deputy CM of Rajasthan. She has been source of inspiration for many women inspiring to enter in politics. Her tenure and political journey highlights the potential for women to raisea significant situate in the state.

Kamla Beniwal: Beniwal (1927-2024) was one of the most powerful women politicians of Rajasthan as she served as minister for almost 50 years in the state government (Times of India, 2024). She also served as the governor of three states – Tripura, Gujarat, and Mizoram, between 2009 and 2014, becoming the first woman governor of a northeastern state. She was elected to the Rajasthan Legislative Assembly for seven terms between 1954 and 2003Beniwal was an Indian independence activist and veteran politician who served as the deputy chief minister of Rajasthan. A leader of the Indian National Congress, she was the first female minister and held cabinet ministerial positions in the state government of Rajasthan for more than two decades between 1980 and 2003 (Times of India, 2025). She was honoured with the Tamra Patra from former Prime Minister Indira Gandhi for her contributions to the freedom struggle.

Girja Vyas: Girja Vyas was the prominent Indian politician and famous women leader of congress. In 1985, Vyas was elected to the Rajasthan Legislative Assembly from Udaipur. She managed diverse portfolios in the Rajasthan government. She was also a member of the Estimates Committee during this period. In 1993, she became president of the All India Mahila Congress, advocating for women's political participation. She served as president of the Rajasthan Pradesh Congress Committee. Between 1990 and her death, she was a member of the All-India Congress Committee, later serving as the chair of its Media Department. Vyas returned to the Rajasthan Assembly in 2008 to resign after a year.

Sanjana Jatav: Sanjana Jatav is among the youngest MP from Rajasthan (Moshra, 2024). She is a member of the Indian National Congress. She was elected to the 18th Lok Sabha, the lower house of the parliament in 2024 from the Bharatpur.

These case studies highlight the remarkable achievements and contributions of female leaders in the politics of India. They have shattered glass ceilings, inspired the countless individuals, and demonstrated the women potential to excel in positions of leadership.

Conclusion

Overall, it is concluded that for a demographic country, it is very significant to both man and women of the motherland equally engage in the governance and law building process. More women's representation involves in politics of India, more it will bring gender equality in India. Active involvement of women in politics will help them to recuperate their respect, dignity, freedom, and authority in homes as well as in the society. Hence political empowerment is a key to attain strengthening of women in India. Women's representation in Rajasthan has progressively improved, from two women running for office in 1951 to 183 women running from office in 2023, despite the fact that the women who ultimately obtained the seats never crossed a total of 28 seats out of 200 seats in the assembly. Nevertheless, this was an important achievement for women's existence in the Indian politics. Although this study was limited and minimum, it still demonstrates a trend in how women have taken ownership of their rights and attempted to achieve or fight for equality over time. As a result, based on constrained survey, one could conclude that yes, women's representation has improved in India. To enhance more participation of women in Indian politics, the urgent action is needed on long pending Women's Reservation Bill and affirmative action should be happen in quotas in parliament or in the political parties mobilization of women around an integrated development agenda is crucial. The formation of caucus of women political leaders across the party lines to enhance women participation within political parties and to advocate for the Women's Reservation Bill must be as a collective voice.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98979

Statehood under Siege: How Geopolitics Overrides Legal Criteria in the Recognition of Palestine and Kosovo

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Abstract

The present article focuses on a contradiction between legal definitions of statehood and their political enforcement through recognition. Palestine's and Kosovo's paths to statehood after unilateral declarations of independence were analysed comparatively to assess how both entities fulfil the four conditions of the 1933 Montevideo Convention for statehood: permanent population, defined territory, government and capacity to enter into relations with other states. The research adopted a qualitative, doctrinal-comparative approach, drawing on primary materials like UNSC resolutions, ICJ Advisory Opinions, state declarations and secondary legal scholarship. The study indicates that Palestine and Kosovo meet the legal requirements for statehood, though recognition of both has been shaped by the political agendas of major powers. For Kosovo, a political alliance among Western countries emerged, framing it as sui generis, whereas the United States' repeated vetoes on the UNSC stalled Palestine's path to recognition. Findings demonstrate politicization of the statehood recognition process delegitimizes international law and creates inequality between applications of the self-determination principle. Recommendations include reinforcing collective international recognition regime through UN General Assembly voting procedures.

***Keywords*:** Montevideo convention, declaratory theory, recognition, self-determination

Introduction

Statehood is the organising principle of international law and international relations. The rise of new aspiring entities has led to an ever-growing disconnect

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between legal rules and political realities (Crawford, 2006; Orford, 2012; Visoka, 2022). Palestine and Kosovo are two crucial case studies to understand how legal requirements for statehood relate to political considerations when recognising countries worldwide. Palestine and Kosovo attempted to gain independence and become subjects of international law but reached very different results.

This article aims to resolve the persistent conflict between the legal standards for statehood and the political realities of its recognition. The 1933 Montevideo Convention laid down four straightforward legal benchmarks for statehood. These criteria included permanent population, a defined territory, effective government, and capacity to enter into relations with other states (Crawford, 2006). However, politics ultimately dictates state recognition today despite legal merits (Newman & Visoka, 2023; Visoka, 2022, 2025). Legal criteria are applied selectively in the interests of powerful states while being ignored in all the others.

Palestine and Kosovo, while both fulfilling the Montevideo benchmarks, have experienced uneven recognition on the global stage. Palestine is recognised by 157 UN member states and is an observer state at the United Nations. The United States' Security Council veto prevents Palestine from securing full UN membership. Approximately 110-120 UN member states acknowledge Kosovo, and it enjoys broad acceptance from Western nations. Kosovo will never be admitted to the UN as applications for membership will be vetoed by Russia and China (Hajdari, 2023; Reuters, 2025). How can two situations with such similar legal standing elicit such divergent responses from the international community? Do the established legal norms hold the same sway for every nation?

This article demonstrates that geopolitical considerations, rather than strict legality, dictate international recognition of statehood. By methodically evaluating Palestine and Kosovo in light of the Montevideo criteria, this article illustrates that they should not be treated differently from a legal standpoint. Selective application of legal norms benefits powerful states that enforce their political will internationally.

The objectives of this study are as below:

1. to provide an analysis on whether Palestine and Kosovo satisfy the requirements of statehood under the Montevideo Convention
2. to identify whether the declaratory or constitutive theory of recognition was implemented in each case
3. to figure out what political and strategic interests influence great powers' decision to recognize new states
4. to examine what arbitrary recognition implies for international law and right to self-determination

The main research question is: To what extent does the incomplete recognition of Palestine and Kosovo stem from political factors rather than their compliance with the Montevideo Convention criteria?

The article deepens the international legal discourse on statehood and self-determination. Highlighting inconsistencies in recognition practice, this article critiques some of the underlying principles of international relations and proposes a structure for legal change moving forward that will create fair and consistent recognition processes.

Literature Review

International law lays out four essential requirements for asserting statehood. These qualifications are set out by Article 1 of the Montevideo Convention (1933) and include: a permanent population, defined territory, government and capacity to enter into relations with other states. Palestine and Kosovo have used these four qualifications when declaring their independence as international law requirements (Crawford, 2006). There are two theories on recognition that describe how these requirements are implemented and politicized when deciding whether to recognize a state.

Declaratory theorists such as Crawford (2006) believe once an entity has achieved the qualifications of statehood set out in the Montevideo convention it becomes a state independent of recognition. In this sense, declaratory theorists view recognition simply as political act of confirming what a legal fact is already. Constitutive theorists such as Lauterpacht (1944) and Kelsen (1941) view recognition as a legal act that is required before a state comes into existence, therefore deciding which entities become subjects of international law. Worster (2009) provides a succinct summary of the difference between the two theories by saying "whether recognition of states is viewed as a legal obligation or a matter of political discretion" depends on which theory you ask. Finck (2016) argues that although states tend to publicly favour declaratory language regarding new states, in reality recognition is becoming a constitutive requirement that substitutes for effectiveness.

This article will proceed by adopting the declaratory model for its analysis. From a methodological standpoint, if an entity meets the criteria for statehood irrespective of external recognition yet remains unrecognized, it strongly suggests that political considerations are at play. It follows that comparing states that meet the requirements helps us determine if the denial stems from legal or political considerations.

