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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 1 includes 14 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

February 2026

Contents

Between Colonizer and Colonized: An Exploration of Hybridity and Mimicry in <i>Robinson Crusoe</i> <i>Arjun Dev Bhatta, PhD</i>	1-15
Teachers' Perceptions and Practices of Using Authentic Materials in English Language Teaching <i>Hukum Bahadur Khadka, Rajan Kumar Kandel</i>	16-30
Practices of the Semester System in Higher Education: Insights from the University of Nepal <i>Ramesh Khatri</i>	31-45
Language in Education Policy at the Local Level: Ideologies and Practices <i>Jnanu Raj Paudel, PhD</i>	46-62
Interrogating Colonial Legacy of Active Learning Strategies in English Language Education: A Postcolonial Critique <i>Deepak Thapa</i>	63-77
Impact of Digital Media Marketing on Purchase Intention of Organic Vegetables in Butwal Sub-Metropolitan City, Nepal <i>Subham Shrestha</i>	778-99
Impact of Personnel Control on Organizational Performance of Elected Government Agencies in Kailali District <i>Mahendra Singh Mahara</i>	100-121
Trading Day Effect and Volatility Clustering in NEPSE Returns: An Empirical Analysis of Market Anomalies <i>Tek Bahadur Madai, Dilli Raj Sharma (PhD), Jeetendra Dangol (PhD)</i>	122-140
Factors Influencing the Adoption of Management Accounting in Nepal's Co-operatives <i>Atmaram Khatiwada</i>	141-164

From Youth Bulge to Ageing Society: Dependency Ratio, Life Expectancy and Disability among Older Adults in Nepal (1991–2021) <i>Tilak Prasad Sharma, Dhanendra Veer Shakya</i>	165-181
Domestic Violence against Married Women in an Urban Informal Settlement <i>Bala Ram Acharya</i>	182-197
Effectiveness of Project-Based Learning in Enhancing Mathematical Reasoning and Creativity: A Systematic Review <i>Prem Prasad Dahal, Laxmi G.C.</i>	198-212
Ascribed Rites of Passage among the Tharu Communities of Western Nepal <i>Nathuram Chaudhary, PhD</i>	213-225
Determining the Sample in Qualitative Research <i>Khim Raj Subedi, PhD</i>	226-240



Between Colonizer and Colonized: An Exploration of Hybridity and Mimicry in *Robinson Crusoe*

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Abstract

This research article critically examines the complex and ambivalent relationship between colonizers and the colonized in Daniel Defoe's *Robinson Crusoe*. It aims to unravel the contradictions and anxieties embedded in colonial authority. To support this claim, the researcher draws on theoretical insights forwarded by postcolonial theorist Homi K. Bhabha in his seminal text 'The Location of Culture'. Bhabha's concepts of hybridity, mimicry, ambivalence, and 'The Third Space' are employed as key theoretical tools to show how colonial authority is disrupted and resisted. Focusing on Crusoe-Friday relationship, the article argues that Friday's mimicry and hybridity unsettle Crusoe's authority and open up a 'Third Space' for cultural negotiation and resistance. This article follows a qualitative research method, analyzing the text through primary and secondary resources available in the library and online resources. Using Bhabha's postcolonial theory, particularly his notions of hybridity and mimicry, this article seeks to fill up the gap left by earlier research. The findings of the study suggest that Defoe's *Robinson Crusoe* is not a monolithic narrative of European superiority but a text that reveals the fragility and complex colonial discourse.

Keywords: colonialism, hybridity, mimicry, ambivalence, Robinson Crusoe

Introduction

Daniel Defoe's *Robinson Crusoe* (1719) is widely celebrated as the foundational colonial text in the English literary canon. The novel reflects the time when British colonialism was underway, and Britain's profit-oriented colonial economy, dependent



on African slave labor, was thriving. It powerfully embodies Eighteenth-century colonial ideology, Eurocentric domination, and the cultural, religious, and linguistic subjugation of non-European peoples and spaces. The novel is regarded as a precursor to the colonial literary canon, highlighting its foundational role in shaping subsequent representations of empire and cultural hegemony. Chakraborty (2003) argues that *Robinson Crusoe* is a “foundational text for setting the pattern for colonial fiction” and “one of colonial literature’s most influential texts, a text with which the modern novel can be said to begin” (pp. 51, 53). Thus, the novel sets the template for later colonial narratives by portraying themes of exploration, conquest, and domination of the “Other”. Further, the novel foregrounds stereotypical “color binary and hierarchical structuring of colonial and racial relations and the eighteenth-century articulations of race and colonial power relations” (Wheeler, 1995, p. 821). In this sense, the novel is paradigmatic of colonial relations between Whites and non-Whites.

Set on a desolate island, the novel unveils the power dynamic between the European castaway protagonist, Robinson Crusoe and the indigenous, Friday, revealing the ambivalent relationship between colonizers and colonized during the age of Empire. Crusoe, as a prototype of colonizer, treats Friday as a savage, irrational, and inferior ‘Other’, while claiming himself as a civilized, rational, and enlightened European. To assert colonial superiority, Defoe presents Crusoe as ruling over the island, renaming Friday, teaching him English language and values, converting him to Christianity, and rendering him a servant or possession. Furthermore, the novel reinforces the stereotypical binary between colonizers and colonized, foregrounding the ideological underpinnings of European expansion, which justifies conquest of people and land, as natural, benevolent, and necessary.

Two key concepts of postcolonial theory – mimicry and hybridity as articulated by Homi K. Bhabha – help unpack this dynamic, showing that colonial authority operates not only through control, but also through cultural influence and identity formation. Friday’s partial mimicry and the creation of a ‘hybrid self’ disrupt Crusoe’s dominance and his sense of European superiority. Bhabha suggests that mimicry is not simply an imitation but a powerful form of resistance and hybrid identity unsettles colonial authority by blurring the boundaries between colonizers and colonized. Friday does not appear merely as a passive servant or companion of Crusoe, but as a complex figure, who resists Crusoe’s colonial domination through the act of mimicry and hybridity. Thus, this article explores how mimicry and hybridity function as means of challenging colonial power and domination. It argues that while Crusoe tries to shape Friday into a European ideal, Friday’s retention of native traits and partial mimicry counter Crusoe’s absolute power. This paper analyzes key scenes in the novel through Bhabha’s postcolonial framework, illuminating the instability of colonial identity and

the nuances of resistance, and argues that colonial authority is neither absolute nor immutable but can be contested and transformed.

Literature Review

Critics and scholars of *Robinson Crusoe* have explored multiple themes since its publication in 1719. Many readers consider the text as a tale of adventure, individual survival, and human resilience. Mcinelly (2003) argues, “In *Robinson Crusoe*, Defoe transforms colonialism through the power of fictional representation into the adventures of a single man who masters the island, his native companion, and himself” (p. 3). Likewise, Nforbin (2023) in the same line examines the novel as embodying “features of the adventure novel and the picaresque tradition”, emphasizing its portrayal of “the oversea adventures of a white British man” (p. 5). These views highlight Crusoe’s daring activities and his confrontation with both environmental challenges and the perils of transatlantic journeys to Africa, Brazil, and eventually the unknown Caribbean island.

Critics, who move beyond a surface reading of the novel as a tale of adventure and survival, interpret it as a reflection of early capitalism and colonial expansion. Bohm-Schnitker (2022) admits that *Robinson Crusoe* is a “central text in defining English identity as ‘white’ in the sense of the Anglo-Saxon genealogy of its main character that is closely tied to capitalist structures of mercantilism and processes of colonial expansion” (p. 174). The novel illustrates the emergence of British imperial power and the consolidation of global trade, foregrounding property-ownership, individualism, labor, and imperial aspiration as central values. Watt (1957) also regards the novel as a “landmark text emphasizing the rise of the modern capitalist subject” (p. 63). Crusoe’s maritime ventures, his commercial success in Brazil, participation in the slave trade, and the conversion of the deserted island into a productive estate exemplifies Defoe’s fictionalized articulation of capitalist and colonial ideology.

Some readings of the text identify individualism as a central theme in *Robinson Crusoe*. Noting Crusoe’s individualism as one of the most distinctive features of the novel, Mcinelly (2003) affirms “In *Robinson Crusoe* we get, perhaps for the first time in English prose fiction, a work that asserts the primacy of the individual subject” (p. 4). He focuses Crusoe’s determination to prioritize individual will over familial and social expectations. Crusoe, who gives up his middle-class status and his father’s counsel, pursues plantation ownership, engages in the slave tradition, and ultimately masters both nature and human beings on the island through intellect and labor. His transformation from rebellious youth to self-sufficient “king” of the island reflects the spirit of modern individualism.

With the emergence of postcolonial theory, traditional critical perspectives on the novel have shifted, offering new interpretations and critiques of its colonial discourse. Mcinelly (2003) considers *Robinson Crusoe* as a pivotal colonial novel that dramatizes colonial expansion, conquest, and domination over non-European peoples and lands. He asserts, “British colonialism informs nearly every feature of Daniel Defoe’s first novel. Spatially . . . religiously . . . economically, and psychologically . . . *Robinson Crusoe* owes many of its most characteristic traits to the colonial context (p. 1). He focuses on Crusoe’s hegemonic role over Friday and his domination of the island, which parallels colonial practices of power, subjugation, and the imposition of European norms on indigenous populations, thereby endorsing Eurocentric values, culture, and system as superior and universally applicable. Said (1994) considers the novel “immensely important in the formation of imperial attitudes, references, and experiences” that symptomatically deals with “a European who creates a fiefdom for himself on a distant, non-European island (p. 9-10). He examines Crusoe’s control and rule over the indigenous people and the island is similar to England’s colonial expansion and conquest. He alludes to *Robinson Crusoe* as “a work whose protagonist is the founder of a new world, which he rules and reclaims for Christianity and England” (p. 70). Sharing with Said, Green (1979) describes the novel as “the prototype of literary imperialism” (p. 5). Crusoe is taken as a symbolic representation of European imperialist who usurps native land, acts as a sovereign, controls the natives, and imposes Christian values and customs, demonstrating that Crusoe’s domestication of the island and his governance over Friday is a reproduction of the logic of colonial domination.

Some scholars such as Hutnyk (2023) view Crusoe’s role on the island as an extension of colonial mission. He writes: “Crusoe appears as the embodiment of English cultural identity, reinforced with polemical strategy to invoke and generalize the axiomatic of colonial mission” (p. 3). Crusoe as an ideal and enlightened English man follows strategies to justify and universalize his colonial mission, control, and cultural superiority. Likewise, Novak (1997) affirms that the story of *Robinson Crusoe* “is not that of conquest but that of colonialism, of the advantages of exploiting foreign land and of a good relationship between colonizer and indigenous population” (p. 114). He sees the novel less about military conquest and more about colonial settlement, displaying the benefits of exploiting foreign land and portraying a seemingly cooperative relationship between the colonizer and the colonized. Downey also observes the theme of colonialism and its domination in the novel. Downie (1983) argues that “*Robinson Crusoe* involves imperialistic propaganda to promote his schemes of trade and colonization” (p. 66). Each step of Crusoe’s journey to the island and his imposition of authority over the natives, particularly Friday showcases the emerging colonialism and imperial power during Defoe’s time.

The novel, despite the adventurous and improbable plot, is often considered one of the realistic novels. In this sense, Richette (2001) singles out the novel as a “pioneering work of modern novelistic realism” (p. xiv). The novel is not a heroic or romantic tale based on fantasy or nobility. Crusoe’s obstacles and his physical and mental struggles for survival illuminate how human beings tackle the adverse situation in their real life. Richetti underscores the complex psychological and moral dimensions of human beings, moving beyond a simplistic interpretation of the novel as propaganda for British imperialism. He writes: “*Robinson Crusoe* is not simply propaganda for British imperial expansion but, also, a dramatization of the psychological origins and moral problems of the triumphant but troubling historical phenomena of Western individualism and imperialism that [Crusoe] comes to embody” (p. xxviii). He supports this claim by focusing Crusoe’s status, anxiety, and fear on the island. Although Crusoe is a paradigmatic self-made individual who relies on his own effort, intelligence, and resourcefulness, his isolation and seclusion force him to confront multiple questions – such as his existence and position, his life and survival on the island without society, and, in doing so, he encounters contradictions as well as moral and ethical problems, notwithstanding his power and authority.

The existing critical discourses on the novel have predominantly underscored the operation of colonial power dynamics and authority. The critics have foregrounded the hierarchical structure that positions Crusoe as the dominant subject and Friday as the subordinated other, reinforcing the assumption of colonial domination as immutable and unchallenged. However, such traditional readings remain inadequate when examined through the lens of postcolonial theory, particularly Bhabha’s conceptualizations of mimicry and hybridity. Previous scholarship has rarely addressed the ways in which Friday negotiates his subjectivity and destabilizes Crusoe’s authority through acts of mimicry and the formation of hybrid self. Thus, this study seeks to fulfill that gap by demonstrating the instability of colonial identity, its inherent vulnerability, and ambivalent dynamics between colonizers and colonized as articulated by Bhabha.

Methods and Procedures

This study employs the qualitative research design, and Defoe’s *Robinson Crusoe* is selected as a primary text, focusing on the contradictory and ambivalent relationship between Crusoe and Friday. To address the research gap, it draws on secondary materials available in the library and online sources. The text is analyzed through the lens of Bhabha’s postcolonial theory, as articulated in *The Location of Culture* (1984) to argue that colonial authority is never static, but can be negotiated, challenged, and resisted through performance of mimicry and creation of hybridity.

Bhabha presents a complex and nuanced concept that critiques essentialist views of culture, identity, and power. He contends that the stereotypical boundaries between colonizer and colonized are fluid and contested, reflecting a system that is itself fractured, shifting, and deeply embedded in power relations. Colonial authority, therefore, can be challenged and subverted through the performative acts of mimicry, hybridity, and ambivalent relationship, where meaning and identity emerge through negotiation and struggle. Hybridity refers to cultural amalgamation and fusion during the time when colonizer and colonized cultures interact. This cultural mixing, according to Bhabha, dismantles cultural purity and fixed identities, consequently, it undermines colonial authority by exposing that colonial power is not wholly imposed or imitated but transformed through cultural interaction. Bhabha postulates that colonial hybridity is the complex and contradictory in nature and it is a space where distinct powers, desires, and disciplines, intersect. Bhabha (1994) admits: “the colonial hybridity is the articulation of the ambivalent space where the rite of power is enacted on the site of desire, making its object at once disciplinary and disseminatory . . . a negative transparency (p. 112). Colonial hybridity is not static; it exists in an ‘ambivalent space’ – a place of contradiction, where meaning and identity are always shifting.

Colonial authority desires its power to be visible, clear, and natural; however, hybridity exposes the contradictions and incoherence in that power. For Bhabha, hybridity is not merely mixing of one race, culture, and identity with another; rather, it is a complex, contradictory, and unstable intersection of cultures shaped by colonial power. Hybridity thus embodies ongoing power struggles and identity negotiations that cannot be simply resolved through cultural relativism. It serves as a means to subvert or destabilize colonial authority, exposing that identity is never fixed or unified, and that colonial discourse is fraught with contradictions and indeterminacy.

Mimicry, on the other hand, is the act of imitating the language, customs, and behavior of colonizer by the colonized subjects. However, it is not merely about coping and becoming identical; rather, it is about performing difference. Through mimicry, the colonized subjects imitate the colonizer, in a way that makes the difference visible and unsettling. Bhabha (1994) opines: “Mimicry is therefore stricken by an indeterminacy: mimicry emerges as the representation of a difference that is itself a process of disavowal” (p. 86). He argues that mimicry is a strategy that creates ambivalence and instability within colonial authority. While the colonizer employs mimicry to impose control, it is disrupted through the partial imitation by the colonized, turning it into a form of mockery. This contradiction is an instance of disavowal that is never fully resolved. Consequently, colonial power remains ambiguous and fragile. The colonized subject’s partial resemblance to the colonizer is both reassuring and menacing – a reminder that colonial identity can be limited, challenged, and even ridiculed. According to Bhabha, this partial imitation is not simple assimilation, but a complex, unstable process that

undermines colonial authority. Mimicry thus generates a site of ambivalence – a mix of compliance and subversion – that reveals the fragile foundations of empire. The colonized subject’s resemblance to the colonizer undermines colonial authority by revealing its failure to fully dominate the colonized. Hence, mimicry becomes a form of resistance because it unsettles the image of the colonizer as superior.

Bhabha states that new cultural meanings and identities are formed in a liminal space what he calls ‘Third Space’ – an ‘in-between’ space. This is a contact zone where different cultures and identities are negotiated and compromised to create new identities that are not unique to one culture or the other. Consequently, colonial discourse is never fully authoritative because it is inherently ambivalent – a simultaneous attraction and repulsion, inclusion and exclusion, and desire and fear of the colonized subjects. According to Bhabha, this ambivalent relationship between colonizer and colonized generates the possibility for resistance within the very structures of colonial authority.

Hybridity, mimicry, and ambivalent relationships are the mechanisms of resistance to colonial authority. Bhabha’s postcolonial theory envisions internal contradictions and instabilities within colonial discourse itself, where traditional binary opposition is always already compromised due to their internal contradictions. Based on Bhabha’s postcolonial theoretical notion of mimicry, hybridity, and ambivalence, this paper seeks to critique the traditional reading of the text as colonial domination, hegemony, and authority. This article argues that colonial identity and authority is not monolithic or subtle but always fragmented and shaped through complex interactions within colonized subjects. Thus, Defoe’s *Robinson Crusoe* unravels colonial tension and ambiguity where colonial power is simultaneously enacted and undone.

Results and Discussion

This section examines Defoe’s *Robinson Crusoe* through Bhabha’s postcolonial theoretical framework, particularly his notion of mimicry and hybridity as central to the colonial encounter between Crusoe and Friday. The novel discloses the underlying instability and fluidity of colonial authority, even though it has often been read as a story of colonial and imperial adventure. The relationship between Crusoe and Friday depicted in the novel is characterized by ambivalence – a simultaneous assertion of dominance and fear of subversion. Bhabha’s key concepts of mimicry and hybridity allow a re-reading of the novel that investigates how colonial authority, while striving for control, inadvertently creates spaces of resistance and negotiation. Thus, the analysis exposes how colonial authority is asserted yet simultaneously disrupted through the acts of imitation and cultural translation.

In Defoe's *Robinson Crusoe*, the eponymous character epitomizes the European colonizer who seeks to control the island and its inhabitants. Crusoe proceeds to establish himself on the desolate island through the creative activities of domestication and cultivation, after being survived the shipwreck. In setting up his colony, he initiates the so-called "civilizing process" in the manner of a European colonizer, and proclaims himself "lord of the whole manor . . . king or emperor over the whole country" (Defoe, 1719, p. 103). This assertion indicates his sense of sovereign power and imperial control, typical of colonial rulers over foreign territories. Moreover, he saves Friday from the cannibals and enslaves him as his submissive and loyal servant, giving him a new English name, Friday. Crusoe initiates cultural, religious, and linguistic colonization by teaching Friday the English language, converting him from cannibalism to Christianity, and imposing European customs to make him conform to a European semblance.

Crusoe is essentially authoritative and oppressive, reinforcing stereotypical binary of superior/ inferior and self/other. His statement "I made him know his name should be *Friday*, which was the day I saved his life . . . I likewise taught him to say *master*; and then let him know that was to be my name" (Defoe, 1719, p. 163) illuminates his assertion of colonial dominance and ownership over Friday. Novak (1997) comments Crusoe's act of renaming: "Crusoe assumes possession of him in the same way that Columbus assumed possession of the land by his naming" (p. 117). This indicates how colonialism nullifies the identities, cultures, and histories of indigenous people. In this sense, Crusoe represents a microcosm of colonial ideology, and the island becomes a manifestation of empire – a space where he exercises imperial control over both land and people.

Crusoe creates differentiation and establishes stereotypical hierarchies between himself and Friday, assuming him to be Christian, rational, and civilized, whereas Friday is depicted as pagan, emotional, and savage. This mirrors Bhabha's claim that colonial power produces "identity effect" (Bhabha, 1994, p. 3), a construction of subjects through representation. Bhabha argues that discrimination and differentiation are central to colonial discourse as colonial authority "requires modes of discrimination that disallow a suitable unitary assumption of collectivity" (Bhabha, 1994, p. 111). Thus, Colonial discourse is founded on divisions and differentiation rather than unity and assimilation in order to preserve its authority and power.

In the novel, Crusoe adopts a similar approach in his treatment of Friday. He attempts to erase Friday's cultural, religious, and indigenous identity by imposing European ideals and compelling him to imitate his ways. Crusoe manifests colonizer's "desire for fixity and order" (Bhabha, 1994, p. 66) to reinforce fixed hierarchies between self and other, master and slave, and civilized and savage. However, Bhabha (1994) considers that fixity in the discourse of colonialism "is a paradoxical mode of

representation” (p. 66) because it seems to introduce contradictions and instability. Crusoe, for instant, defines Friday as naturally inferior, submissive, and savage; yet Friday’s partial mimicry of Crusoe’s language and religion is imperfect being shaped by his own culture. Consequently, Friday’s hybrid presence undermines Crusoe’s desire for order and exposes the fragility of colonial authority.

Bhabha sees the colonial relationship as inherently ambivalent, performative, and dependent on the colonized subject it seeks to dominate. Mimicry and hybridity are key mechanisms that serve to subvert colonial authority and superiority. Thus, Bhabha’s notion of mimicry “almost the same, but not quite” (Bhabha, 1994, p. 86) becomes a key takeaway to perceive the dynamic between Crusoe and Friday. Crusoe tries to recreate Friday in his own image, turning him into a faithful servant and a reflection of colonial civility through the strategic procedure of teaching, conversion, and imitation. He attempts to transform Friday’s perceived savagery to English civility by teaching him the civilized manner of dressing, eating, and behaving. Moreover, Crusoe wants Friday to renounce cannibalism and correct his horrid way of eating. He becomes a fully civilized human being after embracing European norms and values. Crusoe’s civilizing process becomes complete as Hulme (1986) argues that “The native’s ‘subjection’, that is his self-interpellation as a subject with no will brings Crusoe’s civilizing mission to an end” (p. 206). Friday mimics every aspect of Crusoe’s behavior; however, his imitation remains imperfect, revealing traces of his indigenous identity. He is marked by both difference and dependency. His partial mimicry sustains Crusoe’s authority yet simultaneously challenges Crusoe’s absolute colonial control. In this sense, Friday’s mimicry is not mere carbon copy; it becomes the “most elusive and effective strategies of colonial power and knowledge” (Bhabha, 1994, p. 85), exposing the partiality, incompleteness, and instability of colonial discourse.

Friday imitates Crusoe’s language, behavior, and religion and customs in order to survive and win Crusoe’s favor. Yet he remains both distinct and dependent; showing how his mimicry sustains Crusoe’s dominance while simultaneously disrupting his supposedly fixed colonial authority. Thus, Friday’s mimicry “represents an ironic compromise” (Bhabha, 1994, p. 86) because his imperfect imitation inadvertently mocks or parodies Crusoe’s power. Here, Friday’s mimicry functions as a double-edged sword – a tool of colonial control and, at the same time a means of resistance. This dual nature of mimicry is what Bhabha (1994) calls “the sign of double articulation” (p. 86) indicating that mimicry operates as a strategy of both domination and subversion.

Crusoe foregrounds colonial authority through his civilizing acts of teaching, turning Friday a ‘reformed’ native; however, Friday never becomes truly equal to Crusoe because of his racial and cultural difference. Bhabha’s well-known phrase “almost the same but not quite” encapsulates this dynamic: it preserves Crusoe’s authority on the one hand, while Friday’s flawed mimicry simultaneously challenges Crusoe’s sense

of superiority and control. This polarity creates ambivalence and tensions inherent in colonial mimicry. As Bhabha (1994) argues the colonized subject's fragmentary resemblance "leads to ambivalence, uncertainty, and anxiety within colonial discourse, making the mimicry at once resemblance and menace" (p. 86). Although Friday appears almost similar to Crusoe, he nevertheless remains different in his accent, thought, knowledge, and appearance. Crusoe desires to see his own reflection in Friday, but, ironically, he encounters a distorted reflection that threatens Crusoe's confidence and reveals the fragility and artificiality of his power. Friday's expression of his indigenous self – his racial and cultural hybridity – creates in Crusoe a sense of paranoia, a fear of losing control or being mocked by the very 'copy' he has produced. Bhabha suggests that mimicry is not merely a tool of colonial control but also a threat to it. It does not create a complete colonial subject, but only imperfect representations, what he calls "metonymy of presence" (Bhabha, 1994, p. 90), exposing the artificiality, absurdity, and hollowness of the colonizer.

Bhabha develops the concept of hybridity – the mixing of languages, cultures, identities, and meanings within the contact zone between the colonizer and the colonized – as a means of challenging, transforming, and disrupting fixed colonial discourse. Bhabha admits that colonial identity is invariably contingent, impure, and formed through interactions, contradictions, and negotiation. Bhabha conceives of a 'Third Space', a liminal zone where heterogeneous identities, meanings, and power relations are negotiated. It is a creative in-between space in which new meanings, hybrid identities, and subversive expressions interact. Bhabha (1994) writes: "In the emergence of the interstices – the overlap and displacement of dominations of difference – that the inter subjective and collective experiences of nationness, community interest, or cultural values are negotiated", and that "the meaning and symbols of culture have no primordial unity or fixity; that even the same signs can be appropriated, translated, rehistoricized and read a new" (pp. 2, 37). This is the space where different systems, ideologies, and cultures interact and influence one another, and where meanings, power structures and dominant narratives are challenged or undone. Thus, the creation of a hybrid or in-between identity renounces stereotypical binaries, allowing the colonized subject to dismantle the colonizer's discourse through differential use of language, thereby undermining colonial control over meaning.

In Defoe's *Robinson Crusoe*, the island becomes a vivid example of the 'Third Space' where Crusoe's European culture and Friday's indigenous culture come into contact, negotiating and influencing each other. When Friday adopts Crusoe's language, religion, and values, he becomes neither fully pagan nor fully Christian; he is no longer simply the "Other" nor entirely the "Self." His actions and identity remain indeterminate, as he exists in a hybrid space – in-between Crusoe and himself.

Likewise, Friday's role as a loyal and faithful servant is also hybrid, as he obeys Crusoe while simultaneously retaining his own agency through self-expression. As Bhabha (1994) suggests, hybridity "unsettles the mimetic or narcissistic demands of colonial power" (p. 112), Friday's hybrid cultural belonging, unsettles Crusoe's domination and subverts his authority, dismantling the binary between the colonizer and the colonized on which Crusoe's dominance rests.

Bhabha also affirms that the colonizer's language, as a site of power, becomes contaminated and transformed through hybridity. Although colonialism defines, classifies and controls meanings through its language as a discourse of domination, that very language becomes fluid, impure, and contradictory. Bhabha (1994) observes: "In the very practice of domination the language of the master becomes hybrid – neither the one thing nor the other" (p. 33). He suggests that the language of the colonizer is altered when it is blended with the local culture, expressions, accents, rendering it unstable, ambiguous, and unreliable. As the colonized mimics the colonizer's language in a distinctive and resistant way, meanings, words, and symbols are reinterpreted, thereby unsettling the colonizer's authority over meaning. The negotiation of heterogeneous linguistic and cultural signs in the 'Third Space' produces hybrid form that resists any clear-cut image of either language or culture. In the novel, Friday cannot become a perfect English speaker in his imitation of Crusoe's language. His speech is partial, accented, and grammatically broken, as it is disturbed by his own indigenous background. He can neither fully understand nor completely accept Crusoe's worldview. This hybridity, according to Bhabha, disrupts colonial authority because the 'language of the master' becomes unstable – it is neither wholly Crusoe's nor Friday's. Thus, Crusoe's authority through language remains uncertain, and the very tool he applies to dominate Friday is transformed by Friday's hybridity.

In Bhabha's view, the colonial relationship is inherently suspicious, ambivalent, and anxious. The relationship between Crusoe and Friday in the novel is marked by contradiction, ambiguity, and ambivalence—a fusion of domination and devotion, intimacy and hierarchy, affection and control, and power and dependence. From the moment Crusoe rescues Friday from the cannibals, he begins transforming him from a state of savagery and instinct into so-called civilization through acts of teaching moral values and proper manners, calling him "aptest scholar" (Defoe, 1719, p. 166). Crusoe offers protection to Friday to fulfill his own purpose and assert his authority, as he narrates, "that now was my time to get me a servant, and perhaps a companion or assistant" (Defoe, 1719, p. 160). He saves Friday for his self-interest, seeking to end his long years of solitude on the island. His education of Friday and the imposition of European religion and culture reflect his cultural imperialism, as he claims Christianity to be universal and superior.

Friday, on the other hand, submits himself to Crusoe and follows his teaching fanatically, considering Crusoe as his ‘master’. Friday seemingly exposes humility, subservience, and servitude to Crusoe out of gratitude for being rescued from cannibals. Crusoe explains Friday’s submissiveness and his gesture of acknowledgement: “He came close to me, and then kneel’d down again, kissed the ground, and led his head upon the ground, and taking me by the foot, set my foot upon his head . . . to be my slave forever” (Defoe, 1719, p. 161). Friday’s symbolic act of submission and gratitude reinforces Crusoe’s sense of superiority.

Crusoe shows genuine sign of affection toward Friday, speaking warmly and praising his loyalty and intelligence. He esteems Friday: “never man had a more faithful, loving, sincere servant than *Friday* was to me . . . his very affections were tied to me, like those of a child to a father” (Defoe, 1719, p. 165). However, Crusoe constructs a hierarchy between father/child and master/servant as a form of dominance within his so-called paternalistic love. Likewise, Crusoe fascinates and idealizes Friday’s body as a form of colonial domination: “He was a comely handsome fellow, perfectly well made, with straight strong limbs . . . tall and well shap’d He had a very good countenance . . . he had all the sweetness and softness of a *European* in his countenance . . . (Defoe, 1719, p. 162). Crusoe’s fascination of Friday’s body exemplifies the colonial gaze – a dominating tendency of colonizers to perceive the colonized body in terms of physical beauty rather than intellect or individuality. Crusoe admires Friday for his natural beauty, purity, and vitality, as a symbol of “noble savage”, not as a human being capable of reason, emotion, and equal thought. Thus, Crusoe-Friday relationship is founded on domination and control within so-called affection.

Crusoe’s domination of Friday through the act of fascination echoes Bhabha’s assumption that the colonial fetish is a site of contradictory desire, in which the colonizer both idealizes and condemns the colonized subject—as an object of fascination and fear, and as primitive yet inferior. Bhabha (1994) suggests that “the fetish is a substitute for that which is both desired and feared . . . the colonial subject is fixed as an object of fascination and disavowal” (p. 82). The colonizer needs to believe in the colonized subject’s inferiority to maintain domination, but simultaneously desires, or even envies, the vitality embodied by the colonized. Thus, Crusoe’s fixation on Friday’s physique perfectly enacts the colonial fetish that Bhabha describes as a projection of contradictory impulses of admiration, desire, and control.

Although Crusoe appears self-sufficient and dominant, he depends on Friday for assistance, companionship, and emotional support, as Friday’s presence on the island alleviates his twenty-five years of isolation. Likewise, Friday relies on Crusoe for survival and protection. Crusoe provides Friday with clothes, making him “pleased to see himself almost as well cloth’d as his master” (Defoe, 1719, p. 164), and introduces him to the mystery of gunpowder and bullets. He also trains Friday how to

shoot, provides him with more useful weapons, and describes to him the story of his country—the way English people live, worship God, and behave toward one another. However, their intimacy and mutual dependence are contradictory, for Crusoe still regards Friday as inherently savage, inferior, and childlike, assuming himself to be superior and rational. In Crusoe’s world, Friday’s identity remains blurred, and he is seen merely as a domesticated version of the “savage.” Crusoe speaks in a derogatory tone, calling Friday “my savage” and “my man.” Even at the end of the novel, when the Spaniards and mutineers appear on the island, Crusoe immediately reverts to colonial hierarchy, referring to Friday as a “faithful servant.” He identifies with the Europeans, distancing himself from Friday’s so-called savage origin. This dynamic discloses the limits of Defoe’s insight—that although friendship and loyalty coexist within the colonial hierarchy, signs of contradiction and ambivalence never disappear.

Bhabha believes that colonial power is sustained by a constant fear and anxiety that its authority and control may be resisted or subverted at any time by the colonized, who seek agency and equality. This dynamic is evident in the novel when Crusoe perceives Friday’s longing for his native land and his connection to the Caribbean peoples. Consequently, Crusoe keeps Friday in a separate tent and blocks his door to prevent Friday’s sudden entrance, and he carefully stores his weapons in his room. Crusoe expresses his terror:

If *Friday* could get back to his own nation again, he would not only forget all his religion, but all his obligation to me; and would be forward enough to give his countrymen an account of me, and come back perhaps, with a hundred or two of them, and make a feast upon me, at which he might be as merry as he used to be with those of his enemies. (Defoe, 1719, pp. 176-177)

This episode reveals Crusoe’s anxiety about his colonial authority and even his own life. He becomes more circumspect and alert to Friday’s new thoughts and possible deceit when he notices Friday’s strong inclination toward his native deity, Benamuckee—a primordial mountain god. Friday compares his deity to Crusoe’s Christian God, Christ, asking several theological questions concerning the nature of God, evil, and salvation. Crusoe finds himself confounded when Friday asks why the omnipotent Christ does not kill the Devil, and his equivocal answer fails to satisfy Friday’s curiosity. This exchange reflects the complexity and contradictions in Crusoe’s own belief, undermining his confidence in his mission to enlighten Friday. Crusoe then begins to reverberate multiple questions within himself – can Friday be trusted? Might he return to his own people and country? Is his loyalty genuine? – as he becomes increasingly haunted by psychological fear.

In the novel, Defoe presents the footprint scene to dramatize deep-seated colonial anxiety and fear. Before Friday is introduced, Crusoe discovers a human footprint in the sand, which creates terror and threat in him. His panic symbolizes

not just a personal fear of danger, but also anxiety about losing his dominance and authority. Crusoe, who once conceived of himself as “lord of the whole manor”, “king or emperor over the whole country”, where were no “rivals” or “competitor” (Defoe, 1719, pp.102-103) to dispute his sovereignty or command is suddenly lost. His sense of self-perception is completely shattered: “I stood like one thunder-struck, or as if I had seen an apparition” (Defoe, 1719, p. 122). The unknown footprint, as a presence of the “Other” makes him alert to the possibility that his authority might be challenged and contested. Moreover, his narcissism turns into neurotic paranoia – a fear of losing control, displaced, and distorted – as he encounters the footprint.

Crusoe faces recurrent nightmares; anxiety strikes his mind; and every unusual sound startles him. He explains: “I should now tremble at the very apprehensions of seeing a man, and was ready to sink into the ground at but the shadow, or silent appearance of a man’s having set his foot in the island” (Defoe, 1719, p. 124). His terror at the footprint indicates the loss of mastery and his fragility of his supposed self-image. Mcinelly (2003) explains: “Crusoe’s authority – indeed, his internalized image of himself – is threatened by the mere prospects of an encounter with the Other” (p. 17). Mcinelly interprets the image of footprint as colonizer’s insecurity, vulnerability, and possibility of threat on another’s land.

Conclusion

The analysis of Defoe’s *Robinson Crusoe* through the lens of Bhabha’s postcolonial concepts of hybridity and mimicry seemingly proves the instability and vulnerability of colonial authority. The colonial relationship between Crusoe and Friday is not simply a colonial domination and submission, but an inherent contradiction and ambivalence, where imitation and difference coexist. Friday’s hybrid existence and his partial imitation of Crusoe’s cultural norms challenge Crusoe’s sense of superiority and authority, and it reveals the inherent unreliability of colonial discourse. Thus, the novel is not merely a celebration of colonial conquest; rather, it is an exposition of fluidity and unpredictability of colonial authority in which the stereotypical boundaries between master/slave, self/other never remain fixed.

The implications of this study extend beyond the novel itself, suggesting that the colonizer’s domination of the colonized often carries within it the seed of its own subversion. Although this study has focused on European colonial and imperial domination in Defoe’s time, the concept of hybridity, mimicry, and ambivalent relationships can be applied to later colonial and postcolonial texts. Ultimately, this study concludes that Defoe’s *Robinson Crusoe* dramatizes the complex negotiation between the colonizer and the colonized, demonstrating that colonial power is not

monolithic; rather, it is unstable, contradictory, and ambivalent, and can be continually subverted by the very mechanisms it employs to assert control.

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Teachers' Perceptions and Practices of Using Authentic Materials in English Language Teaching

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Abstract

Authentic materials support language learning by connecting classroom experiences with everyday communication. This article examines secondary-level teachers' perceptions and practices regarding the use of authentic materials in EFL classes to facilitate students' English learning. It employed an interpretive phenomenological research design under the interpretative research paradigm. Semi-structured interviews with purposively selected 10 community school English teachers from Birendranagar Municipality, Surkhet, and classroom observations were used to collect data. Semi-structured interview guidelines and observation protocols were used to facilitate 10 interviews and 30 classroom observations (three classes of each teacher). The interviews were transcribed, and observation sheets were compiled for coding and thematic analysis. The teachers argued that authentic materials help teachers encourage and motivate students to use English appropriately and to build an interactive classroom environment for learning the target language. Findings suggest that when used appropriately, authentic materials can significantly enrich the language learning experience and better prepare learners for real-world communication, foster student engagement, enhance critical thinking, and develop essential language skills. Teachers need to select authentic materials creatively and critically, and other educational stakeholders must recognize the importance of using authentic materials in learning a second or foreign language and implement measures to manage such materials and support teachers' appropriate use for students' learning.

Keywords: Authentic materials, engaged learning, community schools, language exposure

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Introduction

Authentic materials refer to resources created for real-life communication rather than for teaching purposes (Mamba, 2024). These include audio, video, songs, podcasts, menus, radio broadcasts, websites, television programs, advertisements, and real-world conversations. Authentic materials (AMs) are not primarily prepared or authored, or created for teaching and learning, or solely to be used in the classroom. Nowadays, English Language Teaching has advanced from traditional grammar-based instruction to more communicative and learner-centred approaches. One key element of this shift is the increasing emphasis on using AMs, texts, and media created for native speakers and real-world contexts rather than for pedagogical purposes. The use of AMs augments language learning and streamlines instruction. It enhances classroom interactions, engages students in practical and communicative activities, and promotes learner autonomy (Pokhrel, 2021).