The academic discourse surrounding Palestinian statehood is quite substantial. Quigley (2010) makes the most robust legal argument by arguing Palestine was sovereign both during the League of Nations Mandate and to the present day. Dajani (1997) analyses Palestine's legal status under international law since the Oslo Accords were signed. He concludes that Palestine meets the necessary criteria, but that Israeli occupation has limited Palestine's abilities. Sakran and Hayashi (2017) illustrate

how Palestine's strategic accession to twenty multilateral treaties bypasses the core statehood debate, thereby enabling its functioning as a state for specific, constrained objectives. Few scholars argue against Palestinian statehood. Kontorovich (2013) and Becker (2000) argue Palestine fails the effective government condition of statehood because politics are divided between the West Bank and Gaza. Quigley (2010) rebuts that argument by showing how those deficits are caused by belligerent occupation, which does not negate sovereignty under international law.

The academic discussion surrounding Kosovo's statehood hasn't reached the same volume. Newman and Visoka (2018) analyse the practice of recognition and argue Kosovo was recognized because of agency, strategy, and timing as well as conformity with great power interests. The ICJ's Kosovo Advisory Opinion (2010) found that Kosovo's declaration of independence did not breach international law. Christakis (2011) points out that in coming to that decision, the Court worded its questions about Kosovo very narrowly to avoid deciding on whether international law even encompasses a right to remedial secession. Vidmar (2024) analyses state practice on the issue of secession and concludes that it has never implied a general right to secession existed. Borgen (2009) compares rhetoric used by great powers when choosing to recognize Kosovo versus South Ossetia. His research indicated that principles of self-determination and territorial integrity were wielded to legitimize intervention or non-intervention depending on what best suited political aims.

Although many authors have drawn parallels between Palestine and Kosovo as cases where the political will of Western powers has affected their involvement in Bosnia-Herzegovina, discourse between scholars who write about Palestine and those who write about Kosovo remains scarce. Discussions surrounding Palestine take place almost exclusively in Middle Eastern studies journals while those concerning Kosovo appear in European studies publications. Though scholars in both fields may acknowledge the similarities, truly in-depth comparative research remains scarce. Authors such as Daku and Rudaku (2024) make direct comparisons between Kosovo and Palestine, but only within the narrow lens of Spain's position on recognition. At present, no analysis has been done comparing Palestine and Kosovo side-by-side using the same criteria laid out in the Montevideo Convention to clearly show when legal obligation becomes political manoeuvring. This article aims to bridge that gap by placing Palestine and Kosovo into the context of both declaratory and constitutive theory and demonstrating that both meet legal requirements but are treated differently for political reasons.

Methods and Procedures

This article has a qualitative doctrinal-comparative design. A doctrinal legal article reviews and analyses legal sources to determine what the law says and doesn't say about rules and principles. Comparative analysis determines the similarities and differences among two or more cases to produce a greater understanding than is

possible from examining only one case article" (Hutchinson & Duncan, 2012; Van Hoecke, 2011). The methodology works for this article because the research question contains two parts: a strictly legal question (do Palestine and Kosovo meet Montevideo criteria?) and an empirical political question (why do similar situations lead to different recognition results?).

The research employs a most-similar case selection logic, citing three interconnected rationales for choosing Palestine and Kosovo.

First, Palestine and Kosovo are unilateral declarations of independence (UDIs) and fulfilled the requirements for statehood under the Montevideo Convention upon proclamation (Geldenhuys, 2009).

Second, Palestine and Kosovo have experienced two extreme, opposite recognition paths since their unilateral declarations of independence. Kosovo received over 100 recognitions from UN member states, with most recognitions coming from Western states, while Palestine became a non-member observer state of the United Nations, indefinitely denied full membership by a Security Council veto.

Third, Great power actors have significant interests at stake in both Palestine and Kosovo, controlling for irrelevant variables that may affect the research outcomes (Ryngaert & Sobrie, 2011). This logic allows for comparison between two legally similar entities that have been treated differently based on their respective alliances.

Primary sources used in this article are; the 1933 Montevideo Convention on the Rights and Duties of States, UN Security Council and General Assembly resolutions relevant to Palestine/Kosovo, the ICJ's Kosovo (2010) and Wall in Occupied Palestine Territory (2004) Advisory Opinions, Palestine's and Kosovo's declarations of independence, and statements of legality by states and international organisations concerning recognition of Palestine and Kosovo.

Secondary sources consist of scholarly articles, monographs, and policy reports that discuss theories of statehood/recognition and analyses of Palestine/Kosovo.

There are two questions with corresponding analyses. Palestine vs Kosovo: Can Law Explain the World?" In Part 1 of the analysis, Palestine and Kosovo were evaluated separately according to the four criteria. This determination is made using the declaratory theory framework: if an entity objectively meets the criteria, then it legally qualifies as a state" (Crawford, 2006). The Conclusion of each fact-based analysis is stated as such and does not delve into any subjective interpretations of what those findings mean for the defensibility of the current system of recognition. Once it has been established that Palestine and Kosovo are similarly situated from a legal perspective, the two entities are compared along four variables. How political recognition is granted in Palestine and Kosovo depends on; Power politics, Procedural gatekeeping at the UN Security Council, Contestation over legal narratives (self-determination vs remedial secession vs territorial integrity), and Material incentives

for differential treatment" (Worster, 2009).

Results

The analysis section applies each of the four criteria of the Montevideo Convention in turn to Palestine and Kosovo. Within each subsection, the information relevant to satisfying each criterion is presented and weighed separately. The sources consulted for this article include those detailing UN estimates of population, state constitutions, the ICJ Advisory Opinion, state records, and secondary academic sources. By analysing Palestine and Kosovo under each Montevideo criterion separately, this article concludes based solely on international law whether or not one of the entities fails to qualify as a state, allowing the Discussion section to explore if differing recognition can be justified by this failure or must instead be grounded in political motivations.

Legal Compliance with the Montevideo Criteria

Palestine and Kosovo fulfil all four criteria stipulated by the Montevideo Convention with some qualifications on particular criteria.

Permanent Population

Permanent population is defined as inhabitants who live continuously in the given territory. Palestine had a population of approximately 5.6 million in the West Bank and Gaza Strip in 2025, based on estimates from the UN Population Fund (Crawford, 2019; United Nations Population Fund, 2025). According to the World Bank (2024), Palestine had around 5.29 million people living in its region. Palestinians identify primarily as Arabs, with a significant portion of the population being refugees who hold official documents from UNRWA. Kosovo is home to approximately 1.59 million individuals, with around 91.76% identifying as ethnic Albanian. The remaining population consists of Serbian, Bosniak, Roma, and Turkish ethnic groups (Kosovo Agency of Statistics, 2024). International law does not specify a minimum population, provided there is a permanent population that constitutes the sociological aspect of a state (Crawford, 2006). Both Palestine and Kosovo qualify for this requirement.

Defined Territory

Palestine purports to encompass land spanning the West Bank (including East Jerusalem) and the Gaza Strip, its boundaries being those of the 1949 Armistice Lines (Green Line) (International Court of Justice, 2024). The International Court of Justice's Wall Advisory Opinion (Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, 2004) established Palestine to hold title to the West Bank and Gaza Strip, together comprising one territorial unit for purposes of Palestine's right to self-determination. Israeli-held territory currently disrupts Palestinian territorial contiguity between these regions. Furthermore, Israeli settlements' continued growth on the West Bank has resulted in the claimed Palestinian territory becoming increasingly fragmented. Kosovo's territory is that delineated by its Constitution of 2008 and the Comprehensive Proposal for the Kosovo Status Settlement ("Ahtisaari Plan"). The

territory comprises 10,887 square kilometres (Secretary- General of the United Nations, 2007; U.S. Department of State, 2008). Article 1 of Kosovo's Constitution of 2008 states: "The territory of the Republic of Kosovo is an integral whole and comprises its border areas". (Constitution of the Republic of Kosovo, 2008). The Serb-majority northern municipalities, with parallel institutions affiliated with Serbia, are within Kosovo's internationally recognized borders, but do not fall under the effective control of either Serbia or Kosovo. However, undisputed control of a territory is not required by international law; instead, a claimant needs merely to demonstrate a consistent territorial base (Crawford, 2006).

Effective Government

This arguably is the criterion where Palestine and Kosovo diverge the most, although for opposite reasons. Palestine's case is more nuanced. The PA provides governmental services with regard to civil issues and internal security in Palestinian populated areas defined as Areas A and B in the West Bank, according to the Oslo Accords. However, it does not have governance over Gaza, which has been ruled by Hamas de facto since 2007, nor can the PA fully operate in East Jerusalem, which Israel effectively claims as its own sovereign territory. Moreover, the PA's government is limited by the Israeli permit and closure regime that restricts the movement of people and goods in and out of the territories, as well as Israeli control over border crossings, the population registry, and tax collection (Iqtait, 2023). According to the World Bank, the PA's budget sustainability relies on Israel transferring tax clearance revenues to Palestine-Israel relations, which can at times suspend this transfer (World Bank, 2023).