Mainly, textbooks are used to teach English at the basic and secondary levels in Nepal (Shrestha & Gautam, 2022). The textbooks provide basic outlines for teaching and learning the content. They are neither sufficient for all the learners nor are they equally comprehensible. In this regard, Thanajaro (2000) noted that textbooks are often designed without effectively considering learners' developmental levels and their verbal requirements. Rather, they are designed based on the curricula and a certain accepted benchmark that may not suit the context of the teachers, learners and institutions. English language textbooks in Nepal, for instance, do not foster interest and intellectual curiosity equally among students from different regional and socio-cultural contexts because the same textbooks are recommended nationwide (Giri & Gnawali, 2025). Common criticisms of textbooks generally include unclear main ideas, lack of logical reasoning, missing descriptions, and an emphasis on drills (Nayyar & Salim, 2005). However, English textbooks prescribed in schools follow the communicative approach and emphasize the functional and task-based use of the English language. In this context, the use of AMs could play a crucial role in achieving the designated curricular goals. An important aspect of this debate is assessment, a fundamental component of education. In preparing for the examinations, students lack English communication skills, even when they have great potential to learn (Dawadi, 2023). Classroom teaching mainly focuses on the textbook knowledge and preparation for the final paper-and-pencil tests (Kandel, 2015).

AMs provide students with real-life language exposure, enhance motivation, and improve linguistic competence (Iroda, 2024; Kandel & Raskoti, 2025). Rao (2019) argued that AMs enable English language teachers to employ a range of teaching methods and the latest techniques in their classes. Learners get opportunities to be

exposed to natural, authentic English language exposure with comprehensible input required for the target language acquisition through the facilitation of the teachers (Brown & Lee, 2025). In a similar vein, Dhakal (2022) reported that all teachers responded positively to the use of AMs in ELT. They were aware of the positive effects of the materials even when they could not use them. The study concluded that the use of AMs made English language learning more interactive and student-centred. In the same way, Silvani (2018) also found that students were active, motivated, and enthusiastic to learn when AMs were used in the ELT classrooms because it helped them understand the cultural nuances of English use. It also fostered intercultural understanding by comparing its use across their local contexts.

The exposure obtained from the AMs improves linguistic competence and cultural awareness, motivation, and confidence of the learners in using the language in real-life situations. Given this attention, there is a need to further investigate the impact and practical application of AMs in ELT classrooms in local contexts. This study focuses on discovering how the use of AMs impacts language learning and learners' motivation, in addition to establishing the challenges teachers encounter in using these materials. This study addresses this gap and attempts to investigate the secondary English language teachers' perceptions of using AMs in ELT classes. It also aims to explore teachers' practices for using AMs in ELT classrooms. Particularly, it answers the following research questions:

1. What are the perceptions of secondary-level English teachers towards the use of AMs in ELT classrooms?
2. How do they use AMs in their regular classrooms to convey their beliefs into practice?

Literature Review

The use of AMs in ELT has been a topic of much discussion in applied linguistics and language teaching. Numerous scholars argue that AMs, texts, and media created for real-life communication have the potential to substantially enhance learners' language proficiency and communicative competence. The use of AMs in ELT has been a key topic in second language acquisition and pedagogy. Iroda (2024) claimed that AMs expose learners to real-life language, raise motivation, and build linguistic competence. Sayi (2024) further notes that AMs foster a sense of cultural authenticity and connectedness, thereby encouraging learners to use the language beyond academic requirements. Therefore, the inclusion of AMs in language learning programs can significantly influence learners' motivation, allowing students to be more effective in language learning and proficiency acquisition. Similarly, Rao (2019) argues that, because genuine materials enable English language teachers to apply various tactics

for teaching learners using new approaches in their classrooms, learners have the opportunity to learn the language in a fresh way.

Omid and Azam (2016) state that the use of AMs in language teaching is advocated among the majority of professionals in the language teaching field. Pokhrel (2021) found that AMs fostered student-created tasks such as role plays, letter writing, and community interviews, which led to higher learner autonomy and meaningful use of English in different learning contexts. This study demonstrated the feasibility of using AMs as supplementary materials, accompanied by occasional textbook-free authentic teaching, even in resource-limited settings. Lafta (2024) also identified that AMs notably improve vocabulary retention and reading fluency when supported by structured pre-post-task instruction. This approach aligns with Sharma (2022), who highlighted the inclusion of authentic Nepali and global literary texts in ELT, showing how they enhance cultural understanding and language skills. Similarly, Mitrukescu and Negoescu (2024) highlighted the pedagogical importance of AMs such as newspapers, social media, and videos for improving students' learning outcomes in EFL classrooms.

Likewise, Tamang (2022) identifies criteria such as cultural relevance, linguistic appropriateness, and learner engagement as essential criteria for selecting AMs. In this way, this finding also aligns with Kramersch's (1993) statement on the essential role of cultural appropriateness in language teaching. Fitria (2022) states that AMs refer to texts, photographs, and movies that were not created for educational purposes. Abidjanova (2024) notes that genuinely created AMs provide teachers with opportunities to expose learners to the English language. They can also pursue various approaches and the latest techniques in their classrooms that employ AMs and texts for teaching English as a second or foreign language. Dhakal (2022) identified the perception of teachers on the use of AMs in English Language classes. The results of this study showed that teachers had positive perceptions towards using AMs in English classes at the secondary level. It was also found that using AMs helped to develop the quality of education. It helped both teachers and students achieve their language-learning goals. AMs made language learning more interesting, attractive, enthusiastic, and motivating and expanded the existing knowledge horizon of teachers and students.

AMs are materials used to engage, motivate, and make the classroom authentic in its use of the target language. Using AMs in the ELT classroom helps learners engage with the language as it is truly used by native speakers. In addition, these materials improve listening and reading skills and expose students to vocabulary, grammar, and cultural context. Similarly, they develop the teachers' professionalism too. While they can be challenging, especially for beginners, when carefully chosen and supported, they make learning more meaningful, practical, and enjoyable.

Methods and Procedures

This study adopted a qualitative research approach. It employed semi-structured interviews and classroom observations to examine the use and impact of AMs among secondary-level teachers in ELT classrooms. A qualitative approach was chosen to gain in-depth insights into participants' perspectives, experiences, and the contexts in which they worked. Among the various qualitative research designs, we employed a phenomenological approach. Under this design, we explored the essence and individual teachers' lived experiences of the use of AMs in the ELT classroom.

Participants and Sampling

We purposively selected 10 teachers from 10 government-funded community schools in Birendranagar Municipality. Selected sample participants consisted of seven males and three females, all qualifying a master's degree. Initial contact was made through the head teachers of the respective schools. Then, we built rapport with the participants. After establishing rapport, the purpose of the study was explained, and informed consent was obtained from all participants before data collection.

Data Collection

Data for the study were collected using semi-structured interviews and participant teachers' classroom observations. Each teacher participated in a semi-structured interview lasting approximately 15 to 20 minutes. The interviews were audio recorded using a mobile phone with participants' consent. These interviews aimed to elicit teachers' perceptions, practices, and experiences with materials not primarily designed for teaching and learning in the ELT classroom. Following the interviews, classroom observations were conducted to assess their arguments that they shared during the interviews. Permission for classroom observation was secured from both the head teachers and the participating teachers. A total of 30 classroom sessions (three per teacher) were observed. The purpose of the observation was to examine how the teachers used the AMs in actual classroom practices. Observation protocols were used to record the observation data.

Data Analysis

The interview data were first transcribed and then organized with the observational data into raw datasets. The researchers read and reread the data to get the meaning. Then, the data were coded and categorized thematically under different themes and subheadings relevant to the research guidelines and research questions. A thematic analysis approach (Braun & Clarke, 2006) was used to identify patterns and

insights across participants' responses and classroom behaviors. This process allowed for a comprehensive understanding of teachers' lived experiences and the contextual factors influencing the use of AMs in their respective ELT classrooms.

Results

Based on the research questions, we organized the data into the following themes: teachers' perceptions of secondary-level community school English teachers' use of AMs and the use of AMs in action observed in their classrooms.

Teachers' Empirical Perceptions of Using AMs in ELT

The findings of the study showed that the teachers possessed positive perceptions regarding the use of AMs in teaching English. They shared that AMs were highly effective for the purposeful instruction of the English language in their contexts, as they identified many advantages of using them. To illustrate, T1 argued:

Authentic materials are very important in ELT in our context because English is not a native language for us. It is taught as a second language. So, we are teachers, but not always authentic sources. We can use authentic materials that contain natural use of language in context. Magazines, audio recordings, videos, and literary texts, for example, show how language is used in real communicative situations.

The teachers agreed that the use of AMs exposed the learners to the real-life, natural use of the English language. It consequently helped them acquire language. Moreover, they motivated learners and engaged them in practice with language through audio, video, and texts used in different disciplinary contexts. They also identified that materials helped students become habitual to the appropriate use of language. T2, for example, reasoned: "Authentic materials are very essential to create a helpful teaching environment. They capture students' attention and give a long-lasting impression. So, they are very useful...in the ELT classrooms". The participant teachers cheered the advantages of AMs in students' learning. They also made learning meaningfully engaging and interactive. It enhanced students' motivation and exposed them to the practical use of the English language across diverse sociocultural contexts. These resources are relatable and relevant to real life, which makes lessons more meaningful and engaging. While sharing the advantages of AMs, teachers also mentioned the ease and accessibility. In this regard, T3 added:

Authentic materials are needed to make the classroom more effective. They help students understand more easily. In addition to helping students, they provide knowledge and resources outside the textbook. For example, pieces of newspaper can be brought into the classroom that contain current news. We can

use mobiles and laptops to access and share materials from the internet with the students in classes.

The teachers opined that AMs enhanced classroom learning. It made learning more practical and accessible through the extracts of language used in real contexts. These resources, drawn from everyday life, such as newspapers, advertisements, or casual conversations, supported students in understanding how English is used in real-world contexts. The teachers also highlighted the role of digital tools like smartphones and laptops in finding useful multimedia content appropriate for their students. They reported that they could select appropriate materials from a large repertoire of resources to meet their students' needs. To intensify this idea, T4 elucidated, "Using authentic materials is highly beneficial in our case. They increase enthusiasm, inspire students for critical thinking, and help them prepare for real-life conversations". He meant to explain that the AMs increase students' motivation because they find the content more interesting and relevant. Similarly, these types of materials help students explore natural, everyday language as it is really spoken or written. Moreover, those materials encouraged critical thinking by exposing students to real-life content that may require analysis or discussion. Additionally, T5 revealed, "Authentic materials usually integrate various language skills, reading, listening, speaking, and writing within a single task; reading a news article can lead to a discussion, a writing activity, or a related listening task, like watching a news video". His response highlights that AMs often combine several language skills, such as reading, listening, speaking, and writing, in one activity. For instance, they shared that they used video for listening initially and speaking followed during the discussion on it. Similarly, their sharing, for instance, clarified that reading texts allowed them to teach listening as they read it for the students, speaking as they asked students to read and say the answer to the questions. They could also practice writing by asking the students to write a summary of the text or write answers to the comprehension questions. In this way, the teachers engaged the students with the content of the authentic materials to the full extent.

Similarly, T1 also stressed, "Authentic materials are more important and have great significance, such as increasing student engagement, developing critical thinking, promoting real-life communication, and supporting various other learning activities". His view holds that real materials are important because they motivate learners, develop critical thinking, facilitate real-life communication, and enhance other study skills. Additionally, T2 wrapped up, "The impact of using authentic materials in the ELT classroom is positive because it enhances students' pronunciation and develops their comprehension skills". He added that AMs also help develop the pronunciation and comprehension skills of the students. T3's insight further intensifies the idea, "Authentic materials facilitate comprehension. They help develop language

skills. So, they have a very positive effect”. His explanation illustrates that AMs help to facilitate comprehension skills and other language learning skills of students. They also noticed that it helped their students develop intercultural awareness and negotiated understandings of the controversial issues. To this reference, T5 said, “The impact of using AMs in ELT class includes increased engagement, improved real-world understanding, improved dialect skills, heightened awareness, and critical thinking in students”. The response implies that the use of AMs in English language teaching develops student engagement in learning, real-world and dialect skills, and sociocultural awareness and critical thinking in addition to the basic language skills such as listening, speaking, reading, and writing.

Teachers’ Practices in Classrooms

The data revealed that teachers in the study context used AMs in different ways, with varying levels of concentration and motivational intent. Some were regular users of AMs, while others used them occasionally to bring a difference in their usual teaching, even among the ten participant teachers of this study. For instance, we observed that T1, T2, T4, T6, and T9 occasionally used AMs in their classroom, while the rest of the teachers (T3, T5, T7, T8, and T10) were frequent users of AMs, which they collected and brought into their classes every day. In the meantime, it was visible in the classroom observation that T1, T2, T6, and T9’s use of AMs noticeably engaged the students in additional learning tasks. Similarly, T3, T5, T7, T8, and T10 used AMs in the ELT classroom to help students learn curricular content more illustratively and contextually. In the same vein, T1, T2, and T6 used AMs to improve students’ language skills more effectively in comparison to T7, T8, T9, and T10 in their regular classrooms. On the other hand, T1, T2, T3, and T4 were very well integrated in the use of AMs into the lesson, and the rest of them, i.e., T5, T6, T7,... T10, used AMs in the lesson to accomplish certain skills or tasks at a time. However, T1, T2...T7 were very confident in selecting and using AMs in their lesson. Among them, T8, T9, and T10 were somewhat confident in selecting and using AMs in their lesson.

All the teachers engaged students with AMs. They used language while describing or using them. For instance, T7 brought a newspaper, shared it with all the groups and asked students to prepare a short news report about the event they organized in their school that morning in the assembly. All students got engaged, discussed, collaborated and shared the group-wise final news paragraph in the class. Similarly, T1, T2, and T3 used online resources in their classroom to engage the students to use English through the projector, and the remaining T4, T5,... T10 used the extracts of the children’s stories, poems, and essays related to the environment, good behaviours and familial and school cultures. In the meantime, T1, T2.....T5 were very interested and motivated students while using AMs. Similarly, T1, T2...T5 encouraged students

in learning activities by using AMs. They used AMs in a variety of ways to practice language skills, such as listening, speaking, reading, and writing. Additionally, they also used AMs to help students practice pronunciation, vocabulary, and sentence structures through the online and printed materials they brought into the classrooms. Likewise, T7, T8...T10 were more focused on classroom activities in using AMs. The use helped teachers to accomplish curricular as well as extramural activities, such as socialization in societies and in formal and informal events inside and outside school premises, acquisition of good habits and their performance in speech and writing in English.

Students' reactions were very positive to getting engaged with AMs in the ELT classroom. Teachers had very good instructions by using AMs to motivate the students to use English appropriately in different contexts, orally and in writing. The observations of ten secondary-level English teachers' classrooms reveal diverse patterns in the use of AMs in ELT. While T10 also incorporated AMs in assessing students' language skills and aspects, the rest (T1–T9) used them for classroom delivery and student practices. However, the observation showed that the teachers used AMs in classroom presentation, practices, and student evaluation. It made students learn English implicitly without as much conscious effort of the students as in the conventional practices or the use of the pedagogically prepared materials.

The findings showed that participant teachers in Birendranagar Municipality, Nepal, integrated AMs moderately into ELT. Learners also appreciated the use of AMs in their classroom and participated actively in learning English. This shows that contextual use of relevant AMs is appreciable in EFL teaching and learning. The data showed that both teachers and students acknowledged the academic benefit they received from the use, as AMs allowed them to practice English in real and simulated communicative settings. It also provided natural English language exposure, which triggered students' English learning aptitudes and justified the pedagogical benefits of using AMs in ELT. Nevertheless, the findings unveiled the instrumental difference in EFL pedagogy through AM-integrated teaching that increased interactivity and encouraged student-centred teaching. Yet, the teachers' readiness, efforts, and confidence in using AMs varied significantly in the study site, although all the teachers agreed that the use of AMs in ELT builds cultural awareness, critical and higher-order thinking skills, and intercultural understanding among the students.

Discussion

The study found that secondary-level English teachers in community schools in Birendranagar held a positive attitude toward AMs in ELT. They shared their success stories about using AMs to create better learning environments in their classrooms

as they induced genuinely communicative contexts for using the English language interactively. Students were actively engaged and highly motivated using the multimodal authentic resources more easily than conventional teacher-tailored materials. The teachers' use of printed texts from newspapers and magazines, literature, fictional books, daily conversations in different contexts, restaurant menus, and multimodal texts such as audio-visual materials, podcasts, and social media content provided students with exposure. AMs supported teachers in enhancing students' communicative interactions, intercultural awareness, and learning autonomy in their learning contexts (Kandel, 2019). Many students participated in class discussions and learned through sharing and collaboration in such AM-integrated classrooms. The findings of this study corroborate with Dhakal (2022), as the study reports teachers' appreciation towards the use of AMs to expose learners to authentic linguistic input that contributes to quality English language acquisition. Additionally, aligned to the findings of this study, Mishan (2021) also highlighted the importance of AMs for developing cultural awareness and linguistic proficiency within the learners' sociocultural contexts.

The findings of this study substantiate the motivational potentials of the AMs in ELT. The participant teachers' perceptions and practices depict a critical appraisal of the pedagogical use of the AMs. In this regard, Peacock (1997) and Gilmore (2007) reported that real-life texts and media content boost learners' engagement and bridge the gap between classroom language and language used in real contexts. The teachers' experience in this study, as they observed heightened student motivation and engagement with AMs, further underscored the usefulness of AMs for scaffolding the complex process of English language acquisition among Nepali learners. Bist and Kandel (2024; 2025) identified that literary texts helped learners develop communicative skills and the linguistic structures implicitly by exposing them to authentic discourse that depicted contextual English use. The use of AMs also includes the avenue of integrating ICT in ELT, as it addresses the concern of accessing appropriate materials in resource-limited contexts. Kandel (2023; 2025) identified that ICT-induced AMs facilitated students' integrative language development. Akin to these studies, the teachers in this study also reported that AMs engaged learners in listening, speaking, reading, writing, and learning grammar, vocabulary, and pronunciation. It consequently reduced students' cognitive strain and effort in English language learning and helped increase their language proficiency. Fang and Webb (2020) also reported that the use of the AMs gave exposure to real-language input. Additionally, they suggested scaffolding the exposure for better pedagogical mediation. The findings of this study, in this way, justified that AMs assisted in developing learners' readiness, motivation, learning awareness, socio-cultural sensitivity, and confidence.

Similar to the findings of this study, current studies corroborate that AMs are supplementary teaching tools in ELT. For example, Mitrulescu and Negoescu

(2024) highlighted the importance of AMs in the classroom to attain optimal student comprehension and motivation. Likewise, Husnawati and Yundayanu (2024) identified that such materials positively affect student engagement, intrinsic motivation, and cultural curiosity. Morton (2024) also argued that learners who use AMs acquire vocabulary and communicative competence that are immediately applicable to professional and real-life contexts. The study found that most of the instructors favoured using AMs ELT on a varied scale based on the teaching content. Some used them habitually, while others used them selectively, as dictated by time, material, or professional pressures, including the demand of the lesson and students. However, all the participant teachers acknowledged a significant role of AMs in language teaching, particularly in bridging the gap between the theoretical knowledge that they have acquired during the teacher education courses and modules, including the preservice teacher preparation courses of the universities and communicative language use in the context of ELT in Nepal.

Conclusion

This study illustrates that AM integration in ELT in the context of secondary-level government-funded community schools in Nepal exerts remarkable influence on learner motivation, intercultural awareness, and English language acquisition. The findings showed that real-life language use in the AMs justified the appropriate use of language to learners more than teachers' mere explanations. It developed sustainable habits of the students in engaged learning and critical comprehension of the language in meaningful contexts. AMs also provide exposure in different forms and media of language that reinforce the dynamic nature of language learning in different social contexts. It helps learners gain linguistic competence and strategic as well as communicative competence through contextually grounded, academically relevant, and engaging language input. Furthermore, such material offers invaluable opportunities for cultural exploration, making language learning more meaningful and enjoyable. In this study, identified that AMs also promote critical thinking and holistic language competencies of the students. However, effective use of AMs requires meticulous planning, creativity, and contextualization. Teachers need to prepare for selecting and utilizing appropriate AMs to ascertain their alignment with lesson goals and students' needs.

The findings of the study imply more innovative and planned utilization of AMs in ELT in Nepal. This includes selecting materials that are age-appropriate, level-appropriate, and based on the interests of the learners. Proper planning is required on the part of the teachers in order to benefit from the optimum pedagogical potential of AMs in the classes. The study suggests that curriculum planners integrate AM into English language curricula, textbooks, and supplementary materials. Such integration

will enhance a communicative and practical approach to language learning, bridging the gap between classroom learning and daily use. Revisions in the secondary-level English curricula and textbooks in Nepal can consider revisiting the examination system to offer flexibility to AM-based activities. This would foster a more vibrant and learner-centred pedagogy while aligning assessment with real-life language use and communicative competence. Similarly, school administration should support teachers by providing resources, training, and institutional support to incorporate AMs. While the use of AM-based lessons may initially seem burdensome, with appropriate support, teachers can adapt lesson plans to incorporate AM to augment textbook content. Through collective efforts on the part of teachers, curriculum planners, policymakers, and school managers, AMs can be an empowering tool in ELT in Nepal.

Meanwhile, the study was limited to exploring the perceptions and experiences of 10 English language teachers from Birendranagar regarding the use of AMs in ELT classrooms, employing semi-structured interviews and classroom observations. Those delimitations had been established to maintain a focused and manageable scope for the study. This study adds to the literature on English language teaching by capturing secondary teachers' perceptions and practices of using authentic resources in the context of Nepali EFL instruction. The phenomenological design further unveils teachers' lived experiences and practical efforts that depict how they embrace materials for enhancing learner autonomy and communicative competence. Also, it suggests evidence-based recommendations for teachers, curriculum designers, and policy makers to integrate authentic materials systematically in school-level English education.

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Authors' Contribution

The first author was responsible for data collection and writing the initial draft of the manuscript, while the second author led the conceptualization of the study and the development of research instruments. Both authors reviewed the final version and provided informed consent for publication. The second author further contributed to the substantive revision of the manuscript and oversaw the correspondence for the publication process.

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Practices of the Semester System in Higher Education: Insights from the University of Nepal

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Abstract

The semester system is an innovative approach to education that differs from the annual system. It emphasizes continuous student assessment, a flexible and market-driven curriculum, and learner-centered teaching methods. This study examines the implementation of a semester system at Valley University (pseudonym), Nepal. A mixed-methods approach was employed to gather quantitative data from 43 faculty members via a Google form, with seven faculty members chosen for in-depth interviews across five graduate schools at VU. The findings show that while faculty members view the semester system as a modern and innovative approach to higher education, its complete success is challenged by insufficient infrastructure, inconsistent academic calendars, irregular student attendance, inadequate teaching and learning resources, poor time management, an under-resourced library, and limited professional development opportunities for teachers. Faculty members discussed the need for curriculum revision and redesign to meet market-driven demands, effective administrative management, and the proper integration of technology in teaching and research. The study concludes that policy formulation, including the effective implementation of the semester system, teacher capacity building through professional development, and infrastructure investments, is necessary for the semester system to achieve its goals. The study's findings can improve existing practices and facilitate knowledge sharing among key university stakeholders.

Keywords: Academic calendar, educational reform, internal assessment, university teacher



Introduction

A semester system is an academic structure that divides a year into two equal parts. In other words, an academic year is organized into two semesters, each lasting 14–16 weeks and comprising lectures, midterms, assignments, projects, and semester-end examinations, with final evaluations based on both internal assessments and summative examinations. The semester system is a widely recognized method of organizing higher education worldwide (Joshi, 2019; Patgiri, 2019). Its goal is to improve student learning outcomes through ongoing assessment, student-centered teaching and learning, and flexible curricula. The semester system is widely used in both developed and developing countries, highlighting its potential to enhance critical thinking, practical application of knowledge, and academic rigor (Malik & Shrestha, 2023). Pabla (2014) emphasizes the importance of the semester system, highlighting its support for continuous and in-depth learning, as well as its goal of developing students' abilities by fostering the necessary knowledge, skills, and positive attitudes. Nevertheless, in the South Asian context, the practice of the semester system has shown mixed results, as educational institutions face challenges in balancing its demands with infrastructural and administrative limitations.

In the Nepalese context, Tribhuvan University introduced the semester system in the 1970s. The system could not continue for an extended period and was replaced in the 1980s by an annual system due to administrative and logistical issues (Pokharel & Subedi, 2018). Regarding the discontinuation of the semester system, Joshi (2019) stated that it was a failure for several reasons. Some of these issues include insufficient and under-equipped infrastructure, poor administrative management, inadequate implementation of the academic calendar, the absence of fixed admission and enrollment criteria, irregular student attendance, and an under-resourced library. Later in 2014, Tribhuvan University reintroduced the semester system with a fresh hope of improving academic quality, ensuring timely student assessments, and aligning with global standards. However, challenges like inconsistent academic calendars, resource shortages, and inadequate faculty training have hindered its success (Dahal, 2018). Other universities in Nepal, such as Kathmandu University, Far Western University, Nepal Open University, and Mid-West University, have been running their various academic programs on a semester system since their inception.

Implementing the semester system effectively in Nepalese higher education institutions requires pedagogical and institutional changes. Both students and faculty members recognize its potential to improve learning and enhance quality. Addressing the problems encountered during implementation through academic, financial, and administrative strategies is crucial for successfully transforming Nepalese higher education to produce skilled manpower for various aspects of society and the country.

Against this backdrop, Valley University (VU) (pseudonym) of Nepal has adopted the semester system from its inception, demonstrating its strong commitment to delivering quality education. However, despite this commitment, the university faces several challenges related to student admissions, teaching and learning strategies, student assessment, and the proper implementation of the semester system in its true spirit. This study addresses a gap in Nepalese higher education: the lack of empirical, institution-specific analysis of the implementation of the semester system. By examining VU's experiences, this research provides evidence that can inform both institutional reforms and national policy decisions in Nepal.

Literature Review

Although the semester system is a popular approach to education, only a few studies have examined its implementation and effects in South Asian higher education. Jat (1970) examined teachers' perceptions of the semester system and found that most teachers viewed it positively. Similarly, Akhtar (1980) conducted a study of the semester system in a few Indian universities. He found that it was well-adopted by administrators, that teachers had considerable freedom in designing courses and grading students, that there were numerous ways to teach, and that there were numerous internal assessments. In Nepal, Chongbang (2014) conducted a comparative analysis of the semester and annual systems at the Faculty of Education, Tribhuvan University, and found that the semester system led to higher student pass rates, likely due to its structural benefits rather than changes in teaching methods. Bhutia and Subba (2015) reported on the practices of Sikkim's colleges, highlighting a rigorous framework that includes midterms, term papers, practical examinations, and semester-end examinations. Their findings highlighted the benefits of learning and the overall development of students. However, they faced challenges such as large classes, lengthy syllabi, a low-resourced library, and teacher favoritism in implementing the system. To overcome these challenges, they stated that continuous teacher feedback and a favorable rapport with students could help.

Sharma (2016) conducted a meta-analysis of the semester system in three countries: Nepal, India, and Pakistan. The study reported mixed results that varied depending on the context. Similarly, Dangi (2016) explored students' attitudes toward the semester system and found that they were generally satisfied with it. Furthermore, Pandit (2016) found a strong correlation between students' overall satisfaction and their perceptions of the quality of mathematics education. In agriculture, Pokharel, Jaishi, and Subedi (2018) found that more than half of the teachers and students valued curriculum relevance; however, dissatisfaction was common regarding co-curricular activities (49%), course coverage timelines (55%), and class regularity (89%) in the

semester system. Dahal (2018) also examined how students at the Nepal Commerce Campus (MBS program) in Kathmandu, Nepal, felt about the semester system. He emphasized the need for strategic improvements in academic resources, course organization and planning, physical resources, governance, and institutional image to enhance the system's effectiveness. His findings show that students' perceptions of all aspects are quite satisfactory, except for the toilets and canteen facilities on the campus. Sardar et al. (2019) identified teacher behavior and engagement as the main factors influencing student satisfaction in Pakistani universities. Similarly, Acharya et al. (2023) investigated teaching and learning mathematics under the semester system at Tribhuvan University. Their findings showed that the semester system has brought positive changes in teaching and learning practices. Moreover, the study found that the internal and external evaluation systems support students' overall development in general and the development of mathematical skills and knowledge in particular.

Despite a few studies on the semester system, including its effectiveness, perceptions, challenges, and coping strategies, research on the semester system at VU has not been conducted yet. To address this gap, this study was undertaken to explore the practices of the semester system implemented in higher education institutions in Nepal.

Methods and Procedures

This study employed both qualitative and quantitative (i.e., a mixed-methods) approach. It began with a quantitative survey to gather numerical data, followed by a qualitative narrative inquiry. This study aimed to investigate the practices of implementing the semester system at VU. An explanatory sequential mixed-methods approach was selected to study the practices and personal experiences of university-level teachers. The target population comprised all faculty members from five graduate schools at VU: Education, Humanities and Social Sciences, Engineering, Management, and Science and Technology. Forty-three faculty members were selected for the survey using simple random sampling, and seven of them were chosen for in-depth interviews purposively.

The researcher developed a structured questionnaire for faculty members that included both closed-ended and open-ended questions. The closed-ended questions helped quantitative analysis, while the open-ended questions enabled participants to share their experiences and perceptions regarding the semester system. Furthermore, semi-structured interviews were conducted with seven purposively selected faculty members to gather their personal insights and "lived experiences" regarding practices in teaching within the semester system. Data collection was done in two phases: first, Google Forms were sent to the faculty members via email; second, in-depth interviews

were conducted with seven faculty members to confirm and expand on the survey results. These interviews were conducted with participants' consent via Zoom and transcribed verbatim for analysis and interpretation.

The survey data were analyzed using descriptive statistics (percentages and frequencies) to identify numerical information. Moreover, qualitative data were coded thematically, following the framework of Braun and Clarke (2006) for thematic analysis. Initially, several codes were selected from the interview transcripts, and they were later merged into five themes. Participant validation (member checking) was used to ensure credibility, asking the respondents to review and confirm the accuracy of their recorded responses. The study maintained ethical considerations by obtaining informed consent, maintaining participant confidentiality, and respecting diversity in terms of ethnicity, gender, and socioeconomic background. The data were stored securely, and participant anonymity was maintained throughout the study. Pseudonyms have been used for the university name and participant names.

Results

This section presents findings from surveys and interviews conducted with 43 faculty members across the university's five graduate schools. The 43 participants, selected randomly, completed the survey, and seven of them were chosen for in-depth interviews about their experiences teaching in the semester system. Of the total participants surveyed, 40 were male, and three were female. Their teaching experience ranged from one year to over 10 years, with most having more than 10 years of teaching experience in the semester system. The results are presented both statistically and thematically, aligning with the study's research objectives.

Institutional Practices and Orientation

The faculty members' responses regarding their institutional and orientation practices are shown in Table 1.

Table 1

Teachers' Information Regarding the Institutional Practices and Orientation

SN	Statements	Responses	
		Yes	No
1	The graduate school issues an academic calendar for the semester system that specifies the start date of the semester, holidays, termination date of the semester, midterm exams, and other relevant dates.	43 (100%)	

2	If you responded yes, the graduate school strictly follows the academic calendar.	24 (56.25%)	19 (43.75%)
3	A fixed quota or system is in place for on-campus student admissions.	24 (55.8%)	19 (44.2%)
4	The graduate school offers the Entrance Test (ET) as an optional or obligatory requirement.	42 (97.7%)	1
5	The graduate school runs an orientation program for the students at the beginning of the program/course.	35 (81.4%)	8 (18.6%)
6	You provide the program syllabus and the academic calendar on orientation day.	29 (67.4%)	14 (32.6%)

Table 1 shows that all teachers (100%) stated they provide a comprehensive academic calendar; however, only 56.25% of respondents confirmed they follow it strictly. Approximately all graduate schools (97.7%) used an Entrance Test (ET) for student admission, and a similar percentage (97.7%) also employed a fixed quota or admission system. Moreover, most graduate schools (81.4%) offered orientation programs for new students; however, a significant minority (32.6%) did not take this opportunity to distribute the syllabus. This highlights a gap in standardizing the immediate sharing of essential course documentation with students.

Curriculum Relevance and Quality

The faculty members were asked for their opinions on the curriculum's relevance and quality, and their responses are displayed in Table 2.

Table 2

Teachers' Views Regarding Curriculum Relevance and its Quality

SN	Statements	Responses	
		Yes	No
1	The curriculum is relevant, up-to-date, and market-based.	22 (51.2%)	21 (48.8%)
2	The objectives in the curriculum are SMART.	27 (62.8%)	16 (37.2%)
3	The curriculum's contents help achieve the set objectives.	34 (79.1%)	9 (20.9%)
4	You are free to structure the teaching courses to meet the course objectives.	29 (67.4%)	14 (32.6%)
5	The curriculum is interdisciplinary in nature.	32 (74.4%)	11 (25.6%)

Table 2 shows that most respondents agreed that curriculum objectives are SMART (62.8%) and that the content effectively achieves these goals (79.1%), indicating strong internal consistency. Nevertheless, slightly more than half of the respondents (51.2%) reported that the curriculum was relevant, timely, and market-driven, with nearly an equal number disagreeing. Moreover, about three-quarters (74.4%) reported that the curriculum is interdisciplinary, with an integrated learning focus. Furthermore, a majority of respondents (67.4%) expressed having the autonomy to design courses that meet their objectives, demonstrating widespread pedagogical freedom in course delivery.

Binod (pseudonym) shared his experience of applying his strategies for managing issues related to the curriculum from his perspective as:

When prescribed textbooks and reference materials are not available in the library or on the market, I use the Internet, such as Google and Google Scholar, to search for research articles, books, research reports, PowerPoint slides, and other relevant resources for my courses. While teaching in the classroom, I utilise the latest research articles, books, and reports to provide students with up-to-date knowledge. I make every effort to incorporate current, relevant, and practical content into my teaching.

Similarly, Shyam (pseudonym) shared his strategy as follows:

I prepare a detailed course outline to revise the syllabi and incorporate modern teaching and learning resources to support students' education. My focus is consistently on imparting the latest knowledge, skills, and attitudes to students. To support their learning, I prepare class lectures, PowerPoint slides, and handouts, and sometimes compile course materials for students. I also utilise locally available resources for my teaching.

Teaching Methods and Resources

The respondents were asked about the teaching methods and classroom resources they used in the semester system. Their responses are displayed in Table 3.

Table 3

Teachers' Responses Regarding Teaching Methods and Resources

SN	Statements	Responses	
		Yes	No
1	You prepare the course session plans before a semester begins.	27 (62.8%)	16 (37.2%)

2	Your graduate school determines the appropriate teaching and learning methods for the course.	18 (41.9%)	25 (58.1%)
3	You use interactive lectures and discussions, programmed learning, team teaching, assignments, and project work in the class.	43 (100%)	0
4	You actively involve all the students in class discussions.	35 (81.4%)	8 (18.6%)
5	You use authentic materials in the class.	34 (79.1%)	9 (20.9%)
6	You provide students with reading materials, such as sufficient and up-to-date books, articles, and class notes.	36 (83.7%)	7 (16.3%)

Table 3 shows that all respondents (100%) supported the use of diverse, interactive teaching strategies, including project work and team teaching, and were firmly committed to active student participation (81.4%) in discussions and to the use of authentic materials (79.1%). Resource availability was also good, with 83.7% of respondents providing students with sufficient and current reading materials. However, while a majority of respondents (62.8%) planned their sessions before the semester began, more than a third did not. Most faculty members (58.1%) reported that the choice of specific teaching methods was not mandated by the campus, indicating a high level of individual autonomy in teaching.

In this context, Ram (pseudonym) shared his experience with using teaching-learning materials in his teaching as follows:

In addition to traditional instructional materials, I incorporate a variety of teaching resources, such as laptops, multimedia projectors, audiovisual tools, documentaries, and case studies. My teaching approach focuses on combining these tools to enhance the learning experience and address students' diverse needs, abilities, and learning styles.

Despite these challenges, several issues were identified, including a shortage of multimedia projectors, unreliable internet connections, frequent power outages, and limited access to library reading materials. About 27.9% of faculty members reported not using audiovisual materials at all due to these problems.

Students' Regularity and Adaptation of ICT Tools

The faculty members were surveyed about their students' consistency and use of ICT tools in the classroom. Their responses are presented in Table 4.

Table 4*Students' Regularity and Incorporation of ICT Tools*

SN	Statements	Responses	
		Yes	No
1	Students attend class regularly.	19 (45.2%)	23 (54.8%)
2	Students must maintain an attendance rate of at least 80% for the entire semester.	25 (58.1%)	18 (41.9%)
3	Students come to class prepared for the topic.	25 (58.1%)	18 (41.9%)
4	Classes are run regularly throughout the semester.	33 (76.7%)	10 (23.3%)
5	You assign presentations and fieldwork to the students as part of assignments.	42 (97.7%)	1
6	You provide any rubrics or instructions along with the presentations or fieldwork assignments to the students.	36 (83.7%)	7 (16.3%)
7	Students submit their assignments to you before the deadline.	27 (62.8%)	16 (37.2%)
8	You use students' diverse social, cultural, regional, etc., backgrounds as examples in class.	36 (83.7%)	7 (16.3%)
9	You establish the link between teaching and research in your class.	40 (93%)	3 (7%)
10.	You incorporate ICT tools, such as email, the Internet, Google Meet, and Zoom, into your class.	40 (93%)	3 (7%)

Table 4 shows that most respondents (54.8%) indicated that their students do not attend classes regularly, despite 58.1% confirming a mandatory attendance requirement of 80%. Student preparation for the topic they would study that day was somewhat more positive, with 58.1% of faculty agreeing. Although teaching was consistent, 76.7% reported that classes are held regularly throughout the semester. The surveyed teachers demonstrated a strong commitment to active student learning, with 97.7% assigning presentations and fieldwork and 83.7% providing rubrics or instructions for these tasks. They reported using ICT tools (93%) and integrating teaching with research (93%). Moreover, teachers promoted inclusive teaching by using students' diverse social, cultural, and regional backgrounds as examples (83.7%). Student assignment completion was moderate, with 62.8% submitting on time.