Palestine's shortcomings in effective control were used by some academics to argue Palestine is not able to fully conduct the affairs of a state, pointing to Palestine's geographic and political split between the West Bank and Gaza as evidence that Palestine lacked effective control of its territory (Becker, 2000; Kontorovich, 2013). Proponents of Palestinian statehood argue that these shortcomings were precisely the result of belligerent occupation, and international law does not require an occupied territory to lose its sovereignty (Quigley, 2010).

Implicitly lending support to this claim was the ICJ Wall Opinion (2004), which recognized Palestine as a unit with the right to self-determination. Kosovo has effective control over its territory through its institutions. There is an elected parliament and government, police and judicial service, and tax administration. Police patrols cover Kosovo. State institutions deliver services to Kosovo citizens throughout the territory. This includes public schools, healthcare and social protection systems. There are parallel institutions funded directly by Serbia operating in Serb-majority municipalities located in northern Kosovo. Those are North Mitrovica, Zvecan, Zubin Potok, and Leposavic municipalities (Associated Press, 2024). Schools, hospitals, and municipal services are run by Serbian-appointed officials rather than Kosovar institutions (International

Crisis Group, 2020). While this impairs the exercise of governmental authority over all of Kosovo's territory, the ICJ Advisory Opinion implicitly found that Kosovo's institutions were effective when it found that Kosovo's declaration of independence did not violate international law (ICJ Advisory Opinion, 2010, para. 84).

Capacity to Enter into Foreign Relations

Palestine maintains diplomatic missions in over 90 states. It is a member of UNESCO (since 2011), the International Criminal Court (since 2015), the Arab League, and the Organisation of Islamic Cooperation. On 29 November 2012, Resolution 67/19 at the United Nations General Assembly upgraded Palestine to non-member observer State status by a vote of 138 in favour, 9 against and 41 abstentions. Following the vote, Palestine signed instruments of accession to various treaty regimes. On 1 April 2014, Palestine deposited instruments of accession to 21 international treaties and agreements. Palestine deposited 13 instruments of accession with the UN Secretary-General. Palestine deposited its accession to the four Geneva Conventions of 1949 and Protocol I Additional to the Geneva Conventions of 1949 with the Swiss Federal Council on 2 April 2014. (United Nations General Assembly, 2012; United Nations, 2014; Swiss Federal Council, 2014).

Palestine was only able to accede to treaties after the Secretary-General accepted Palestine as a state for the purpose of signing treaties when Palestine was upgraded by the General Assembly. Kosovo became a member of the International Monetary Fund and the World Bank Group in 2009. Kosovo is also a member of several regional organisations, including the Central European Free Trade Agreement, the Energy Community, and the Regional Cooperation Council. Kosovo applied for membership in the European Union in December 2022 and secured visa liberalisation for the Schengen Area that came into effect from 1 January 2024. (European Commission, 2024; European Commission, 2025) Kosovo is not a member of the United Nations, UNESCO, the International Criminal Court, the Council of Europe, or the World Trade Organization. Kosovo's capacity to sign treaties can sometimes be complicated by states that do not recognise Kosovo.

Recognition Trajectories

Bilateral Recognition

Despite fulfilling the Montevideo requirements to a similar degree, their mutual recognition of each other is unequal. As of 2025, Palestine is recognised by 157 out of 193 UN member states (Al Jazeera, 2025). Thus far, Palestine has been recognised by 81% of the international community. Recognition peaked during 2024-2025 when Palestine was recognised by several G7 states for the first time, including the United Kingdom, Canada and France, as well as Australia, Portugal, Belgium, Luxembourg, Malta, Ireland, Norway, Spain, and Slovenia (UN Meetings Coverage, 2025). 4 out of the 5 permanent members of the Security Council recognise Palestine (China,

France, Russia, and United Kingdom). The United States does not recognise Palestine. Kosovo is recognised by about 110-120 UN member states. An exact number is hard to establish because Serbia runs a dedicated campaign to make countries derecognise Kosovo (Hajdari, 2023; Reuters, 2025). Serbia claims about 28 states have withdrawn recognition of Kosovo since 2017, though Kosovo disputes these claims (Ryngaert & Sobrie, 2011). All states of the G7 recognise Kosovo, as do 22 out of the 27 EU member states. Spain, Greece, Romania, Slovakia, and Cyprus are the European Union member states that do not recognise Kosovo.

UN Membership Status

Palestine acceded to non- member observer state status in Resolution 67/19 in 2012. Palestine submitted an application for membership again in April 2024. The application was put to a vote at the Security Council and got the required nine votes in favour from the fifteen countries on the council, passing 12 votes in favour to 3 against. However, the United States vetoed the application. Both the United Kingdom and Switzerland voted to abstain from voting. The US claimed that "statehood will only come from direct negotiations between the parties". (UN News, 2024) This was the fifth instance the US vetoed a Security Council resolution regarding the Israeli-Palestinian conflict since October of 2023. Kosovo has never had a Security Council vote on membership due to the expected vetoes of Russia and China.

Institutional Participation

Palestine is a member of UNESCO, ICC, Arab League and OIC. Palestine's admission to UNESCO led to withdrawal of funding from the United States, plunging the organisation into massive budget deficit. Kosovo is a member of IMF, World Bank and International Olympic Committee. Palestine and Kosovo are not members of UNESCO, ICC, Council of Europe or UN. Neither Palestine nor Kosovo are allowed to vote on matters of membership at the General Assembly.

Material Consequences of Differential Recognition

The lack of consensus over their status has tangible impacts on their citizens. Kosovo citizens have visa-free or visa on arrival access to 81 countries and territories as of 2026, according to the Henley Passport Index. This ranks the Kosovo passport 56th in the world in terms of travel freedom. Since January 2024, Kosovars have been able to enter visa-free into the Schengen Area for up to 90 days (European Commission, 2024). Citizens of Kosovo need visas to visit the United States, Canada, Japan, Australia and most countries in Asia and Africa. Kosovo passports are also not recognised by a number of states including Russia and China. Holders of these countries do not accept them as valid travel documents. Citizens of Palestine can travel to about 38 countries. Palestine passport rank at the bottom among all passports in the world. Palestinian movement is restricted by Israeli control over border crossings with neighbouring countries, and Israeli control over who may pass between the West Bank

and Jordan, or through the Rafah crossing from Gaza.

The PA cannot issue biometric passports, has no control over its own border crossings, and most states do not recognise the Palestinian passport as proof of sole Palestinian sovereignty. The contested status of both regions means limitations on their economies. Palestine's economy is constrained by Israeli limitations on the movement of goods and people, limitations on natural resource access, and Palestinian Authority reliance on clearance taxes collected by Israel on its behalf, resulting in fundamental weaknesses in the PA's fiscal independence and sustainability (Iqtait, 2023). Kosovo's capacity to access foreign markets and investments is hindered by the five EU member states that do not recognise Kosovo, and Serbia, which bars Kosovo from joining regional economic communities and international financial organisations.

Discussion

Legal Compliance versus Recognition Practice

Regarding the Montevideo Convention, Palestine and Kosovo demonstrate compliance with all four stipulations. Incomplete recognition, therefore, cannot be due to lack of legal qualification. The inconsistency between law and state practice suggests that state practice does not adhere to the declaratory theory outlined previously, under which meeting legal conditions results in statehood. The modern system more closely resembles a neo-constitutive approach where powerful states decide which entities will garner recognition and membership in the UN regardless of legality.

This doesn't necessarily imply the system is failing or that norms have deteriorated. The idea that states would strictly follow the Montevideo qualifications has been a non-starter since 1933, as practical politics has always played a role (Crawford, 2006). Rather, these examples show how legal norms are applied selectively. Proponents of Kosovo's statehood assert that it meets the defining criteria and prevailing circumstances that establish it as a legitimate entity. Arguments against recognizing Palestinian statehood frequently emphasize its governance shortcomings and the demand for a negotiated two-state solution. The same legal principles underpin both arguments, yet they arrive at differing conclusions due to political factors (Worster, 2009).

Geopolitical Interests as the Determining Factor

The evidence indicates that geopolitical interest, rather than legal compliance, determines recognition outcomes. Kosovo receives support from the United States while Palestine faces a US veto. Palestine receives backing from Russia and China, while Kosovo faces their opposition. This pattern extends beyond the permanent five Security Council members. The five EU member states that do not recognise Kosovo do so not based on the Montevideo criteria or legal analysis, but due to domestic political concerns about separatist movements (Armakolas & Ker-Lindsay, 2019). Spain's position reflects anxieties about Catalonia and the Basque Country; Romania

and Slovakia cite minority protection; Cyprus references the TRNC; and Greece maintains traditional ties with Serbia.