Interviews with faculty members reveal that they faced challenges related to technical infrastructure, technological skills, resource availability, and student engagement in using ICT tools. They stated that unreliable power supply and internet access, a lack of gadgets such as projectors, mobiles, and laptops, and limited ICT skills among students and teachers. Teachers mainly relied on themselves using personal data/gadgets, participated in workshops, engaged in self-learning, and requested support from colleagues and trainers. Additionally, implementing the semester system faced challenges such as high student irregularity and absenteeism, academic dishonesty, time constraints due to lengthy syllabi, and inadequate infrastructure and administrative support. Teachers typically utilise a combination of assignments/projects, presentations, and various examinations/tests for assessment, with a strong focus on providing constructive feedback. However, continuous assessment was not widely practiced. Shyam (pseudonym) said he tried to solve ICT-related problems in his teaching from his side:

I use an alternative power source and mobile data for the Internet to conduct online classes from home. When I encounter issues with ICT tools, I consult an IT expert. Sometimes, I ask my colleagues and students for help. I also try to find solutions through Google search and YouTube. Additionally, I search for and download teaching materials whenever I have Internet access, whether at home or elsewhere.

Assessment Practices

The teachers were asked about the assessment practices they used in their classes, and their responses are shown in Table 5.

Table 5

Students' Assessment Practices

SN	Statements	Responses	
		Yes	No
1	You assess the students continuously.	39 (90.7%)	4 (9.3%)
2	You provide any constructive feedback on the students' performance.	41 (95.3%)	2 (4.65%)
3	You provide the question bank to the students.	23 (53.5%)	20 (46.5%)

Table 5 shows that most respondents (90.7%) reported continuously assessing students, indicating widespread use of ongoing assessment methods throughout the semester. As a result, a continuous assessment was strongly supported by the provision of constructive feedback, reported by an even higher percentage of faculty at 95.3%.

This suggests that assessment is primarily used for learning improvement and guidance, rather than solely as a final measure. However, the practice of providing a question bank to students is with a slight majority (53.5%) doing so, indicating that graduate schools or individual faculty members have not yet reached a consensus on the usefulness or appropriateness of giving students such pre-exposure to potential exam content.

Regarding the problem faced while assessing students in the semester system, Hari (pseudonym) expressed that:

One major challenge I face when evaluating students is the submission of late assignments. Some students miss the assignment submission deadline. Often, I have to follow up with them repeatedly before they submit their assignments. Late assignment submission is a significant problem.

Teachers' Professional Development

The teachers were asked about their professional development programs, and their responses are shown in Table 6.

Table 6

Teachers' Professional Development

SN	Statements	Responses	
		Yes	No
1	You have received professional development training in your subject.	18 (41.9%)	25 (58.1%)
2	You received training related to teaching and assessing students in the semester system.	21 (48.8%)	22 (51.2%)
3	If yes, it helps you to teach and evaluate students in the semester system.	16 (74.4%)	5 (25.6%)

Table 6 indicates that a majority of respondents have not received any professional development training from their institutions. Specifically, 58.1% reported never having received professional development training related to their subject matter. In comparison, slightly more than half (51.2%) have not received training related to teaching and assessing students within the semester system. This shows a significant gap in professional enhancement programs. However, among the group of teachers who received training, a strong agreement emerged regarding its usefulness: 74.4% stated that the training was beneficial for teaching and assessing students in the semester system, highlighting the perceived value and positive effects of such initiatives when implemented.

Discussion

The results of this study indicate that both structural and pedagogical issues hinder the effective implementation of the semester system at VU. Challenges such as a lack of strict follow-up on academic schedules and inadequate infrastructure align with prevalent themes identified in higher education transitions in Nepalese institutions.

The study's findings reveal that no strict adherence to academic calendars poses a significant challenge, frequently hindering the timely delivery of teaching and assessments. Sah (2020) agrees that the effort to maintain a strict academic calendar, coupled with the resulting disruption of teaching schedules, frequently undermines the time-sensitive nature of semester-based programs, a situation attributed to political instability and administrative delays in Nepal. The semester system requires 'temporal discipline,' in contrast to the annual system; this study demonstrates that inadequate time management and student irregularity undermine the continuity of learning. This aligns with Poudel's (2021) assertion that the transition to semesters in emerging contexts is predominantly 'structural rather than functional,' with the academic calendar being theoretical yet infrequently adhered to in practice.

The practical implementation of semester systems is hindered by limited resources, including inadequate ICT facilities and unreliable internet access, which hinder the integration of technology into teaching and learning. Physical constraints challenge the implementation of interactive, student-centered teaching, supporting Attard et al.'s (2010) claim that student-centered learning requires flexible conditions, which are often unattainable in traditional, overcrowded classrooms. Furthermore, the lack of reliable internet and library resources aligns with the "digital gap" described by Ghimire (2022), in which inadequate technological integration prevents faculty from moving beyond traditional lecture-based methods.

The study's findings suggest that teachers are not adequately prepared for the teaching methods and tests specific to each semester. This aligns with Lohani's (2019) study, which indicates that many teachers in Nepal still rely on summative evaluation models characteristic of the annual system, rather than the continuous, formative assessments essential for an effective semester system. Without targeted faculty development programs, the 'washback effect' of traditional exams continues to shape the classroom environment, regardless of the administrative structure.

Conclusion

This study examined the implementation practices of the semester system at Valley University in Nepal from the perspectives of faculty members. The findings indicate that, although they consider the semester system modern, practical, and student-centered, its full potential remains unrealized due to numerous persistent challenges. In

the effective implementation of the semester system, the significant challenges include inconsistent adherence to academic calendars, irregular student attendance, outdated or insufficient teaching and learning resources, limited ICT infrastructure, and gaps in faculty preparedness for semester-based teaching and assessment. Although the curriculum is relevant and better aligned with labor market needs, it could benefit from more practical components, greater integration of indigenous knowledge, and stronger interdisciplinary links. Issues regarding academic honesty and low participation in internal assessments hinder the practical evaluation, despite the benefits of continuous assessment.

Overall, the semester system at VU has excellent potential for enhancing educational quality in the area where the university is located. However, its success depends on systemic reforms, targeted resource allocation, and specific capacity-building programs for both faculty members and students. By addressing the above-mentioned challenges, VU and similar institutions in developing regions can better realize the semester system's intended benefits—such as encouraging active learning, enhancing academic standards, and aligning higher education with the needs of a rapidly changing global knowledge economy. After adopting a semester system and reforming assessment procedures to enhance teaching and pedagogy, VU will highlight the importance of ongoing infrastructure investment and professional development.

The study's findings will help university authorities refine their current practices to make them more effective and reliable, aligning with twenty-first-century global educational trends. Despite challenges about curriculum implementation, the results are valuable to all stakeholders involved in the semester system. This supports policymakers in developing effective educational policies. It also assists curriculum experts in addressing problems related to curriculum design, teaching, learning activities, and assessment methods, thereby enhancing their efficiency, reliability, and consistency. As a result, the insights from this study can inform the reorganization of the semester system to address its limitations and challenges.

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Language in Education Policy at the Local Level: Ideologies and Practices

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Abstract

Language in education policy is a contested issue in multilingual nations like Nepal. Policy makers in these contexts face the dual challenge of incorporating the demands of ethnic and linguistic identity through multilingual education, with the desire for global language learning through English Medium Instruction (EMI). Against this backdrop, this paper aims to identify the language ideologies of local level authorities and teachers in the process of local level policy formation in Nepal to understand how these actors navigate the inherent tensions between multilingual education (MLE) and EMI policy demands. Using a phenomenological research design, I draw on the first-hand experience of local-level officers and teachers through interviews and FGDs. Local level authorities lack knowledge of the need for medium of instruction policies and have not yet approved medium of instruction policies for their region. However, during the interviews and discussions, local authorities appear to be guided by a neoliberal ideology that supports standard and global language above local indigenous and minoritized languages for education. However, school teachers are against the imposition of a language policy that prioritizes a single language over others. Teachers wish to be given agency to decide on the language to be used in the classroom based on the learning needs of their students. The study therefore offers implications for TESOL professionals and policy makers on the need for policies that balance the global role of English with support for linguistic diversity and teacher agency.

Keywords: Medium of instruction, multilingual education, teachers' language ideologies, linguistic ecology

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Introduction

Language in education policy is widely recognized as a contested issue in multilingual and super-diverse contexts, where decisions about the medium of instruction are shaped not only by pedagogical concerns but also by political, ideological, and historical forces (Mohanty, 2006; Liddicoat, 2007; Saud, 2025; Tollefson & Tsui, 2004; Vertovec, 2019). In Nepal, language policy has passed through multiple ideological phases. During the Rana regime (1846–1950), English education was restricted to elites as a strategy to maintain power and social hierarchy (Sharma, 2011; Weinberg, 2013). After 1950, the state adopted a “one nation–one language” ideology, institutionalized through the Nepal National Education Planning Commission, which promoted Nepali as the sole medium of instruction to achieve national unity and linguistic assimilation (NNEPC, 1956; Weinberg, 2013). This monolingual orientation marginalized indigenous languages while privileging Nepali and foreign languages. A significant shift occurred after the restoration of democracy, when the 1991 Constitution recognized Nepal as a multilingual and multicultural nation and introduced mother tongue–based multilingual education (MTB-MLE), particularly for early grades, as a means of valuing learners’ linguistic resources and strengthening educational foundations (Phyak & Ojha, 2019).

In the post-2006 period, language in education policy has become further complicated by neoliberal ideologies and the global expansion of English as a lingua franca. English medium instruction (EMI) has increasingly been perceived as linguistic capital associated with quality education, social mobility, and participation in the global market, despite limited research-based evidence supporting its effectiveness in multilingual contexts (Saud, 2024; Sah & Li, 2017; Phyak, 2016). Policy ambiguity intensified after the amendment of the Education Act in 2006, which allowed Nepali, English, or both as media of instruction (Phyak & Ojha, 2019). The promulgation of the 2015 Constitution and the introduction of federalism further decentralized authority over language, culture, and education, enabling provincial and local governments to formulate their own language policies (Phyak, 2011; Sapkota, 2012). As a result, local practices range from the promotion of indigenous languages through MTB-MLE initiatives to the expansion of English-medium schooling, reflecting competing ideologies of identity, development, and power (Phyak & Ojha, 2019; Fillmore, 2019). In this context, this study aims to explore the plans and procedures adopted by local governments for language in education policy, to examine the language ideologies of local authorities and schoolteachers, and to understand how linguistic diversity is being addressed in classroom practices within Nepal’s federal system.

Literature Review

Nepal is one of the most linguistically diverse countries in the world, reflecting a mosaic of cultural, geographical, religious, and linguistic plurality. According to the National Population and Housing Census 2021 conducted by the National Statistics Office (NSO), Nepal is home to 124 mother tongues spoken across its population, reaffirming its complex linguistic ecology under the Federal Democratic Republic system. Nepali remains the largest mother tongue, spoken by 44.86% of the population, followed by Maithili (11.05%), Bhojpuri (6.24%), Tharu (5.88%), and Tamang (4.88%) as the next most spoken languages. Other languages such as Bajjika, Avadhi, Nepalbhasha (Newari), Magar Dhut, Doteli, Urdu, and Yakthung/Limbu also contribute significantly to Nepal's linguistic landscape. The census also recorded a wide range of smaller languages, many spoken by very small populations, highlighting both linguistic diversity and vulnerability among lesser-used tongues. Additionally, a variety of second languages are used across the country, with Nepali functioning as a dominant additional language for nearly 46.2% of the population, followed by other languages such as Maithili, Hindi, Bhojpuri, and English (NSO National Report, 2021).

At the regional level, linguistic diversity remains pronounced. For example, Sudurpaschim Province, located in the Far Western part of Nepal and bordered by Lumbini Province, Karnali Province, China, and India, illustrates intra-provincial multilinguality with approximately 83 languages spoken in the province alone, including languages such as Doteli, Nepali, Tharu, Baitadeli, Achhami, Magar, Hindi, Tamang, Newar, and Gurung (Yadava, 2017). Such heterogeneity within regional contexts indicates that linguistic diversity is not solely a national phenomenon but is intensely localized and contextually distributed. The presence of major mother tongues alongside numerous minor languages demonstrates how population size and geographical dispersal influence language vitality and societal representation.

Language policy and planning have evolved significantly over the decades, transitioning from early frameworks guided by modernization and national development priorities toward more critical perspectives that emphasize issues of equality, justice, and linguistic rights (Ricento, 2000). Education policy is a formal discourse addressing both formal and nonformal educational systems, including operational mechanisms and institutional structures that govern schooling. In its broadest sense, language policy refers to deliberate actions aimed at influencing the structure, function, and acquisition of languages or language varieties in society. Within education systems, language in education policy refers specifically to legislation, guidelines, and institutional practices determining the language of instruction and literacy language(s) used in basic education. This includes decisions about the medium of instruction (MoI), the

role of learners' first languages (L1), and the responsibilities of implementing agencies (Tollefson, 2008; Dutcher, 2003).

Approaches to language policy can be broadly categorized into top-down and bottom-up perspectives. The former centers on government decisions that prescribe language use in official domains such as schools, media, and public administration without necessarily reflecting the complexity of linguistic diversity in everyday life (Schiffman, 1996; Phyak, 2017). In contrast, bottom-up perspectives view language policies as emergent from actual language practices, beliefs, and communicative behaviors of individuals, communities, and institutions. Both perspectives underscore the importance of considering sociopolitical and socioeconomic contexts in policy planning and implementation, as these conditions influence language choices in homes, schools, and communities.

Language ideology plays a central role in shaping language policies. Blommaert (2006) argues that language policies are invariably rooted in linguistic ideologies—systematic beliefs about what forms of language are desirable or ideal within society. Schiffman (1996, 2006) explains that language policy is socially constructed and shaped by the linguistic culture, a repository of collective beliefs, values, and attitudes toward languages. Farr and Song (2011) further emphasize that language ideology and policy are inseparable, meaning that underlying beliefs about languages inevitably shape policy outcomes, even if ideology does not determine policy directly (Sonntag, 2007). Thus, both explicit policies and implicit sociolinguistic norms impact educational opportunities and language use.

Within education systems, the choice of MoI significantly influences student learning, identity formation, and social inclusion. Studies consistently show that children educated in a language unfamiliar to them—especially when it is a national or foreign language—experience disadvantages in comprehension, participation, and academic success (Ball, 2011). This is particularly pertinent in Nepal, where languages such as Nepali and English have historically been privileged. Early language policy in Nepal, shaped by the Rana regime, privileged English education for elites and associated Western education with social status, while later federal policies reinforced Nepali as a means of national cohesion. This legacy continues to influence contemporary educational practices and parental expectations.

The theoretical foundation of the present study draws on two influential frameworks: Ricento and Hornberger's (1996) Language Planning and Policy (LPP) "onion" model and Spolsky's (2011) theory of language policy. Ricento and Hornberger conceptualize language policy as operating across national, institutional, and interpersonal levels, emphasizing interaction between top-down directives and bottom-up practices. Their onion metaphor illustrates how each level permeates and

influences the others, often producing ambiguity and conflict in policy implementation. Teachers are highlighted as key policy actors who interpret and enact policy in classrooms, effectively shaping policy in practice (García & Menken, 2010).

Spolsky's (2011) framework complements this model by defining language policy through three interrelated components: ideology (beliefs about language), practice (actual language use), and management (deliberate efforts to influence language behavior). Language policy is understood as a social phenomenon shaped by both internal and external factors. Beliefs guide language choices, practices reflect real-life language use, and management involves interventions such as laws, regulations, and institutional directives (Spolsky, 2004, 2011). Together, these components provide a comprehensive lens for examining how language policies are formed, interpreted, and implemented.

Empirical studies in Nepal and beyond further illuminate the complexity of language in education policy. Awasthi's (2004) ethnographic study demonstrates that Nepali-only and English-only medium-of-instruction policies create linguistic hierarchies, marginalize non-Nepali-speaking children, and negatively affect their academic achievement, identity, and well-being. Burton's (2013) study in the Philippines shows that effective mother tongue-based multilingual education requires interaction between national policy and local interpretation, rather than rigid top-down enforcement. Research in Nepal's Far Western region reveals a growing shift toward English medium instruction driven by competition with private schools and parental pressure (Ojha, 2018; Paudel, 2020; Saud, 2020). These studies highlight the widespread belief that English equals quality education, despite evidence that EMI often hampers comprehension and cognitive development. Teachers frequently rely on translation and translanguaging, revealing a mismatch between policy ideals and classroom realities.

Fillmore's (2019) study of MTB-MLE initiatives in Kavre and Panchthar districts shows that local governments can adopt multilingual policies when supported by evidence-based guidance and institutional collaboration. However, such initiatives remain limited and largely experimental. In nutshell, the reviewed literature underscores that language-in-education policy in Nepal is shaped by historical legacies, ideological contestations, and evolving federal structures. While significant research exists on medium-of-instruction debates, there remains a clear gap in studies focusing on local governments as policy actors. This study addresses that gap by examining the ideologies, plans, and practices of local authorities within Nepal's federal context, informed by established theoretical frameworks and grounded in empirical realities.

Methods and Procedures

I adopted a qualitative phenomenological research design to examine the lived experiences and language ideologies of key stakeholders involved in language in education policy. This study was guided by the interpretive research paradigm, which assumes that reality is socially constructed and that knowledge emerges from multiple perspectives of both the researcher and the researched. In line with this assumption, qualitative research recognizes the existence of multiple realities rather than a single objective truth (Denzin & Lincoln, 2005). I purposively selected three local government units in Kailali District, namely Dhangadhi Sub-Metropolitan City, Tikapur Municipality, and Kailari Rural Municipality, to represent urban, semi urban, and rural contexts with varying degrees of linguistic diversity and geographic location. The selection of these sites was based on the inclusion of different types of local governments, linguistic composition, and their location across the district. Dhangadhi Sub Metropolitan City represents a linguistically diverse urban context, Kailari Rural Municipality reflects a linguistically homogeneous rural setting, and Tikapur Municipality represents a semi urban and linguistically heterogeneous context, thereby enabling a comparative understanding of language ideologies across settings (Yadava, 2017; Bhasha Aayog, 2075). In addition, I selected one school from each local government to explore school level practices related to language use and medium of instruction. I engaged mayors or, where necessary, deputy mayors as key informants to understand policy level perspectives, and I involved teachers to gain insights into everyday classroom realities and practices.

I generated rich and in-depth data through prolonged engagement using interviews and focus group discussions. I conducted interviews with representatives of local governments to explore their experiences, priorities, and plans regarding language in education policy, while I facilitated focus group discussions with teachers to elicit shared and contrasting views on language practices, rationales, and challenges within schools. I audio recorded all interactions and maintained detailed field notes to capture contextual information. I transcribed the data verbatim and systematically coded and categorized them by identifying recurring patterns and meaningful relationships. I employed thematic network analysis to move from basic codes to organizing and global themes and interpreted these themes critically using participants' exact words in order to preserve authenticity and do justice to the voices of key informants (Cohen et al., 2011). To ensure the trustworthiness of the study, I used triangulation, member checking, peer review, and thick description as recommended in qualitative research (Creswell & Miller, 2000). I maintained ethical standards throughout the research process by informing participants about the purpose, relevance, and implications of the study, ensuring voluntary participation, and protecting confidentiality in accordance

with ethical guidelines for social science research (Cohen et al., 2011). I presented the findings thematically and drew conclusions and practical recommendations grounded in the empirical evidence generated through the study.

Results and Discussion

I started preliminary preparation after I got information about the acceptance of my proposed study. I further strengthened review of relevant literature and prepared broad interview and Focus Group Discussion guideline. Then, I prepared request letter for field visit from my working institution getting oral consent from the Ministry of Social development authority. Since it was the time of Corona Pandemic second wave, the field visit was not as easy as I expected it to be. The schools were about to postpone face to face teaching learning activities. Getting access to mayors and deputy mayor was quite challenging due their engagement pandemic management endeavors. Keeping this aside for few weeks, I shifted to schools. At first, I contacted three schools that I have selected purposively and finalized the schedule for Focus Group Discussion. I started the field visit from the first week of Chaitra and completed the first-round visit before lockdown. I could not perform face to face interview with all mayors of selected municipality. However, I utilized telephonic interview tool instead to draw required ideas on language in education policy, plans and strategies.