Recognition functions as an instrument of foreign policy. If recognition were determined by legal compliance, one would observe consensus on the threshold for statehood. Instead, states grant recognition when it serves their interests and withhold it when doing so would damage relations with parent states or establish undesirable precedents for domestic separatists (Ryngaert & Sobrie, 2011).

The findings therefore confirm that recognition operates primarily as a political rather than legal mechanism. Though there are two rebuttal points to offer. First is the recent influx of Palestinian recognitions in 2024-2025 by several G7 countries, which shows that diplomatic consensus can change with time, even if nothing changes legally. Second is how Kosovo still remains recognized by over 100 countries in spite of constant de-recognition efforts from Serbia, which shows that there is some institutional momentum to recognition once it is achieved.

Institutional Gatekeeping: The Security Council Veto

The biggest institutional hurdle towards full UN membership for Palestine and Kosovo is the membership admission process outlined in Article 4(2) of the UN Charter. The procedure requires recommendation by the Security Council and approval by the General Assembly. Consequently, broad international backing proves inadequate when a permanent Security Council member exercises its veto power over the necessary recommendation.

This is clearly demonstrated by Palestine'24 application. The draft resolution recommending Palestine for membership received 12 votes in favour and one against with two abstentions. However, the draft resolution failed to pass due to the single dissenting vote from the United States (UN News, 2024). It might therefore be more precise to say that Palestine secured significant backing in the Council, but failed to obtain an actual recommendation due to a veto.

From a political perspective, Kosovo's circumstances are quite analogous. Russia and China remain opposed to Kosovo' independence and endorse Serbia's territorial integrity claim. Considering the present global political landscape, Kosovo's path to membership is exceedingly improbable, though not entirely out of the question.

The effect of this structure is that permanent members are able to exert significant control over who is granted access to full membership. This situation has effectively established a layered form of recognition, which can be understood as stratified sovereignty. Political entities can fulfil key criteria of statehood but find themselves at different tiers depending on political recognition and support by the great powers. The international system is therefore home to full UN members, non-member observer States like Palestine, partially recognised states like Kosovo, and entirely unrecognised de facto States.

Being a member of the UN doesn't legally confer statehood. Still, it represents a significant objective both politically, legally, and symbolically. Alternative strategies have been pursued by Palestine and Kosovo. Palestine ratified multilateral treaties as a non-member observer State, while Kosovo joined the IMF and World Bank. Although both examples highlight the international legal capacity of Palestine and Kosovo, they do not represent full substitutes for UN membership.

Selective Application of Legal Precedents

Arguments about recognition have been used inconsistently in the case of both Kosovo and Palestine. Recognizing Kosovo was commonly justified on the basis of two arguments: Kosovo was sui generis and remedial secession is permissible where a people have suffered serious and prolonged repression or denial of their right to internal self-determination.

As noted above, the ICJ did not affirm a right to remedial secession. It restricted its Advisory Opinion to the question of whether Kosovo's declaration of independence breached international law, and expressly declined to rule on the existence or applicability of a remedial right to secession (International Court of Justice, 2010, para 83).

Similar statements that Kosovo would set no precedent were undermined by later state practice. In the aftermath, Russia drew upon the Kosovo situation to legitimize its recognition of Abkhazia and South Ossetia, and subsequently mentioned it often in talks about Crimea. Its argument that "legal facts which have created new international entities cannot be undone" shows how legal justifications in one situation can be repurposed for future claims (Ministry of Foreign Affairs of the Russian Federation, n. d.). As Borgen points out, Kosovo has therefore become an argumentative precedent despite explicit statements to the contrary (Borgen, 2009).

Palestinian statehood, in contrast, has been frequently conditioned on the success of bilateral negotiations. The US reiterated its 2024 stance, stating that premature UN actions wouldn't lead to Palestinian statehood and that recognition ought to be deferred until a negotiated settlement is achieved.

This rationale implicitly contrasts with the narrative applied to Kosovo. In that instance, the breakdown of talks was deemed sufficient grounds for recognition. The absence of a negotiated settlement with Israel is presented here as grounds for denying recognition.

The situations are not parallel in strict sense. Palestine is occupied territory whose legal status is regulated by international humanitarian law. However, Kosovo's situation was governed by UNSCR 1244. It should be noted that Resolution 1244 did not remove Serbia's sovereign rights in Kosovo. While setting up a temporary administration, it also restated Yugoslavia's territorial integrity.

Still, there's no inherent justification why negotiations should fare better in one

scenario compared to another. International humanitarian law doesn't require Israel's agreement for Palestinian statehood, just as UNSCR 1244 didn't grant Kosovo a clear right to unilaterally declare independence. These comparisons thus show how concepts such as self-determination, territorial integrity, negotiated solutions, and responses to occupation are applied in a world where geopolitical considerations and institutional leverage are paramount.

Conclusion

Using Palestine and Kosovo as case studies, this Article proved that both entities fulfil all criteria for statehood defined by the Montevideo Convention on Rights and Duties of States. Although they both satisfy international law on statehood, Palestine and Kosovo have followed different recognition paths due to Great Power politics. While Kosovo was quickly recognized by Western states who sought to promote their interests in the region, Palestine has been denied full membership in the UN by a US veto in the Security Council. Through the power to veto, UNSC permanent members can create levels of sovereignty and decide which entities should be legitimized as states.

These findings call into question the legitimacy of international law. If international laws are not applied equally to all states, international law cannot claim to be objective. This may cause Global South states to lose faith in the system if they see self-determination movements being treated differently (Grovogui, 2001). It also has serious material effects: as highlighted by this article, stratification of international law harms the citizens of partially recognized states by limiting their right to travel and work.

The article concludes with two suggestions for reform. The first is procedural and suggests that the international community could recognize states collectively at the UN General Assembly rather than individually. The second is substantive and suggests that the international community returns to a declaratory model of recognition where it is objectively determined whether a state meets criteria for statehood.

This article had limited generalizability due to its two-case Article design, but its conclusions are supported by the body of knowledge on other de facto states (Caspersen, 2012; Geldenhuys, 2009). As this Article used exclusively diplomatic and legal sources, informal recognition was not considered. This Article only covered external recognition and said nothing about state's domestic legitimacy.

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KMC Journal
[A Peer-Reviewed, Open-Access Multidisciplinary Journal]
ISSN 2961-1709 (Print)
Published by the Research Management Cell
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
DOI: https://doi.org/10.3126/kmcj.v8i2.98980

Air Connectivity after Liberalization in Aviation and its Impact on Tourist Arrival

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Abstract

This study attempts to trace air connectivity after liberalization of aviation in Nepal by showing interrelationship among air service agreement, flight movement, total tourist arrived and tourist arriving by air comparing situation before and after liberal sky policy. Mixed method research was followed where quantitative data were adopted from secondary sources and qualitative data were collected from primary Key Informant Interviews (KIIs) with three experts. This study was conducted on the basis of Sequential Explanatory Mixed Method Design where quantitative data were analyzed to identify situation of air connectivity and tourist arrivals before and after the liberal air policy and qualitative data were collected via KIIs. The quantitative findings were interpreted and explained mixing with remarks of experts. There is high correlation among passenger movement, tourist arrivals, tourists arrived by air and flight arrivals. Flight arrivals and total passenger movement have highest correlation ($r = 0.970$, $p < 0.01$) in comparison with other variables. The linear regression result also indicates that flight arrivals are strong predicator for tourist arrivals ($\beta = 0.919$, $p < 0.001$). The model shows that increased air connectivity has positive effect on tourist arrived by air. The ANOVA result ($p<.001$) highlights the statistically significant difference in tourist arrivals by air before and after liberal sky policy. The F-statistic value (55.367) indicates that variance explained by regression is larger than variance kept unexplained. The large variance in significant level of $p<.001$ shows that there is significant change in tourist arrival after liberal sky policy.

Keywords: Air connectivity, air service agreement, airlines, tourism

Introduction

The trend of liberalization in aviation industry began in 1978 after the deregulation of US airline industry. The process of deregulation brought reform initiatives in the regulatory role of the government. Initially, need of regulatory reform

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was realized due to poor performances of regulatory frameworks but later on, it brought changes in competitive environment and allocative as well as productive efficiency of the organization (Huschelrath et al., 2013). The concept of liberalization through bilateral or multilateral "open skies" agreements was spread to Europe and Asia in the 1990s. The principle of liberalization of air transport introduced policies to minimize the government intervention and restriction on operational issues of airlines which enabled competition and connectivity between nations (Button, 2009). Liberalization in aviation sector brought the concept of open sky policy which emphasizes the competition in aviation market. The policy of liberal sky is reflected on a bilateral, regional, or multilateral air service agreement (Tham, 2008). Liberalization in air services increases route competition and airline efficiency which reduces air fare and increases traffic volumes. Airport and route access, flight frequency and seat capacity between two countries are limited as per the agreed provision of air service agreement (Fu et al., 2010).

In context of Nepal, the concept of liberalization of air transport introduced in early 1990s through the adaptation of "liberal sky" policy which paved the path for private as well as foreign carrier airlines to enter in aviation market of Nepal (CAAN, 2006). The institutionalization of the concept of liberalization of aviation was initiated in 2006, through Civil Aviation Policy 2063 (2006). This policy brought the provision of competition on air services, route allocation was simplified and concentrated on enhancement of the bilateral air service agreements (BASAs) with different countries which make the policy pioneer for the turning point of the aviation history of Nepal. The expansion of private airlines and entry of foreign airlines in Nepal was initiated rapidly after the injection of the policy. The gradual adoption of open sky policy enhanced international connectivity which assisted on easy access to Nepal (CAAN, 2025). The main goal of liberal sky policy is to promote the air transport system of Nepal, by enhancing participation of the private sector based on the concept of liberal sky policy while making air services safe, reliable, standard, easily available, accessible for the general public, sustainable and effective.

In global context, the liberalization of aviation sector has impacted on air connectivity resulting the growth of tourist arrival. After following the process of liberal sky policy, the bilateral air service agreement has been expanded. The aviation sector was expanded after liberal sky policy of Government of Nepal which extended domestic as well as international connectivity of the nation (Bastola, 2017). Despite adopting different tourism campaigns like visit Nepal year and other regional campaigns, Nepal is not being able to persuade large number of tourists. Though the international flight operation is in increasing trend, we are not being able to anticipate consistency in tourist arrivals. There is lack of the study on interrelationship between air connectivity and tourist arrival on the one hand and the factors to enhance air connectivity on the other. So, this study attempts to fulfill this research gap. The gap between the expansion of international flight operation and expected number of tourist arrival raises the question

about the effectiveness of aviation liberalization to enhance air connectivity on the one hand and the tourist arrival on the other. Currently, Nepal has bilateral air service agreement with 42 countries where as it has direct air connectivity with 16 countries (CAAN, 2025). In this context, this study attempts to address the research problem whether the liberalization in aviation impacts on international air connectivity or not. Likewise, it also attempts to address the question whether enhanced international air connectivity enhances the tourism sector of Nepal or not. And how the improved connectivity influences the pattern of tourist arrival. This study will contribute for the concerned ministry or government to take policy for the enhancement of tourism sector via strong air connectivity.

Literature Review

Air transport liberalization constitutes a whole new level of globalization. The impacts it brings can be divided into direct, indirect, induced and catalytic. The magnitude of impacts is determined by various factors, including air transport liberalization multiplier, market saturation and the degree of liberalization of other sectors (Grancay, 2009). Air connectivity is an indicator which shows the concentration of the airlines network and its capacity to move passenger from one place to another (ICAO, 2013). It shows the network of the place providing the services to the passenger to reach destination in easy way by indicating the availability of the flights offered by an airport or a system of airports (OECD/ITF, 2018). It is an important tool to connect country as a node within the global air transport system (World Bank, 2011). There are four types of air connectivity. The first one is direct air connectivity which indicates the point to point connectivity between the places. The second one is indirect connectivity where the number of places one can fly from certain country will be measured. In this type of connectivity, a person travels from one place to another using one or more transit in between the origin and destination. In third type of connectivity, overall connectivity will be measured on the basis of both direct and indirect connectivity. Likewise, the hub connectivity is the last type of connectivity which is measured on the basis of connecting flights that is handled by the certain airport. Air connectivity connects the places and people from physical, economic and cultural perspectives.

Bilateral Air Service Agreement as Tool of Air Connectivity

Bilateral Air Service Agreements (BASAs) are the legal framework for the operation of the international flights between the countries. This agreement between countries were guided by the principles of Chicago Convention, 1944. The main aim of this agreement is to promote local carriers for the protection of national interests. This agreement sets the provision and mechanism which regulates international air travel (Vasigh et al., 2018). It arranges the provisions like number of flights, destinations, designation, capacity, pricing and routes between the countries as well as other operational issues. The mutual recognition of the right of signing parties are the foundation of the bilateral air service agreements (Malinga et al., 2024). The

connectivity of the nation depends on bilateral air service agreement. Without this agreement between countries the airlines registered in these countries cannot operate the scheduled flights carrying passengers or cargo. So, it is the legal instrument for the enhancement of aviation sector of a nation. BASA determines flight movement, weakly seat capacity and nature of flights which paves the path for tourist arrival.

Liberal sky policy intends to liberalize the air transport by eliminating the restrictions on air operations which enhances the frequencies of the air transportation. The policy expects to enhance air connectivity, flight frequencies, lowering travel price and increase competition among airlines. The outcome of policy can be observed on the basis of expansion of bilateral air service agreement and extension of foreign carriers theoretically assuming that tourist arrival will be expanded. However, the expected outcome from air connectivity in tourist arrival is not being achieved as expected. The interrelation among liberal sky policy, air connectivity and its outcome indicated through tourist arrival remained unexplored in context of Nepal. The question whether the air connectivity after adopting liberal sky policy in Nepal has significant impact on tourist arrival or not is being attempted to explore in this study. So, this research attempts to trace out the relations among these factors for the promotion of the tourism in Nepal. The major objective of this research is to trace out the relations between air connectivity after adaptation of liberal sky policy and its impact on tourist arrival.

Methods and Procedures

The mixed method of research was adopted for the study where the quantitative data were collected from secondary resources and the qualitative data were collected from primary resource through Key Informant Interview (KII) with three experts of tourism and aviation. The study followed Sequential Explanatory Mixed Method Design where quantitative data were analyzed to identify situation of air connectivity and tourist arrivals before and after the liberal air policy and qualitative data were collected via KIIs. Quantitative data were analyzed and explained with support of qualitative data. The reason behind quantitative findings were traced out with the help of key informant interview.

Data Collection Procedure

The quantitative data were collected from tourism statistics and CAAN report. The tourism statistics published from the year 2008 to 2024 were studied and required data were collected and inserted in excel sheet. After collecting data the required data were imported in SPSS.

The qualitative data were collected through primary sources via KII. The researcher conducted KII with three experts of aviation and tourism sector where the respondents were selected conveniently. The time and budget constraints created limitation for the researcher to conduct KII in large scale.

Data Analysis

The quantitative data were analyzed using the SPSS software and presented in output of univariate, bivariate and multivariate. The quantitative data from 1964 to 2024 were used for this study where data from 1964 to 2007 has been presented in descriptive and the remaining data (2008-2024) were analyzed via bivariate and multivariate. The detail data like flight arrival and departure as well as passenger in and out were not available before 2008. As the detail report was published after that period, the data were presented using bivariate and multivariate analysis tool. The univariate data were presented via observed number, percentage and mean square. The bivariate data were presented via result of correlation between flight arrival and tourist arrival before and after adopting liberal sky policy which were measured in ratio scale. Likewise, multivariate data were analyzed between Flight Arrivals and Tourist Arrivals by Air through output of linear regression. The variables were measured in ratio scale.

Qualitative data were collected from the experts with their consent, recorded the interview, transcribed it in written from and cleaned based on before and after adaptation of liberal sky policy i.e. 1992. The data collected were analyzed on the basis of thematic approach NVivo software to identify the theme of this study. The findings were incorporated with quantitative data and analyzed in thematic basis.

Results

Air Service Agreement after Liberal Sky Policy

Nepal after adopting liberalization in aviation sector in 1992, expanded the scope of aviation sector via enhancement in bilateral air service agreement. The open sky policy was followed slowly and gradually after following liberal sky policy in 1992. The liberal sky policy was institutionalized from Civil Aviation Policy 2006. Before adopting liberal sky policy, Nepal had bilateral air service agreement with 16 countries and after adopting it, the bilateral air service agreement was slowly and gradually expanded (CAAN, 2025). The following table shows that Nepal has signed air service agreement with 26 countries from different continents after adopting this policy.

Table 1 shows that majority of the agreements permits multiple designations which allows more than one airlines from each country to operate flights between the countries. There are direct flights between Nepal and Qatar, Saudi Arabia, Malaysia, Oman as well as Turkey with significant seat capacity of more than 2800 seats per week from each of the countries. In present context, Turkey is the only entry point for Nepal to European market which connects Kathmandu to Istanbul on regular basis.