Based on the ideas drawn from different sources, I have transcribed, coded, and categorized key information. The categorized themes are given meaning by interpretation and discussion along with relevant theories and previous.

Language in Education Policy: Local Governments' Perspective

After the dawn of federal system of government, the discourse of restructuring, names and identities of the states became hot issues in the political discourse. The three layers of government were formed with the delegation of several kinds of rights and responsibilities. The newly promulgated constitution also envisions multilingual, multicultural, multi- religious and multiethnic policies in all spheres including education. Among the key concern agendas of local government visualized by the new constitution, language and education are pivotal areas. The political transformation has brought about some crucial changes in the existing language in education policies by creating broader space for the promotion of multilingual environment. This is further supported by the resolution and decision made by the newly elected Mayors in the first day of office. Phyak and Ojha (2019) reported that the Mayors of Kathmandu, Kirtipur and Ghorahi have decided to legitimate Nepal Bhasha and Tharu as the language of official use. On the contrary, the representative of Suryabinayak Municipality decided

to implement English medium of instruction in all community schools up to grade three. These declarations and decisions were immediate and unplanned. The subsequent section reflects the preparedness and progress of local levels in the issue of language in education policy.

Language in Education Policy: The Least Prioritized Issue

The local governments have not been able to focus on the issue of education during their four years of tenure. The local bodies have spent first two years in the process of being familiar with new system and understanding roles and responsibilities. It took several months for them to build the foundation in terms of physical infrastructure (Municipality office, ward office), human resource management and other micro management. They could not manage the key human resource to handle the education department for long. When the local bodies were having it smooth motion, the pandemic shifted their priority to community health and its development. In that situation, going in depth of different issue of education was difficult. Within the education, they gave major concern to school building, and teacher management. One of the mayors remarked:

Our progress in education sectors is remarkable. However, we vision could reach to the making medium of instruction policy, the software part of education. In our context development is realized only when there is physical output. The language in education policy formation requires a team expert and deep study. We will seek the experts from the federal government and work on it very soon. (Interview Vignette: Head, Local Level C).

The language is education policy is created, interpreted and appropriated in different layers. Based on Johnson (2013) the policies are shaped by intersexual and interdiscursive links to past and present policy texts. After the creation, it is put to motion and made open to interpretations and finally taken for implementation). The progressions go through different levels of governmental language policy (federal level/creation, state level/interpretation, local level/appropriation); or which can transpire throughout all levels (Johnson & Johnson, 2014) in top down approach of policy process. In this vein, local governments are in the position to implement language in education policy created at Federal level. In new political system of Nepal, the local governments are policy arbiters and the school system as the implementers. Zhao (2011) argues the people with power, people with expertise, people with influence and people with interest have role key actors in the policy formation process. The grassroots people who neither have power nor have capacity to influence the decision making process are considered as the people with interest (Phyak, 2013). In the current process of language in education policy formation process in the local level, it seems

that the people with interest, who should be the active agent of the process, will be ignored that according to Zhao (2011) may result the failure of macro policies when they are put to practice. Unlike the top- down process, bottom up approach put the teachers and school system at the center and gives active agency to them in the process of policy formation.

Language as the Medium or Subject

Languages at school are used in different two ways: one as the subject and the other as the medium. English and Nepali are taught as the subject from grade one. Additionally, Primary Education Curriculum 2005 has made the provision of the local curriculum. Schools can develop and implement local contents of 20 percentage weight age in social studies, creative and expressive arts and physical education. On the hand, learners' mother tongue, Nepali and English languages are used as the medium. However, local authorities do not seem to identify if the schools of their municipality is using language as the medium or as the subject. It is evident from their perspectives I asked them about the language in education policy:

We have prepared the policy and decided to teach local curriculum. Local culture, tradition is taught as the separate subject in many schools (Interview Vignette: Head, Local Level A).

The use of language as the medium is related to leaning and comprehension of the subject while the language as subject is related to the content. The information drawn from interview also revealed that they are unaware about the policy provisions and language sequencing framework as suggested by Ministry of Education (2015). The framework suggests that mother learner's mother tongue is used as the medium from ECD to grade three and can continued as the subject up to secondary level. Similarly, Nepali language can be used as the medium of instruction the students whose mother tongue is Nepali, in other case it is used as the subject up t o grade three. In the secondary level, Nepali can be used as both medium and subject. The framework further suggests that English language is used as compulsory subject up to grade six; as medium of instruction for mathematics and science from grade six to eight; and as medium instruction all subjects except the language subjects in secondary level. This trilingual policy offers learners (whose language is other than Nepali) an opportunity learns and uses three languages (his/her mother tongue, Nepali and English) in the course of education (Seel et al., 2015).

Global or Local: An Ideological Dilemma

Being multilingual country in one hand is strength; however, it gives rise to challenges in the management of Languages. The presence of multiple languages in

the classroom has guided the policies into two major directions: Global and Local. Ministry of Education (2016) claims that ‘many educationists ‘many educationists and some political groups have advocated that education should be provided to children in their mother tongues, and MoE has a policy of supporting mother tongue-based multilingual education up to grade 3’ (p.29). On the other hand, the popular discourse of globalization, internationalization and market economy (Phyak, 2016) has encouraged the public-school shift to English medium. The ideological dilemma between global or local is emergent among the local government heads. For example, Mayor B says:

If home language is used as the medium, it is very supportive for the learner. I do agree with idea of teaching in local language in first few years then shifting to Nepali and English (Interview Vignette: Head, Local Level B).

The schools are demanding for English from the nursery. Therefore, this year, the village Assembly has approved the decision to launch an EM school in each ward. For this, 0.2 million budgets have been allocated. Based on the evaluation of these model pilot schools, the decision for further expansion will be made. We have supported by providing textbook to EM schools this year as incentive (Interview Vignette: Head, Local Level B).

In one hand, the local representatives give strong argument in favor of local language for cultural identities of ethnic minority children. They advocate for the use of home language in acquiring equitable and quality education. On other hand, they could not be untouched by neoliberal ideology of giving importance to English which is evident in the opinion of Mayor B:

Teaching them Tharu might lag them behind. We are teaching local curriculum in lower levels. That is enough to make them aware about the original culture and rituals. Describing in the home language is ok but spending two to three years in local language medium will not convince the guardians. I am not planning to implement this system. It is difficult to manage. (Interview Vignette: Mayor A).

The ideological dilemma between the local and global language in education policy is evident in the excerpts. Such policy provisions created at the macro/ top level ignoring the active engagement of teachers working at the grassroots hardly meets the needs and requirements of the children. Both mayors fragile support for local language as the medium instruction seems to reflect the political diplomacy of not hurting anyone. This also gives rise to the question ideological double standard.

Language in Education Policy: Schools’ Perspective

School system that includes School Management Committee (SMC), Parent Teacher Association (PTA), Teachers and students are in the center of policy formation process. Their experiences, ideas, opinions and argument can certainly be the guidelines

for local level policy on education formation and implementation. Considering this acclaimed fact, I visited three schools situated in three different local levels of Kailali District. According to School Sector Development Plan (2016- 2023), classification of school in terms of language of catch communities, two schools belong to the third type where the learners are from diverse linguistic backgrounds with no common mother tongue. And one school is identical to the second type where the learners homogeneously (90%) speak a language other than Nepali as their mother tongue on the entry of ECED or grade one. The local level government has not prescribed any specified language in education policy to be implemented. However, two schools using Nepali as the official medium of instruction to deliver the curriculum. Unlike this, one school has implemented English medium instruction since last 6 years. The subsequent section presents the discussion on the teachers' rich on the ground experiences on the use of language, their language ideology and practices.

Language in Education Policy: Rigid or Flexible?

Language policy in school as recommended by the official policy documents is to be mother tongue (grade1-3), Nepali and English in the step incremental manner (The Constitution of Nepal, 2015; School Sector Development Plan, 2016). The macro level policy in education clearly speaks on trilingual or multilingual language in school education. However, the teachers at the implementation have differing voices and ideologies. Upon being asked about the suitable language to be used for quality learning, a teacher argued that:

We do not have very strict policy on the use of English inside the classroom. In the basic level, the teachers use the learners' mother tongue and Nepali. Since teachers are also from non-Nepali speaking group. Even Nepali speaking teachers can use Tharu language. We focus on content with the flexible use of languages. The use of Nepali language and English is almost equal in the secondary level. While the use of Tharu, Nepali is more frequent than English in basic level (FGD Vignette: Head teacher School C)

It indicates that the teachers do not have strong ideology for using English unlike the private schools' ONLY English policy. The use of learners' home language is shaped by comprehension and concept while the argument for the use of Nepali and English guided by the assumption that the standard and language of prestige help them to grab the better opportunities in national and international market place. Analogous to this, teachers state:

I have the opinion that the students have to be taught in national language... After completing the school education, they may go to different part of the country where they need the national language to communicate (Teacher FGD: School A).

In resonance to this, another teacher argues:

I prefer the use of Nepali and English both in case of teaching science. English improvement is essential with reason that they will have mobility to foreign countries. And the medium of instruction at college level (science) and medium of final examination both are in English. We have been wasting time in translating into Nepali; instead, we can initiate English medium of instruction in all levels. (Teacher FGD: School B).

The teachers reveal that Nepali - the language of wider communication and English- language of prestige and status marker better serves the students in their future career. Such language ideology according to Sah and Karki (2020) undermines the potential of students' mother tongues and perceive them as the language of communication only at home. At the same time, it unpacks the neoliberal ideology of globalized world where language is taken as commodity to be cashed in for economic benefit (Fillmore & Paudel, forthcoming). In the issue of rigidity and flexibility in the use of languages for learning, there was common consensus among the teachers that monolingual policy valorizing particular language and stigmatizing another language does not create equity and justice in learning. One fit all kind of policy created by the macro level arbiters cannot address the demands of all classroom. The appropriate language in education policy keeps the learning at the center maintaining the justifiable balance in the use of mother tongue, Nepali and English in different contexts and levels.

Medium of Instruction: For Learning or Advertising?

Another important discourse is evident among the teachers that should medium keep the learning at the center or use it the marketing policy to boost up student enrolment. As Ojha (2018) claims that community schools have witnessed a sharp decline in the number of students in the recent years that motivated them to adopt EMI to attract and retain students. This is further supported by the official documents of Ministry of Education (2014) admitting the reality that the community schools could not stop shifting to English medium to stave off the threat from the private schools and keep their enrollments from declining. It is also echoed in the head teachers' opinion:

Mainly, we were under the pressure to compete with the private schools that were attracting the students in the name of English medium. There was also trend of shifting to English among the communities (Teacher interview vignette: School C).

The head teacher's comments reinforce the assumption that English medium is popular slogan to attract the attention of the parents who cannot afford to send their children to private schools and shift to English helps them to feel that their children

have access to greater opportunities in life (Ojha, 2018). The head teacher is reluctant to share when I asked about the academic achievement of the learners. The issue of improved learning outcome of the students after its implantation is questionable with the previous human resources who according to the head teacher did not consider themselves ready to teach in English medium:

The teachers (not all) were against this policy. They claimed that they would not teach in English. We convinced them, encourage them. The teachers with the age of their retirement wished to get early retirement with the fear of not being able to teach in English (Teacher interview vignette: School C).

Proficiency of the teachers seems to be the major challenge of EMI schools in assuring the quality education. This is also evident in the study by Karki (2018) that unpacks the reality that after the introduction of EMI, students' achievement is declining. The children were unable to explain and express in English properly though having knowledge in Nepali. The evidence reveals that teachers use Nepali to explain the content while it is mandatory to write in English.

Unlike this, teachers advocating local language as the medium believe the official use of language as the medium in education should focus on the leaning. A teacher opines:

Language is means of communication. It should be easy and comprehensible. Where medium is difficult and complex, learning cannot be imagined. While making the decision about the language to be used in the classroom, learning should be in the center. Local teachers are to be given agency in selecting language for instructional practices (Teacher FGD: School A).

In this regard, Burnett (2012) argues that familiar language as the medium is supportive for educational achievement. This argument rests on the idea that students understand more of what they are taught and retain the information better. Research has shown conclusively that children whose early education is in the language of their home tend to perform better in the later years of education (Thomas & Collier, 1997). For the students of minority language communities, shifting from home to national and national to global language impairs learning.

Conclusion

The study shows that language in education policy is a highly sensitive and complex issue in a multilingual context like Nepal. Choosing a single language as the medium of instruction without considering local linguistic ecology, teachers' professional capacity, and students' language backgrounds often leads to weak implementation and limited learning outcomes. The findings indicate that local governments are increasingly interested in introducing English as a medium of

instruction, often as pilot initiatives, but these decisions are frequently made without adequate planning, teacher readiness, or professional development. As a result, the expected quality of teaching and learning is rarely achieved. The study also highlights that rigid, uniform language policies imposed from higher levels do not fit diverse classroom contexts. Instead, flexible language use guided by teachers, who best understand classroom realities, more effectively supports student learning. It can be argued that language policies should be guided by learning needs and educational equity rather than popularity or publicity, and teachers should be given greater agency in determining context appropriate medium of instruction.

The findings imply that policy makers and local authorities need to approach language in education policy with greater sensitivity and contextual awareness. Clear implementation guidelines, meaningful decentralization of authority, and strengthened capacity of local education offices are essential for effective policy enactment. Schools and local stakeholders, including School Management Committees, parents, and teachers, should engage in informed and participatory decision making that prioritizes long term learning outcomes over short term enrollment goals. Greater emphasis is needed on strengthening classroom pedagogy, teacher student interaction, reading resources, and the use of mother tongue as a foundation for learning, with a gradual transition to national and international languages. This study is limited by its phenomenological approach, which focuses on experiences rather than institutional outcomes. Future research could explore specific schools as case studies, examine language shift among minority learners, or assess the effectiveness of English medium instruction in terms of teacher readiness, student engagement, and learning achievement.

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Interrogating Colonial Legacy of Active Learning Strategies in English Language Education: A Postcolonial Critique

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Abstract

Linguistic imperialism continues to persist unintentionally through pedagogical practices, even within contemporary decolonial contexts. Drawing insights from postcolonial theoretical lens, this thematic paper critically interrogates the colonial legacy embedded within Nepalese English language classrooms. I adopted Braun and Clarke's thematic literature review as a theoretical framework to identify recurring pattern and themes from the existing literature around my study area of the western dominance in the adoption of pedagogical approaches in the non-western contexts. For the study purpose, secondary sources were used to critique on the issue. Using Google database search engine as the data source, I collected only eight relevant academic papers strictly following the systematic literature review process. Furthermore, four books were purposively selected to respond to the search questions. The findings of the study revealed that teaching approaches developed in monolingual context, still dominates significantly even within the post-colonial context. This study highlights the importance of developing culturally relevant active learning teaching approaches to resist the western legacy, arguing that uncritically adopted methods in multilingual and multicultural contexts like ours, reinforces the unintentional western legacies to non-western unique educational settings. This study is significant because it serves as an instrumental tool for policy makers and academic leaders to strategically adapt the western centric teaching approaches and focus more on culturally sensitive pedagogical approaches in multilingual and multicultural classrooms within post-colonial settings.

Keywords: Linguistic imperialism, post-colonial pedagogy, language teaching, multilingual

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Introduction

Almost all dominant teaching approaches, including active learning strategies are originated in western contexts. The western methods, paradoxically considered as the mainstream teaching approaches, are functioning as a soft form of pedagogical control of English language teaching (ELT) to the non-west. ELT has functioned as a linguistic imperialism - a soft power of British industry for ideological dominance and power structures (Phillipson, 2016). Through English language, the British are implicitly colonizing non-native English people for centuries, though their flags have transition to independence. Colonialism is replicated primarily through the expansion of British/American models of teaching and periphery countries are accepting and adopting the pedagogical models believing that they are universal, superior and standard for teaching a second language (Phillipson, 2016; Pennycook, 1994; Kumaravadivelu, 2003). The predetermined assumption about teaching is sustained by the fact that the British-American represent mainstream theories about language teaching providing a methodological guide for 'how to teach English language' worldwide. As a result, some of the common traditional British and American modeled pedagogical methods such as Audiolingual, Communicative Language Teaching (CLT), Task-Based Learning (TBL) and Total Physical Response (TPR), though they are mutually not inclusive, have been globally adopted, institutionalized and practised uncritically, across diverse sociolinguistic educational settings.

To further accelerate this assumption, mainstream theorists have advocated for active learning strategies as an absolute learner-centered method for the 21st century second language classrooms. Active learning strategies, though set in monolingual context, basically aim to promote learner autonomy, enhance engagement for developing language proficiency, fostering critical thinking abilities. Active learning is grounded on social constructivism, and based on the assumption that students' collaboratively can co-construct knowledge when they are actively engaged in the learning process (Vygotsky, 1978). Scaffolding supports from the teacher or mentor maximize the students' learning and transform the learning process. Active learning strategies, from this perspective, are considered to be the transformative tools for promoting learners autonomy, enhancing engagement and developing language proficiency. Active learning strategies are meant for fostering learners' critical thinking abilities through active engagement with the teaching materials and content.

Mainstream active learning strategies are key to language success, enabling learners to actively engage in the classroom for a deeper understanding of the text through contextually meaningful activities. Active learning strategies such as discussion, project-based learning, and collaborative tasks are vital for enhancing problem-solving skills and critical thinking abilities of students in modern language

classrooms (Bonwell & Eison, 1991; Johnson & Johnson, 2009). In addition, active learning strategies are the practical instrumental tools to ensure teacher agency and promote learners' autonomy in learning process. However, the uncritical transfer of colonial power and adoption of western-centric active learning strategies are posing significant threats on their efficacy of ELT in second or foreign language context (Kumaravadivelu, 2003; Pennycook, 2007). It is significant to note that mainstream active learning has become a soft engine to reproduce their colonial power.

Framed in Paulo Freire's emancipatory approach to teaching, active learning serves as an obvious transformative teaching method, which empowers learners for critical engagement in the learning process, promoting their proficiency and fostering autonomy in English language classroom (Bonwell & Eison, 1991; Freire, 1970; Johnson & Johnson, 2009). Nevertheless, scholars from post-colonial critique tradition have argued that active learning strategies such as group work, role play and debates, etc. are fundamentally embedded with Eurocentric assumptions about learning and conflicting with local knowledge system, classroom practices and worldview. It is to be noted that the adoption of teaching strategies developed in monolingual context is unlikely to fit in Nepali sociolinguistic settings primarily for the two reasons. First, the uncritical adoption of unexamined teaching strategies developed in the western context may not sufficiently address the learning ability, styles and needs of learners from diverse sociolinguistic and cultural settings of Nepalese classrooms. Secondly and more importantly, such colonial teaching strategies are covertly replicating pedagogical dominance of the west, perpetuating the educational neocolonialism and epistemic injustices.

Nepal has a unique political history. Unlike other Asian countries, e.g. India, Nepal was not colonized politically. Though it was not colonized geographically, the linguistic colonization is inherently intersected through missionary, education development aid and global language policy. The covert colonial hegemony is mainly reflected through English language and language teaching, nevertheless subalterns are resisting colonial dominance critically (Canagarajah, 1999).

English language teaching is taken as the one of the most respected jobs in non-native English speaking countries including Nepal, as English language is perceived as a ladder for career advancement, elite privilege, modernization and global social mobility through the British-Indian colonial connection (Phyak, 2016). In a similar vein, Kumaravadivelu (2003) argued that the teaching approaches are evolved and developed mostly in the global west and decentralized to the global east and global south. Hence, British-American metropolis are at the center of developing ELT theories and methods. They are the producer of theories, while remotely located decentered non-native countries are the consumers of theories. This prototypical division of labour is unproductive and unrealistic.

Therefore, it is important to take control in principles and practices and restore agency of peripheral community, and resist linguistic coloniality through alternative context sensitive teaching principles. Furthermore, moving forward Kumaravadivelu (2003) presented an influential alternative theoretical framework of *postmethod pedagogy* for contesting the colonial legacy of teaching approaches of 3Ps parameters: particularity, practicality, and possibility. This 3Ps theoretical framework states that teaching context and learners' cultural identities are absolutely diverse (particularity); the mere application of one particular theory in multilingual settings is unrealistic and insignificant (practicality). It is possible to resist the western dominance of western traditions in language teaching through critical pedagogy empowering classroom participants (possibility).

Similarly, Pennycook (2007) ironically stated that colonial roots of active learning are 'donor-driven-international agenda' which promotes standardized model of teaching marginalizing the local pedagogical knowledge, multilingual realities and indigenous learning culture. Furthermore, Phillipson (2016) demonstrated through his investigation of Native English Speaking Teachers' (NEST) performance in six different Asian countries that monolingual teachers were under qualified to teach in unfamiliar conditions with learners' languages, cultures and pedagogical tradition and pointed out for the need of multilingual competence to the language teachers. He further argued that deployment of NEST to Asia was the vested economic and geopolitical agenda behind English language teaching business. That is to say, hidden intentional political and economic interest was located under the canopy of ELT methods.

These intentional motives of the colonizers and theoretical underpinning entail to develop a conceptual framework to critically examine the colonial domination and think of alternatives to colonial ELT methods and resist the dominance. This situation inspires to find some alternative methodologies where classroom participants (students and teacher) construct a new theory of teaching which, in turns, supports to interrogate on the relevance of dominant mainstream teaching approaches developed in the west and circulated to the southeast and the south.

These discussions appear to support the fact that non-native English speaking countries are resisting active learning teaching strategies, which are set in the monolingual context, and exploring alternatives to teaching strategies, which can actively engage students for promoting their autonomy and critical thinking abilities. Number of post-colonial theories, teaching methods and teaching techniques have been put forward to counter monolingual ideology in language teaching and teach in multilingual and multi-cultural contexts. For instance, Canagarajah (2011) illustrated how codemeshing and translanguaging writing strategies served as the act of linguistic resistance through analysis of his students' writing in a multilingual classroom which included: a) Reconceptualization strategies, b) Voice strategies, c) Interaction strategies and d) Textualization strategies (see Canagarajah, 2011).

These theoretical discussions provide a critical roadmap for anti-colonial learning strategies in Nepalese multilingual educational settings. While recent studies in Nepal are focused on the exploration of relative benefits, effectiveness and challenges of implementing active learning strategies in language classrooms. For instance, some studies have explored how student-centered teaching such as active learning, group work and flipped classroom model are beneficial for developing language proficiency, promoting learners' autonomy and classroom engagement in second language classrooms (Thapa, 2025; Dhimi & Neupane, 2025; Maharjan, 2024). However, these studies tend to focus on the classroom procedures and pedagogical outcomes rather than the ideological underpinnings. Similarly, studies on alternative teaching principles, appropriate for multilingual and multi-cultural context have obviously been done for teaching in diverse contexts. Similarly, several fascinating studies on culturally responsive alternative strategies have been conducted being influenced by post-colonial thinkers such as Freire's school of thought, suggesting the outstanding active learning strategies to resist the colonial legacies in Nepalese second language educational landscape. Nevertheless, critique on monolingual active learning strategies from post-colonial perspective is still undocumented, interrogating how such strategies are reproducing the colonial ideologies within Nepalese English language education system. This study critically aims to address this gap with the research question: How do active learning strategies reproduce colonial legacies in Nepalese English language classrooms?

Methods and Procedures

A thematic review often integrates elements from both thematic synthesis and systematic reviews. Combining two have two different proposes. First, it generates the themes from the critiques of existing literature and secondly, to systematically select relevant literature for the review. Together these methods are often referred to as hybrid or semi-systematic or narrative review (Snyder, 2019).

Guided by this conceptual framework, I employed thematic review to generate themes for this study. A thematic review, according to Braun and Clark (2006), is in-depth synthesis of diverse sources for identifying patterns, debates and gaps across existing literature. Following this guideline, I critically synthesized on the existing literature on active learning from post-colonial perspective. Based on the readings of diverse existing literature, I derived three broad conceptual patterns from which I generated four major themes to discuss the finding and make a new interpretation.

While for collecting the existing literature for the study, I utilized systematic-literature review. A systematic literature review involves systematically collecting, evaluating and synthesizing all relevant studies on a specific topic using pre-defined

criteria (Damayanti et al., 2022). I took the help of Google Scholar online database with key words such as *active learning strategies*, *interrogation*, *postcolonial critique*, *colonial legacy*, and *multilingual context* to get the relevant literature for the study, strictly mentioning inclusion and exclusion criteria which allowed me to focus on my research questions. I followed the four successive steps of the Systematic Literature Review (SRL) process, which included *identification*, *screening*, *eligibility*, and *final selection* of relevant studies.

Screening Process and Eligibility Criteria

With the key words, Google Scholar retrieved n=770 results in less than 0.04 seconds in a single hit. However, nearly 700 articles were eliminated through first round of screening process due to thematic irrelevance. I set this inclusion or exclusion criteria due to the reason that I could be able to incorporate the papers which were directly connected to my research agenda, on the one hand, and on the other hand, I could systematically include the relevant research articles in an unbiased manner excluding irrelevant ones. The remaining 70 articles were screened against eligibility criteria. Out of these, only 8 articles met the eligibility criteria and included for the syntheses and remaining others 67 articles were excluded due to various reasons such as the lack of full text, being languages other than English and not being scholarly articles.

I set the following inclusion and exclusion criteria for selecting relevant articles. The inclusion criteria included: a) scholarly articles only (excluding theses and grey literature) in English language, b) active learning strategies, c) articles critiquing on post-colonial pedagogies and, d) flexible teaching approaches. On the other hand, the exclusion criteria were: a) non English articles, b) articles with unavailable full text, c) articles focusing only teaching methods, d) theses and grey literature instead of articles on active learning strategies. Of all n=8 selected articles, 2 were form western context, 6 were form South Asian and African including Nepali writers on active learning and post-colonial methodologies. Furthermore, I purposively selected 4 books on post-colonial ELT approach and methods for the review.

Results and Discussion

The critical review and analysis of existing literature on academic papers and books enabled the researcher to identify three major themes: two themes for the first research question and one theme for second research question. The themes are: 1) Tension between Western and local approaches, 2) Colonial hegemony in current pedagogical strategies, 3) Reclaiming pedagogy through postcolonial alternatives

The following visual representation demonstrates the process of developing

four themes form the exiting literature to make new interpretation.

Themes	Literature synthesized
Tension between Western and local approaches	Pennycook (2007), Canagarajah (1999), Phyak (2016), Thapa (2025), Dharmi and Neupane (2025), Maharjan (2024) Kumaravadivelu (2003)
Colonial hegemony in current pedagogical strategies	Kumaravadivelu (2003), Canagarajah (2011), Phyak (2016) Phillipson (2016)
Reclaiming pedagogy through postcolonial alternatives	Kumaravadivelu, (2006), Canagarajah (1999), Maharjan (2024)

This section presents the thematic interpretation of how western model teaching strategies are unintentionally reproducing the colonial hegemony in Nepalese English teaching context and explores the underlying philosophies and methodologies attached to them.

Tension between Western and Local ELT Approaches

The review of existing literature on postcolonial pedagogies indicated that there is still the dominance of western centric standard teaching methods in English language education. There is decade's long ideological tension between the supremacy on two distinct ideological approaches in adopting methods in English language learning and teaching. The teaching approaches of: a) the west and b) the local pedagogical approaches.

Western pedagogical approaches were based on the assumption that teaching approaches should be inherently developed by the theories especially by the native professional theorists, and non-native language teachers faithfully apply the theories into practice through language teaching (Kumaravadivelu, 2003). The westerners intentionally created an artificial dichotomy of theorists and practitioners and maintained a social hierarchy. The westerners made to believe non-native English teachers that they were the producers of theories and non-native English teachers were considered as the consumers and practitioners of the theories. This dichotomy is deeply institutionalized in non-native community. Through this predetermined ideological orientation, western the professional experts and intellectuals played a dominant role to govern the entire process of teaching and learning, including setting goals, devising curriculum, prescribing teaching methods, determining teacher and students roles and suggesting assessment procedures. In this educational setting, teachers are assigned as the passive technicians who pass the presequenced and predetermined content knowledge mostly originated in the west to the successive generation of students

of non-west (Kumaravadivelu, 2003). Hence, the design of learning process in this framework is automatically top-down approach.

In addition, this ideological construct assumed that the westerns represented the authentic and original source of knowledge and it should be disseminated in the language classroom following a strict of set of methods. The most commonly used eleven western centric ELT approaches and methods in ESL/EFL context are mentioned in Larsen-Freeman (1986) and Richards and Rodgers (1986) which are alphabetically as Audiolingual Method, Communicative Methods, Community Language Learning, Direct Method, Grammar-Translation Method, Natural Approach, Oral Approach, Silent Way, Situational Language Teaching, Suggestopedia, and Total Physical Response. It is to be noted that methods, however, weren't mutually exclusive to each there. They were conceptually similar in sense that these methodologies were designed with monolingual mindset, intentionally aiming to perpetuate the colonial legacy in ELT domain.

Within western circle, John Dewey the propounder of experiential learning, however, led the progressive school of thoughts primarily in the roles of teachers in teaching. He attempted to define the reflective role of teachers for experiential learning. He severely criticized routine based-handed-down pedagogic models arguing that language experts are far removed from classroom reality, so their explicit teaching methods were unlikely to address the complex reality of the classroom. He forwarded the concept of reflective action'arguing that the teacher should look back critically and imaginatively on his/her teaching and derive explanatory principles for next teaching (Dewey, 1930 as cited in Kumaravadivelu, 2003). Following this principles of reflective action, teacher's reflection undertakes in two ways: a) reflection-on-action (where teachers' reflection happens before or after the class), b) reflection-in-action (where teachers attempt to locate the unexpected problem on the spot). This progressive pedagogical approach sharply challenged the conventional notion of teachers as the implementers of established theories reimagining them as reflective practitioners.

Nevertheless, the postcolonial critical thinkers and transformative intellectual denied the supremacy of western methods and knowledge system in L2 learning. They demonstrated that one-sized-fits- all cookie-cutter approach were in sufficient to address the complex socio-cultural situation of L2 learning and advocated for the construction of context sensitive local pedagogical methods. They stated that tea a teaching a language was absolutely subjective activity and it was impossible to carry the activity in an organized way. Heavily influenced by postcolonial linguistic imperialism and critical discourse analysis, critical thinkers like Robert Phillipson,1992; Panneycook, 1994a; Kumaravadivelu, 2003; Holliday, 1994; Canagarajah, 2003 to name a few, explored the possible alternatives to resist the western pedagogical influence in English language teaching in nonnative context, intending to maximize the role of teachers form reflective practitioners to transformative intellectuals.

Therefore, the synthesis of the existing literature on post-colonial teaching revealed that the contribution of Kumaravadivelu and Cangarajah, who are the outstanding South Asian critical applied linguists, was paramount to resist the pedagogical dominance of the west. The study revealed that the conception of post method pedagogy in ELT domain by Kumaravdivelu laid a strong foundation to challenge the grand narratives of mainstream teaching methods with the formulation of three Ps parameters- particularity, practicality and possibility. The three Ps approach challenged the conventional understanding on teaching methods which significantly empowered the teachers in language learning process. Teachers are free to design their own methods based on their practice. In such post method teaching conditions, according to Kumaravadivelu (2003) teachers are provided full autonomy to determine not only ‘what to teach’ but also ‘how to teach’ automatically within the academic and administrative constrains imposed by the situation, curricula and textbook. Hence, teaching approaches according to this perspective is more ‘learning centered’ rather than ‘learner-centered’ and works in bottom up approach’. Similarly, Suresh Canagarajah developed the theoretical framework for teaching in multilingual contexts, outlining the strategies of codemeshing, codemixing and code switching to resist the post-positivist mainstream pedagogical approaches through critical pedagogy. It is to be noted that the teacher applies that method which arises from the commonsense and subjective understanding, own experience, through professional education and peer consultation. For this subjective understanding what Prabhu (1990) called- *principled pragmatism*.

Active Learning Replicates the Colonial Legacy

Active learning strategies such as role play, pair work, group collaborations etc. are the corner stones for empowering teachers and promoting learners’ autonomy in second language classrooms. These strategies are framed as ‘student centered and emancipatory teaching’ models. Furthermore, active learning strategies are designed for enhancing learners’ problem solving skills and critical thinking abilities (Esion & Benwell, 1991). However, the study revealed that the use of active learning strategies in second language classrooms had hidden power structures as these strategies were unintentionally replicating western colonial education system in non-native contexts, especially in marginalized communities of global south.

Essentially, active learning strategies are learners centered teaching approaches, which give the direction of ‘how to teach’ primarily through strategies like role play, group collaboration, think-pair and share activity etc. for promoting learning autonomy and language proficiency, nevertheless, they were equally found to be directing ‘what is to be taught’ overemphasizing the value of western knowledge system. The use of active learning in English language teaching has implicitly made to assume that they were the prefect methods for addressing teaching and learning problem. Furthermore,

after going through the literature, I perceived that British-modeled active learning has implicitly made to assume that it is insignificant and irrelevant, rather they were counterproductive primarily due to the monolingual nature and deadly intentional motive of suppressing peripheral communities through language teaching (Phillipson, 1992; Pennycook, 1998; Canagarajah, 1999). Moreover, the application of western centric active learning strategies in Nepalese multilingual context were almost impracticable and unrealistic (Kunaravadivelu, 2006).

Westerners considered themselves that they were the cater of education, research and held the responsibility for providing financial backing, donate textbooks, share expertise, train non –native English teachers and scholars and sometimes run ELT enterprise in the periphery (Cangarajah, 2003).

The study indicated that the entire English language education system such as English language policy, English language curriculum, teaching methods, framework for English language teacher development, language assessment, monitoring mechanism is directly or indirectly governed by the native English speaking countries' language education system. The most worrying aspect of peripheral circle is that non-native English speaking countries are uncritically adopting and accepting British-American model knowledge system and teaching methods in non-native multilingual contexts without understanding their intrinsic side effects on indigenous languages and cultures. It is important to note that the uncritical mimicry of western teaching methodologies poses a serious threat of local languages and knowledge system, particularly within the educational landscape of global South, including Nepal.

Canagarajah (2003) provided an insightful vignette on how western pedagogical models are imposed under the shadow of English language teaching and learning by providing a reference of English language class of Sri Lankan war-affected school. He artistically sketches a scene of the terrifying situation of civil war in the towns of Tamil in the early years of 21st century and presents a memory of Mrs. K's teaching English to her students. Mrs. K. as an English starts the lesson in a fearful situation of possible war out of the school compound. Initially, students are perplexed to take the class. As an obstinate teacher, Mrs. K opens the lessons reading of John's daily activity and hobbies ingoing war situation. She starts reading a piece of information to her students saying that "John is English boy, he is well organized, focused and goal oriented..." She was reading this from the newly imported book from England. She aimed to teach 'present tense' inductively. However, her students showed little interest and engagement with the English lesson. Comparatively, Mrs. K's students' realities were far beyond of John's.

I observed that the colonial legacy in Mrs. K's classroom is reflected in three significant way: a) through the use imported book form England, b) through lesson content featuring John ('John' is English name and he has positive attributes), and

c) through fearful classroom situation (as students were barricaded due to frequent explosion outside the school compound). This classroom situation clearly indicated the hegemony of English culture in non-native context. One critical point to mention here is that Mrs. K was applying western model teaching strategies without acknowledging the socio-cultural realities of Srilankan Tamil students, deriving examples of John's who is culturally distant. John is often an English name. It is to be noted that Mrs. K was seen as unintentionally constituting linguistic imperialism in English language teaching and her teaching strategies were deeply rooted in British approach absolutely disconnected from the lived experiences of her students.

Reclaiming Pedagogy through Postcolonial Alternatives

The review of postcolonial literature conformed that western centric handed-down one-size-fits-all teaching approaches has severely dominated the domain of English language teaching. English culture and western values are deeply rooted in the soil of periphery countries, especially in former British colonies (Canagarajah, 2003). Western countries are intentionally reproducing implicit neocolonial linguistic imperialism as a silence poison in the name, of methodological advancement and universal knowledge system. Postcolonial critical thinkers, however, are consistently challenging the intentional imposition of language teaching methods. Postcolonial methodologists have outlined anticolonial methods alternatives to mechanical homogenous mainstream pedagogies. They have critically defended the cognitive, cultural, linguistic and methodological superiority of one particular language and opened-up the way for subjectivity and consciousness in language teaching and learning.

The postcolonial pedagogical approaches are based on the assumption that knowledge is conditioned by the local context and it is socially constructed. Learners' emotions, imagination and intuition are considered most important in language learning process. If language learning is the case, dominant mainstream approaches are based on analysis, comprehension and interpretations. The concrete realization of empirical objective-based knowledge without cultural relevance is almost insignificant in non-native contexts.

The most effective way of reclaiming postcolonial pedagogy is through critical pedagogy. When the teachers are empowered to design their personal theories based on their experiential knowledge and encouraged to understand, interpret and test their professional theories outside expert, they will start to challenge the colonial hegemony language teaching (Kumaravadivelu, 2003). With this argument, it could be interpreted that teachers' autonomy/agency is a powerful construct to challenge the colonial legacy.

Highlighting the importance of agency and critical roles of the teachers, Girux (1988) argues that teachers are transformative intellectuals whose have dual tasks of striving for educational advancement and striving for personal transformation. As the role of educational advancement a teacher is supposed to create and implement the knowledge that are relevant to specific context, construct curricula around the needs and interest of students, while a personal transformer, a teacher is expected to educate students about the various form of injustices and inequalities.

English is obviously a vital tool of communication as it is used as lingua franca for humanity. Basic skills in English is indispensable to fully to participate in 21st century civil society. Otherwise one has to be ‘marginalized and excluded’ (Graddol, 2006). Due to this reason, no one can deny the importance of English language and English language teaching. However, one should equally be aware of the fact that teaching of English, following mainstream meta-method is irrelevant and unscientific as it kills the critical consciousness of teaching participants, on the one hand, and more specifically, it unintentionally reproduces the colonial legacy, on the other. Hence, context sensitive and culturally responsive pedagogies which can empower both students and teachers are effective teaching techniques in Nepalese bilingual English classrooms.

Furthermore, teachers must be encouraged for creative and critical instructional practices which promotes to use of mother tongues education because learners’ L2 is detrimental to L2 learning. The strategies such as translanguaging, codemeshing, code switching promote multilingual education. The dependence on the prepackaged, ready-to-use material freely provided by the Western cultural agencies must be adapted as much as possible to minimize the influence of pedagogical imperialism. The teachers must explore the appropriate teaching method out of the various teaching methods of fit for his/ her context.