Nepal has no direct flights with Italy, Egypt, Myanmar, Macau, Austria, Luxembourg, Netherlands, France, Jordan, Croatia, Philippines, Viet Nam, the UK, New Zealand, Cambodia, Australia, Rwanda, and Switzerland despite having air

service agreement with these countries. This indicates the gap between the formal air service rights and its utilization in real ground. In context of Europe, Nepal is not being able to operate direct flight to Europe as there is restriction form European Union. Though Nepal is attempting to address aviation safety concerns of European Union slowly and gradually, in present context it is not possible to use European Sky because of air safety list of European Union (KII, 2025). On the other hand utilization of the air service agreement in real ground is being complex with limited connectivity. Limited service capacity of national airlines creates huddles to extend their service to large number of destinations which shows that only having bilateral air service agreement is not enough to expand aviation sector (KII, 2025).

Table 1

Bilateral Air Service Agreement of Nepal with Different Countries after Adopting Liberal Sky Policy

Country	Date	Designation	Weekly seats	Direct Flights
Italy	8/05/1992	Single	400	No
Qatar	04/06/1995	Multiple	5600	Yes
Egypt	30/08/1995	Multiple	600	No
Myanmar	26/08/1996	Multiple	5300	No
Macau	28/10/1996	Multiple	1400	No
Oman	02/12/1997	Multiple	1400	Yes
Austria	06/08/1997	Multiple	1400	No
Luxembourg	22/08/1997	Multiple	1400	No
Bahrain	26/11/1997	Multiple	5600	No
Netherlands	17/04/1998	Single	1400	No
France	07/07/1998	Multiple	200	No
Saudi Arabia	04/10/1999	Multiple	5600	Yes
Jordan	06/10/1999	Multiple	0	No
Kuwait	10/10/1999	Single	400	Yes
Turkey	13/10/1999	Multiple	2800	Yes
Israel	19/11/2002	Single	800	No
Malaysia	05/08/2003	Multiple	4200	Yes
Croatia	30/03/2004	Multiple	1400	No
Philippines	18/11/2004	Multiple	2500	No
Viet Nam	24/09/2010	Multiple	2800	No
U K	20/10/2015	Multiple	600	No
New Zealand	22/10/2015	Multiple	2800	No
Cambodia	29/11/2018	Multiple	2800	No

Country	Date	Designation	Weekly seats	Direct Flights
Australia	30/09/2019	Multiple	Not decided	No
Rwanda	05/12/2023	Multiple	-	No
Switzerland	06/02/2024	Multiple	5600	No

Source: CAAN, 2025

Table 1 shows the air service agreement after liberal air policy adopted by Nepal. In this context, the result of the key informant interview (KII) shows that there was limited connectivity established by airlines before liberal sky policy. As the government adopted the policy, the amendment in existing bilateral air service agreements for the expansion of seat capacity, flight frequency and designation was initiated. Nepal opened the floor for expansion of bilateral air service with different countries. Before liberalization, the pricing was also monopolistic but after the competitive environment brought by liberal policy, the market led fare came in existence. The hub connectivity was also increased after having bilateral air service agreement with Qatar, Malaysia and Turkey. Connectivity with Europe was established by strong representation of Turkish Airlines (KII, 2025).

International Air Connectivity of Nepal

Nepal has direct international air connectivity with 16 countries established by national as well as international airlines. The operation of the flights are dependent on the legal instruments developed through bilateral air service agreement. These agreements are the baseline for the international air connectivity of the nation.

Table 2

Airlines and their Direct Connectivity

Country	Airlines	Station (base)	Destinations	Flights/per week
Nepal	Nepal Airlines	Kathmandu	New Delhi, Bengaluru, Mumbai, Bangkok, Kuala Lumpur, Hong Kong, Doha, Dubai, Narita, Dammam	50
		Bhairahawa	Kuala Lumpur	
	Himalaya Airlines	Kathmandu	Kuala Lumpur, Dubai, Qatar, Dammam, Riyadh, Dhaka, Kuwait, Shandong, Chongquing, Lhasha	55
		Pokhara	Lhasha	
	Buddha Air	Kathmandu	Vanarashi	3
India	Air India	New Delhi	Kathmandu	35
	Indigo Aviation	New Delhi	Kathmandu	21
		Mumbai	Kathmandu	7
	Air India Express	Bengaluru	Kathmandu	7
		Mumbai	Kathmandu	7
	Spice Jet Limited	New Delhi	Kathmandu	7
Sri Lanka	Sri Lankan Airlines	Colombo	Kathmandu	7

Country	Airlines	Station (base)	Destinations	Flights/per week
Bangladesh	Biman Bangladesh	Dhaka	Kathmandu	10
Bhutan	Druk Air	Paro	Kathmandu	7
	Bhutan Airlines	Paro	Kathmandu	8
China	Air China	Chengdu	Kathmandu	7
	China Eastern Airlines	Kunming	Kathmandu	7
	China Southern Airlines	Guangzhou	Kathmandu	14
	Sichuan Airlines	Lhasa	Kathmandu	7
Hong Kong	Cathay Pacific Airlines	Hong Kong	Kathmandu	7
Malaysia	Batik Air	Kuala Lumpur	Kathmandu	18
	Malaysia Airlines	Kuala Lumpur	Kathmandu	10
Singapore	Singapore Airlines	Singapore	Kathmandu	7
Thailand	Thai Airways	Bangkok	Kathmandu	14
	Thai Air Asia	Bangkok	Kathmandu	7
	Thai Lion	Bangkok	Kathmandu	4
Qatar	Qatar Airways	Doha	Kathmandu	28
UAE	Air Arabia	Sharjah	Kathmandu	21
	Air Arabia Abu Dhabi	Abu Dhabi	Kathmandu	07
	Fly Dubai	Dubai	Kathmandu	28
Kuwait	Jazeera Airways	Kuwait	Kathmandu	2
	Kuwait Air	Kuwait	Kathmandu	5
South Korea	Korean Air	Incheon	Kathmandu	2
Turkey	Turkish Airlines	Istanbul	Kathmandu	5

Source: CAAN, 2025 (retrieved on 20 July 2025)

The above table shows that three national airlines, i.e. Nepal airlines, Himalaya airlines and Buddha airlines operate their schedule flights to international destinations. Nepal airlines operates its flight to 12 cities of 9 countries. Likewise, Himalaya airlines operates its flights to 10 cities of 7 countries. Buddha air operates its flight to Vanarashi, India as international sector. The above table shows that Nepal has connectivity with four South Asian countries i.e. India, Bangladesh, Bhutan and Sri Lanka. There are four airlines from India that operate direct flights to Kathmandu from New Delhi, Mumbai and Bengaluru. Air India operates highest number of flights in context of

international airlines by scheduling 35 flights per week. Likewise, Qatar air and Fly Dubai operate 28 flights per week to Nepal. Korean Air and Jazeera Air operate only two flights per week to Kathmandu from their respective origin.

Status of Flight Arrival and Tourist Arrival

There is strong relationship between flight arrival and passenger arrival especially tourist arrival. The following table shows that the highest number of flight movement was in 2018 and lowest number of flight movement was in 2020. In 2020, the movement of flights were hampered due to restrictions of movement caused by COVID-19. This table shows that the level of movement of flight before COVID-19 is being achieved in 2024.

Table 3

International Flight, Passenger and tourist Movement, 2008-2024

Year	Flight Movement		Passenger Movement		Tourist Arrival			Tourist / flight
	Departure	Arrival	Out	In	Air	Land	Total	
2008	7136	7140	966036	814561	374661	125616	500277	52.47
2009	7846	7855	984593	1042554	379322	130634	509956	48.29
2010	9707	9710	1147930	1288628	448800	154067	602867	46.22
2011	11394	11398	1292515	1407512	545221	190994	736215	47.83
2012	11659	11661	1546350	1378825	598258	204834	803092	51.30
2013	11807	11812	1647235	1493067	594848	202768	797616	50.36
2014	13605	13603	1889448	1622199	585981	204137	790118	43.08
2015	13281	13283	1674664	1542498	407412	131558	538970	30.67
2016	13560	13558	1823598	1687144	572563	180439	753002	42.23
2017	16680	16682	2083150	1804695	760577	179641	940218	45.59
2018	16964	16961	2173939	2179427	969287	203785	1173072	57.15
2019	16212	16213	2245338	1893426	995884	201307	1197191	61.43
2020	5121	5135	539651	566207	183130	46955	230085	35.66
2021	5878	5882	748327	708602	150625	337	150962	25.61
2022	12154	12158	1931517	1556811	592631	22238	614869	48.74
2023	15730	15730	2420787	2120350	914270	100612	1014882	58.12
2024	16620	16627	2607515	2355951	1023937	123611	1147548	61.58

Source: Nepal Tourism Statistics 2008 to 2024

The above table shows that there was regular steady growth of tourist arrival from 2008 to 2014 and the growth was hampered in 2015 because of the earthquake in that year. The recovery of earthquake was visible in 2018/2019. But again COVID-19 impacted on tourist arrival in 2020/2021. The recovery has been observed in the

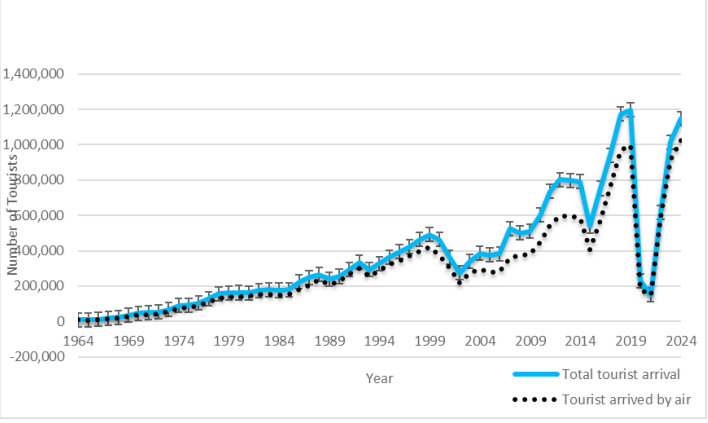
year 2024 with the hike in flight movement which resulted on expansion of tourist arrival. The table indicates that growth in flight movements increases the tourist arrivals especially via air connectivity. It shows that expansion in air connectivity boosts tourism. Likewise, Key informant, during KII, highlighted on the contribution of flight movement on tourist arrival. The barrier of limited connectivity is slowly being scattered by liberal policy in aviation sector. The bilateral air agreement in present context emphasizes on multiple designation with large number of weekly seat capacities. This provision opened the path for different international airlines to operate flights to Nepal via multiple airlines from the same country. In present context, there are four airlines from India and China, three airlines from Thailand and United Arab Emirates, two airlines from Bhutan, Malaysia and Kuwait are operating their flights to Nepal. Likewise three airlines from Nepal are operating direct flights to different destination enjoying the advantages of multiple designation. These frequencies of flights has direct impact on tourist arrival in Nepal from different destination. So, Liberalization of air brought the concept of competition in aviation sector breaking the monopoly of the national flag carrier which resulted on expansion of flight movements influencing in increment on tourist numbers (KII, 2025).

Tourist Arrival via Air

The following figure shows that the ratio of total tourist arrival and tourist arrived by air has close steady development. It shows that the tourist arrival and tourist arrived via air was in increasing trend from 1964 to 1990s. The gap between total tourist arrival and tourist arrived via air was widened slightly during this period indicating the increase in land based arrival. The tourism sector observed rise in the period of 2010 to 2019 due to significant rise in tourist arrival. Tourism sector observed decline in tourist arrival during 2020 to 2021 due to COVID-19 pandemic. It took almost five year to revive tourism sector and come back to the situation of 2019 (KII, 2025).

Figure 1

Tourist Arrival and Tourist Arrived by Air from 1964 to 2024



Source: Nepal Tourism Statistics, 2024

Relation between Flight Arrival and Tourist Arrivals

The following table shows that there is strong correlation between all variables at the p <.001 level. The correlation result shows that there is high correlation among total passenger movement, tourist arrivals, tourists arrived by air and flight arrivals. The table shows that the flight arrivals and inbound passenger ($r = 0.966$, $p < 0.01$) have highest correlation in comparison with other variables. As being land locked country, Nepal has to rely on air transportation for attracting tourists. For that air connectivity should be the priority of government (KII, 2025).

Table 4

Correlations Total Tourists Arrivals, Tourist Arrived by Air, Flight Arrival and Passenger Arrival

		Total tourist arrival	Tourist arrived by air	Flight Arrival	Passenger Arrival
Total tourist arrival	Pearson Correlation	1	.982***	.921***	.923***
	N (Year)	17	17	17	17
Tourist arrived by air	Pearson Correlation	.982***	1	.919***	.940***
	N	17	17	17	17
Flight Arrival	Pearson Correlation	.921***	.919***	1	.970***
	N	17	17	17	17
Passenger Arrival	Pearson Correlation	.923***	.940***	.970***	1
	N	17	17	17	17

=p<.001 ***Source: output of SPSS (2025)

The following ANOVA result shows that the regression model is statistically significant where p<.001 which indicates that flight arrivals have significant effect on tourist arrivals by air. The F value is 81.146 which shows that the variance on tourist arrival of flight arrival. The correlation coefficient (R=.919) demonstrate the positive relationship between flight arrival and tourist arrival. So, the table shows that increase in flight arrivals significantly increases the tourist arrivals by air.

Table 5

ANOVA Table for the Effect of Flight Arrival on Tourist Arrival by Air

Model	Mean Square	df	R	R Square	Adjusted R Square	Standard Error of the Estimate	F
Regression	958,710,924,629.426	1	.919	.844	.834	108695.478	81.146***
Residual	11,814,706,945.489	15					

=p<.001 ***Source: output of SPSS (2025)

The following linear regression result also indicates that the flight arrivals are strong predicator for the tourist arrivals ($\beta = 0.919$, $p < 0.001$). The model shows that the increased air connectivity has positive effect on tourist arrived by air. The beta value (0.919) shows the positive impact of increased flight connectivity on tourist inflow by air. It shows that flight arrival values for a large proportion of the variance in tourist arrivals which shows the importance of air connectivity as well as liberal sky policy.

Table 6

Regression Coefficients for the Effect of Flight Arrivals on Tourist Arrivals by Air

Predictor	Std. Error	Standardized Coefficients (Beta)	t
Constant	89244.947	–	-1.951+
Flight Arrival	7.056	0.919	9.008***

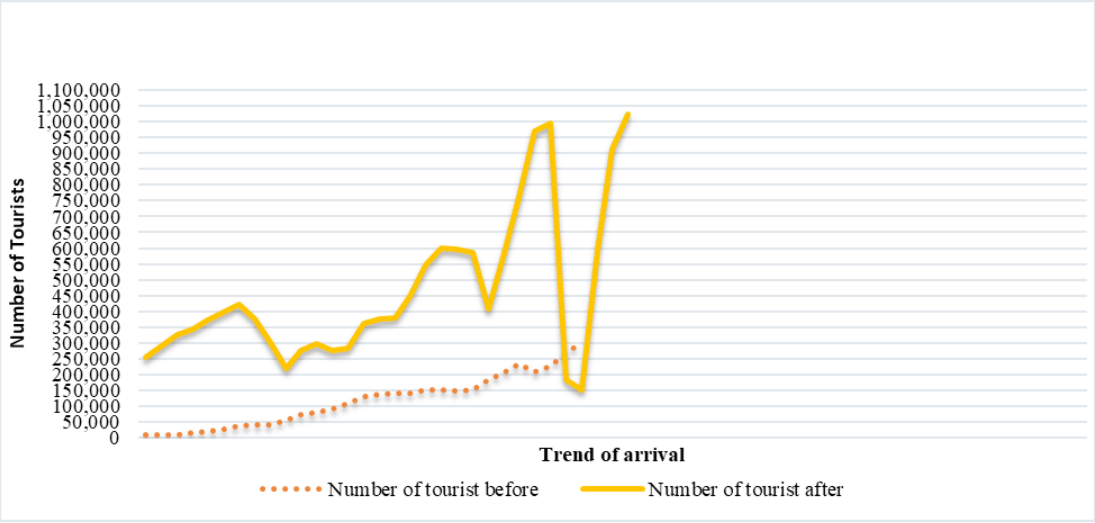
=p<.001, += p<.10 ***Source: output of SPSS (2025)

Tourist Arrival Before and After Liberal Sky Policy

The following figure shows the trend of tourist arrival by air before and after the liberal sky policy. The trend shows that the tourist arrival before liberal sky policy was on increasing trend. The first five year after the liberal sky policy also shows increasing trend of tourist arrival. Then the ups and down in tourist arrival was seen due to Maoist movement, Earthquake and COVID-19.

Figure 2

Tourist Arrival by Air before and after Liberal Sky Policy



The following ANOVA result shows that the regression model is statistically significant where p<.001 which indicates that there is significant change in tourist arrival after liberal sky policy. The liberal sky policy has significant effect on tourist arrivals by air.

Table 7

Result of ANOVA between Tourist Arrival before and after Liberal Sky Policy

	Mean Square	F
Between Groups	1850199945533.974	55.367***
Within Groups	33417056453.650	

=p<.001 ***Source: output of SPSS (2025)

The ANOVA result highlights that there is statistically significant difference in tourist arrivals by air before and after adaptation of liberal sky policy in aviation sector of Nepal. The table shows that F-statistic value is 55.367 which indicates that the variance explained by the regression is larger than the variance which is kept unexplained. The large variance in significant level of .000 shows that there is significant change in tourist arrival after liberal sky policy. This table shows that liberal sky policy has large impact on tourists arrived by air. The liberalization of sky adopted in 1992 which promoted liberal sky policy was the turning point for the expansion of air connectivity of Nepal especially in international sectors. It opened the path for different foreign airlines to operate their flights to Nepal. Air connectivity was enhanced with the expansion of air service agreements with different countries which provided platform for different

airlines to initiate their commercial flights to Nepal (KII, 2025). So, the policy change in aviation sector has significant effect on tourist arrival in Nepal which was the output of increasing air connectivity of the nation.

Mean Comparison Result of Tourist Arrival before and after Liberal Sky Policy

The following mean comparison statistics shows the descriptive statistical analysis of tourist arrivals by air especially focusing on the period before and after liberal sky policy. The table compares the scenario of the tourist arrival during that period.

Table 8

Mean Comparison of the Tourist Arrival before and after Liberal Sky Policy

	N	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum	F value	P value
				Lower Bound	Upper Bound				
Before liberal sky policy	28	110805.36	77669.612	80688.23	140922.49	8303	267932		
After liberal sky policy	33	460298.18	237745.069	375997.45	544598.92	150625	1023937		
Overall	61	299875.25	252382.193	235237.16	364513.33	8303	1023937	55.367	<.001

Source: output of SPSS (2025)

It is observable, from the table, that there is an increment in mean number of the tourist arrival by air after liberal sky policy. The average number of tourist was also expanded from 110,805 to 460,298. This shows that more than four times increment in tourist arrival after adopting this policy. From the standard deviation also there is significant change in tourist arrival which changed the value from 77,669 to 237,745 after adopting the policy. This indicates that wider number of the tourist arrival was observed because of the varied and dispersed tourists. The table also reflects that mean in 95% confidence interval also shows the comparative change in tourist arrival. The interval was 80,688 to 140,922 before the policy which increased by 375,997 to 544,598 after the policy. This wider interval is outcome of the increased standard deviation and increase in greater range value. The remarkable shift in tourist arrival can also be highlighted through minimum and maximum values. The maximum number of tourist arrival before adopting liberal sky policy was recorded as 267,932 in the year 1991. Likewise the maximum number of tourist arrived by air is recorded 1023937 after the policy in the year 2024. So, the table compares the situation before adopting liberal sky policy where data of 28 years were analyzed comparing with the data of 33 years after liberal sky policy. Before adopting liberal sky policy, average annual tourist arrival was

110,805.36 (SD = 77,669.61, whereas after the policy it increased to 460,298.18 (SD = 237,745.07). The table reveals that the difference in mean tourist arrivals between the two policy periods are significant statistically where F=55.367 and p<.001. It indicates that tourist arrivals by air were significantly increased after adopting liberal policy. The policy shift has positive impact on tourist arrival in Nepal.

In present context, there is infrastructure constraints in Tribhuvan International Airport (TIA) which hampers the expansion of connectivity in peak hours. The peak hour slots are highly demanded and there is saturation of these slots which results on delays in flight arrival. So, the government should focus on maximizing the utilization of Gautam Buddha International Airport and Pokhara International Airport.

Discussion

Liberalization provided comparative opportunity for the aviation sector to expand traffic growth through liberal policies in the sector (Fu and Oum, 2014). Liberalization on air services stimulates air traffic flow resulting on the growth of the tourist arrival (WTO, 2008). The empirical study shows the strong relationship between tourist arrival and expansion of aviation sector after following liberal sky policy. In this context, this study also shows that the air traffic as well as the tourist arrival was increased after liberal sky policy which was adopted by government in 1992. Before 1992, Nepal had bilateral air service agreement with 16 countries and after following the liberal sky policy, the competitive environment was promoted and the pace of air service agreement was expanded. The number of air service agreement between different countries and Nepal are also in growing trend which provides opportunity for different foreigner airlines to operate their flights to Nepal (KII, 2025).

The research shows that the tourist arrival via air is high in comparison to land. Landlocked country like Nepal has to depend on airlines network for tourism development, as the land accessibility is comparatively not easy because of open border only with one country i.e. India (KII, 2025). For the land locked country over land routes of cross country is also not easy because of the restriction in boarders (Cater, 1987). So, the hurdles in cross border third country tourist movement is reflected in tourism data which shows that tourist arrival via air is more than 80 percent in past few years.

Air transport liberalization promotes air connectivity of a nation (Tolcha et al., 2021). The liberal air service agreement provides favorable ground for the airlines to operate the flight smoothly which expands international air connectivity of the nation. Empirical result shows that the tourist arrival via air is in increasing trend from the beginning. There are 30 airlines that connect Nepal with different international destinations. Nepalese airlines connect Nepal with 11 different counties of the world. Air service agreement with different countries after 1992 provided opportunity for different airlines to operate flights to/from Qatar, Oman, Saudi Arabia, Kuwait, Turkey and Malaysia. This indicates that the flight movement after liberal sky policy is in increasing trend.

Connectivity of destination is an important factor that affects the volume of tourist arrival of a country. Tourist arrival to a nation is dependent on direct flight connectivity of a nation. The direct flight connectivity enhances the tourist arrival. Arrivals to a destination and air connections heavily depend on each other (Ceti et al, 2016). Increasing direct flights to tourist generating destination is one of the important and viable strategy of a nation to enhance tourism sector (Graham, 2013). The study shows that there was 16620 direct flight arrivals to Nepal which provided service to 23,55,951 passengers including 10,23,937 tourists from different parts of the world. In present context, there are 424 direct flight arrivals to Nepal per week. The result shows that flight arrivals are strong predicator for tourists arrival in Nepal (($\beta = 0.919$, $p < 0.001$). The F value also indicates the variance of flight arrivals on tourist arrivals.

Conclusion

This study provides insights on tourist arrival trend before and after liberal sky policy adopted by Nepalese government in 1992. It examines the trend of having bilateral air service agreements and its effect on tourist arrival via air route. It also quantifies the direct flight connectivity with the countries with whom the agreement was conducted after liberal air policy in Nepal. It traces that the impact of European Union safety list has been reflected on air connectivity with European countries. Direct air connectivity established by national as well as international airlines was traced out by analyzing their weekly flights to different destinations. This study is unique because of its attempt to trace the relations among bilateral air service agreements, liberalization of air services, air connectivity and their impact on tourist arrival in Nepal.

The study shows that there is close relationship between flight movement and passenger movement especially tourists. It reflects that the bilateral air service agreement after liberal sky policy provided ground for national as well as different additional international airlines of six countries to operate their direct flights to Nepal. This increment of flight movement was reflected on tourist arrival in the nation. There are 30 airlines, including three national airlines and 27 foreigner airlines, operate their regular schedule flights to Nepal. The study shows that there is significant correlation among total tourist arrival, tourist arrived via air, flight arrival and passenger arrivals. Likewise, the ANOVA test shows that the regression model is statistically significant by indicating the effect of independent variable flight movement on dependent variable tourist arrival. The linear regression report also supports the above findings showing the significant relationship between flight movement and tourist movement.

This study also reflects that there is significant change in tourist arrival after adopting liberal sky policy. The ANOVA test indicates that there is statistically significant difference in tourist arrival by air before and after liberal sky policy. The mean comparison results also shows the increment in mean number of tourist arrival after liberal sky policy. It shows that there is four times increment in tourist arrival after arranging the provision of liberal sky policy. The standard deviation also indicates

the significant change in tourist arrival. So, in conclusion, the research indicates that liberal sky policy provided opportunity for Nepal to establish direct air connectivity with additional countries. It paved the path for national as well as international airlines to operate flights to or from Nepal.

Though the study shows significant relations between air connectivity before and after liberal sky policy, the expected outcome of liberalization in the sector is not being achieved because of some of the restrictions like pandemic, safety list of European Union, weak representation of the national airlines. So, there is still space for the study on the direct effect of these factors on tourism development of Nepal. Because of the limitation of this study, this research does not cover the area like impact of liberalization in domestic airlines and domestic movement of the passengers as well as tourists.

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Research Management Cell (RMC)
Kailali Multiple Campus, Dhangadhi
Far Western University, Nepal
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