Emphasizing the value of critical ethnographic research in decolonizing the ELT, Canagarajah (1999) stated that a critical ethnographic research will enable us to discern the hidden agendas, interests, and values that shape ELT in the periphery. Besides, the activities such as small group discussions, peer reviews/interactions, collaborative writing, and paired assignments are appropriate for periphery teachers. These teaching strategies would substitute the mainstream active learning teaching strategies. Furthermore, such methods would enable students the scope for experimentation and independence, ultimately leading them for liberation. Similarly, methods such as collaborative projects, guided fieldwork, and research activities (in libraries, dormitories, or off campus) enable students to construct safe houses outside classrooms. It is equally important to teach students that any dialect has to be personally and communally appropriated to varying degrees in order to be meaningful and relevant for its users. This would lead to the pluralization of standards and democratization of

access to English. (Canagarajah, 1999, p.181). Additionally, Gilmour (2005) states that it is the responsibility of those same Western (or “Center”) curricula designers to accommodate the needs of Periphery English as a Foreign Language learning communities when constructing their materials.

Hence, the ideology of teaching should be directed towards the critical thinking and reasoning, through which we can perceive the real world. The pedagogists and teachers must consider that learners’ first language is not the linguistic barrier while teaching English language, rather it is a wonderful resource to learn English language in non-native English speaking countries like Nepal. At the same time, it is equally important for the donor agencies to understand and acknowledge the multilingualism, heterogeneity and diversity in de the devising methods and course material for language teaching.

Conclusion

Although the territorial colonialism has formally ended worldwide, a new form of linguistic colonialism is reflected in non-west with the hegemonic influence of dominant language teaching methodologies in post-colonial context. Dominant and mainstream pedagogical teaching methods, mostly originated in western soil are still heavily influencing ELT of peripheral context, including Nepal. For instance, there is still massive use of adiolingual and communicative language teaching methods with the aim of developing linguistic and communicative competence. These methods are based on post positivist approach and are designed with monolingual mind-set and are intentionally exported for colonizing the language teaching landscape of the ‘third world’. Unfortunately, the third world and periphery countries are adopting these mainstream theories and methods uncritically, without understanding their pedagogical relevance in non-native multilingual context. As a result, British or American born mainstream theories and methods are unknowingly perpetuating western legacy in language teaching.

The beginning of 21st century marks transformative turning point for enriching second language classrooms with active learning strategies with the central promise of enhancing classroom engagement, promoting learners’ autonomy, and foresting critical thinking abilities. These methods are intentionally reproducing new form of pedagogical colonialism in second language teaching spectrum. However, these dominant narratives about language teaching which views ‘west is the center of educational theories’ has begun to be challenged slowly by post-colonial critical pedagogists and thinkers. Due to the contributions of critical thinkers, the ideology of English teaching has begun to be seen form critical perspective. More specifically, the educational assumptions of the post method critical pedagogy has played a significant role in resting the western

hegemony and has opened up the way for new research in local, context sensitive and culturally responsive teaching approaches in ELT domain.

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Impact of Digital Media Marketing on Purchase Intention of Organic Vegetables in Butwal Sub-Metropolitan City, Nepal

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Abstract

This study investigates how digital media marketing influences consumers purchase intention toward organic vegetables in Butwal Sub-Metropolitan City, Nepal. By using four constructs of environmental concern, price, availability, and trust, this study uses a quantitative research design and surveys 403 respondents familiar with digital media platforms by using a questionnaire. Using partial least squares structural equation modeling (PLS-SEM), the analysis evaluates the reliability and validity of the reflective measurement model and then examines the structural relationships among the latent variables to identify the key determinants of purchase intention. The findings show that environmental concern, price, and trust are positive and significant determinants of purchase intention, whereas availability has a positive but insignificant effect. The model demonstrates moderate predictive capability ($R^2 = 0.458$), and the Importance–Performance Map Analysis indicates that environmental concern is the strongest driver of purchase intention for organic vegetables in Butwal. Overall, the study concludes that digital media marketing can strongly enhance purchase intention when a marketer emphasizes environmental benefits, transparency, and value-based pricing. These insights can help farmers, producers, resellers, and marketers design and align with digital media strategies to promote and increase purchase intention for organic vegetables in developing markets.

Keywords: Purchase intention, digital media marketing, organic vegetables, environmental factor

Introduction

The current attitude of consumers toward fresh vegetables for better health has led to study about purchase intentions of fresh vegetables in developing nations like

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Nepal (Lukman et al., 2024). Disseminating organic vegetables, social media platforms through digital media marketing can be influential platforms for consumer engagement (Lukman et al., 2024). Consumers have a positive sense of consumption of organic vegetables as they believe this food products are free from pesticides which are more used in commercial production (Plank & Gould, 1990). Adding to this, consumers rely more on social media reviews before making any purchase which has been created for the purpose of purchasing organic vegetables through social media platforms (Lukman et al., 2024). Beyond avoiding pesticide residues, many consumers choose organic food because they relate it with long-term health benefits and environmental concern (Hughner et al., 2007; Paul & Rana, 2012). Empirical studies consistently show that health consciousness and environmental concern are among the strongest drivers of attitudes and intentions toward organic food (Yadav & Pathak, 2016; Ayyub et al., 2021). In Nepali contexts, factors such as health benefits, environmental concern, price, taste and awareness have been identified as key drivers of purchase intentions for organic products and aligns on environmental factor, price, availability and trust in this study (Shrestha, 2022). Environmental factors, trust, availability are some of the major factors that determine purchase intention of organic vegetables by potential consumers (Kamboj et al., 2023). Digital marketing display, advertisement, search engine optimization are some of the prominent ways to execute marketing strategies that will drive purchase intention for targeted consumers (Gurung, 2018).

Increasing Demand of Organic Vegetables and its promotion through digital media has been undermined in our country. Focusing more in Butwal Sub-Metropolitan City is the key objective of this paper. Less focus is given on promotion of organic vegetables and its promotion through digital media platforms. So, the major research gap of this paper is to know the impact of digital media marketing on purchase intention of organic vegetables. The major differences of this paper are to know how organic vegetables consumption can pave the greater purchase intention on public mind especially in Butwal Sub-Metropolitan City.

Purchase intention is mainly determined by ability to purchase, social pressure and, their positive or negative evaluation (Ajzen, 1991). In the digital era, consumer purchase intention is more expanded to areas like digital media quality, website interface and e-commerce trust (Kim & Lennon, 2013). Health benefits are the primary driving factor for greater consumer purchase of organic foods. Consumers perceive organic foods as healthier with more nutrition due to absence of chemical pesticides and fertilizers (Smith-Spangler et al., 2012). Regardless of increasing demand for organic vegetables, consumers are only willing to purchase organic vegetables if they are readily available at nearby grocery stores (Gracia & De Magistris, 2008).

Combining purchase intention with organic food knowledge, health benefits, convenience and availability can provide an overall view of the impact of consumer

consumption of organic vegetables (Lusk & Briggeman, 2008). Fusing prior work, reviews of organic food consumption conclude that health, environmental concern, transparency of quality assessment jointly shape consumer attitudes and purchase intentions (Hughner et al., 2007; Rana & Paul, 2017). Health awareness, in particular, has been identified as a main driver of positive attitudes toward organic food and a key determinant of intention and actual buying behaviour (Paul & Rana, 2012; Yadav & Pathak, 2015). Recent studies in developing countries focuses trust in organic claims and perceptions of price fairness mediate the relationship between these attitudes and purchase intention (Ayyub et al., 2021; Shrestha, 2022), which justifies incorporating trust and price as core constructs in the present model. Consumers often go through other consumer reviews, celebrity endorsement and product advertisements which all add value to the purchase intentions. The findings of the research will provide a clear landscape on how digital media marketing such as influencer endorsement; advertisement will affect purchase intention. The purpose of writing this paper was to increase consciousness of consumers towards better health, increasing use of pesticides on food products which has created more alignment on organic foods. Additionally, consumer trust and availability of organic products show greater challenges for greater purchase intention which the findings of this paper will provide. Overall, understanding the dynamics of variables related to purchase intention and linking this with digital media marketing is crucial for grasping opportunities for organic food businesses.

In recent years, the concept of the consumption of organic vegetables has significantly increased mainly due to chronic diseases like diabetes and high blood pressure. On the other hand, the consumption and demand of organic vegetables mainly remain consistent due to lack of availability and less promotion of such products. Adding to this evidence, use of digital media platforms mainly through social media advertisement and influencer marketing has played a very beneficial role in promotion of those brands and in turn high sales of the given product. Correlating to this factor with the market of organic vegetables there is more gap in promotion and consumption of organic vegetables signifying unclear evidence on how digital media marketing directly impacts the purchase intention of organic vegetables especially in the developing market (Antczak, 2024).

Research on social media marketing shows that creative, interactive content increases consumer engagement and can convert into more favourable brand evaluations and higher purchase intentions (Ashley & Tuten, 2014). Digital marketing strategies that focuses experiential, visual and participatory content tend to generate stronger engagement than purely informational messages, undermining the crucial role of social media in shaping consumer responses to marketing communication (Ashley & Tuten, 2014). Recent studies also indicate that exposure to organic-related content on social media such as reviews, influencer endorsements and educational posts can positively

affect consumer attitudes and purchase intentions toward organic food products (Ayyub et al., 2021; Singh & Verma, 2017). However, there is still limited evidence on how these mechanisms operate for fresh organic vegetables in small organic markets like Nepal, where digital media marketing for organic produce are only emerging. The demand for organic products, specifically organic vegetables, has increased mainly due to health concerns, increased use of chemical fertilizers, and unhealthy commercial production with which demand of organic vegetables has too increased. Secondly, in the last decade digital media has played a significant role in shaping people's awareness and promotion of products of the given brands and products of the firm. However, with the increased demand for organic vegetables and increased use of digital marketing for the promotion of products less evidence is there on the research of these two factors especially in the developing market. Understanding the relationship between digital marketing strategies with the purchase intention of consumer organic vegetables can provide insights and opportunities for the policy makers, entrepreneurs and marketing to align with the mission on these segments (Francis et al., 2023).

Against this backdrop, the present study focuses on Butwal Sub Metropolitan City, a growing metropolitan city in Nepal where the organic vegetables market is still small and digital promotion remains limited. By fusing environmental concern, price, availability and trust into a Theory of Planned Behavior oriented framework, this research further describes prior work on organic food purchase intention in developing countries (Paul & Rana, 2012; Yadav & Pathak, 2016; Ayyub et al., 2021; Shrestha, 2022) to a digital media marketing context. The study uses partial least squares structural equation modelling (PLS-SEM), which is suitable for analysing complex marketing and consumer-behaviour models with multiple latent constructs (Neupane et al., 2025). In doing so, it provides context-specific evidence on how digital media marketing can be leveraged to strengthen purchase intention for organic vegetables in a developing country, offering practical implications for producers, retailers and policymakers.

Literature Review

Role of Social Media in Advertising

The effect of advertising on social media is effective and widely used by many e-commerce sellers (Alalwan et al., 2017). The real time engagement of billions of social media users makes good opportunities and viable platforms for many brands and resellers where they develop contents, and reels design to attract the attention of their potential social media engaged customers (Ertemel & Ammoura, 2019). Social media advertising is one of the most powerful tools for reaching out potential customer base through social media platforms (Vinerean, 2017). Social media advertising show

a positive impact on increasing sales because of which its social media advertising represents enough opportunities for brands and resellers to increase sales of their product.

Social Media and Organic Food Sales

In general, marketers of any brand want to sell their product and producers of organic vegetables also want buyers to buy organic products by showcasing their benefits in relation to their personal health. For which organic vegetables producers also want to sell their product through the medium of social media (Tashakkori et al., 2023). Organic vegetable producers who adopt social media platforms achieve agility in their performance because agility is the process of having higher efficiency as a result achieving higher sales and higher profit (Itani et al., 2020). Adopting social media platforms means having flexible interaction with their prospective clients as a return having higher opportunities for turning prospects into leads. A Facebook post that shows organic vegetables, their benefits on health have more prospects of generating online sales (Lu & Miller, 2019). On the other hand, rating, feedback and reviews also show positive relation on social media platforms for increasing sales and easy view for first time purchase for clients without hesitation and a better number of positive reviews increases the net sales of the business (Kim et al., 2016).

Social media has a supporting role for the increase in sales of organic vegetables through advertisements, electronic word of mouth effect (Durbul et al., 2024). Social Media Platform mainly Instagram and Facebook promoting organic vegetables content where popularly searched and engaged by online vegetables buyers (Sudha et al., 2024). Organic Vegetables country of origin, safety and quality standard during production of organic vegetables, cultural norms, availability and, know how about benefit of organic vegetables greatly influence the purchase intention of organic vegetables by the perspective buyers (Yiyuan & Ying, n.d.). Website Quality has some mediation on consumer satisfaction which has indirect impact on purchase intention of organic vegetables (Hasanov & Khalid, 2015).

Ajzen (1991) states that purchase intention is mainly driven by attitude, subjective norm and perceived behavioral control. Attitude mainly explains how willing the individual is to be interested in doing behavior and how much effort the individual puts to carry out the behavior. Secondly, perceived behavioral control mainly shows the probability of successful attempts that the given planned behavior will be carried out. Thirdly, subjective norms affect how important the other individuals give approval to perform the following behavior. Davis (1989) states that consumer purchase intention is mainly based on perceived usefulness and ease of use. Perceived usefulness mainly explains people generally purchasing products based on how it will help to make their job more efficient. Secondly, if the clients feel the given product helps them to make

their job more efficient than they generally look for how easy the given products are to use. If the potential clients feel the given product makes their job easier but the procedure is hard to use, then it will negatively affect the purchase intention of the potential clients.

Zeithaml (1988) states that purchase intention of the individual is mainly influenced by the value of the product that is consumed by the individual and its relative cost during its purchase and post purchase. The theory of perceived value classifies the utility of the product and its means to purchase the product is mainly influenced by its real-life usage of the product, cost of the product, brand value of the product, and emotional attachment related to the product. The theory of the consumer decision making process. Haines et al. (1970) explains before purchasing the product, potential consumers firstly go through need recognition where consumers feel purchasing the product satisfies their basic wants. Secondly, potential consumers go through to search the product through various mediums where the individual can purchase the product. Thirdly, in the process of information search for the given product, here individuals evaluated various alternatives related to purchase the given product. In the final stage, consumers decide to purchase the product among the given level of alternatives.

Empirical Review

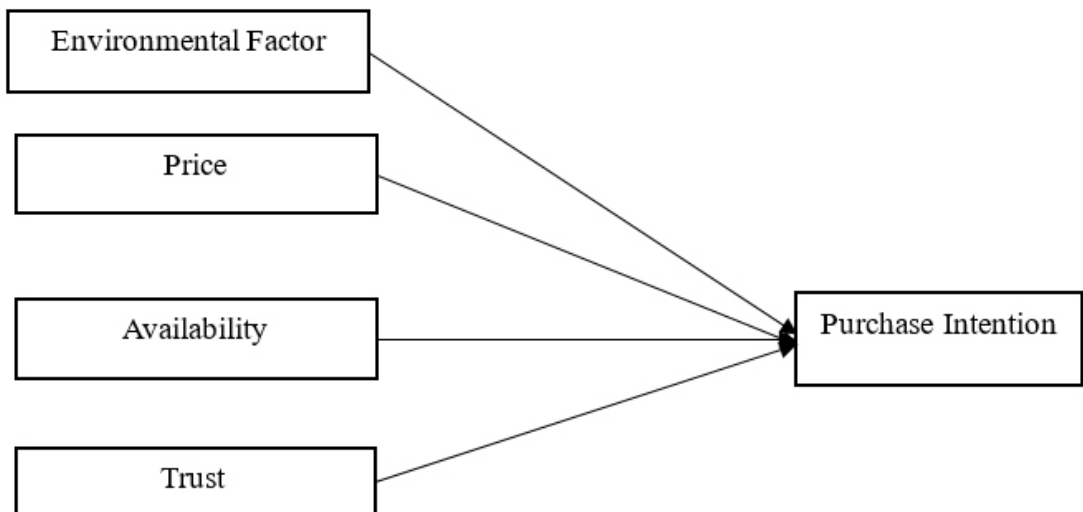
Literacy can be understood as the ability to understand, interpret and make communication in both verbal and written format (Truman & Elliott, 2019). Food literacy can be understood as a person's ability to understand and make decisions in a way that affects their personal health and wellbeing (Cullen et al., 2015). Food or vegetables are organic where the ingredients in it are free from chemicals and composed of organic materials (Liu et al., 2014). Taking concerns about various diseases, there is growing concern of organic vegetables that are free from chemicals and fertilizers.

Explaining the role of social media marketing on the sales performance, social media marketing tools such blogs and reels are where users contribute by creating content such as opinion and feedback (Chaffey & Smith, 2013). The sales process includes identifying the customer base, approaching, needing discovery, presenting, closing and following up where each phase needs certain abilities and skills where social media adoption has a role in each stage (Avlonitis & Panagopoulos, 2010).

Prior research consistently shows that health awareness, environmental concern, and positive attitudes are main drivers of organic food purchase intention, both globally and in South Asian contexts (Ayyub et al., 2021; Guragain, 2024; Shrestha, 2021; Yadav & Pathak, 2015). At the same time, consumers still face hurdles such as higher perceived price, limited availability, and questions about authenticity, which can weaken favourable attitudes into actual purchase (Hughner et al., 2007; Kamboj et al., 2023). Recent studies also aligns increasing role of digital areas; social media content,

influencers, and website quality in shaping trust, engagement and online purchase intention for organic products (Al Falah et al., 2024; Ari & Yilmaz, 2024; Ashley & Tuten, 2015; Hasanov & Khalid, 2015; Samaniego-Arias et al., 2025). However, evidence from Nepal remains limited and fragmented, with only a few local studies focusing on consumer attitudes and purchase intentions in specific metropolitan areas (Guragain, 2024; Shrestha, 2021). Using this framework, the present study examines how digital media marketing influences attitudes and purchase intention towards organic food, while also accounting for trust and perceived benefits in the Nepalese context.

Conceptual Framework



Adapted from Bazhan et al. (2024)

Methods and Procedures

Research Design

The research study adopts quantitative research design to gain in depth insights regarding complex buying behavior of consumers mainly on vegetables for daily consumption. The purpose of using quantitative method is to understand key views of producers and resellers of organic vegetables through questionnaire method where descriptive and inferential statistical analysis is used to have key information from the people who have prior exposure to digital marketing and online shopping experience on digital media platforms.

Sampling and Population

The research papers align with quantitative approach to get in-depth insights of consumer perception of the purchase of organic vegetables via digital media platforms. The study aims to analyze purchase intentions of organic vegetables through digital media platforms in Butwal Sub-Metropolitan City. The population of the research study are the residents of Butwal Sub-Metropolitan City. And the sample areas of the research study are the producers, sellers of organic vegetables and buyers and people familiar with buying organic vegetables through digital media platforms.

Data Collection Method

The study relied on questionnaire methods to 403 people who often buy organic vegetables through digital media platforms. A questionnaire method was carried out to understand how digital media marketing influences purchase intention of organic vegetables in Butwal Sub-Metropolitan City.

Sampling Technique

The research study uses purposive sampling technique to get in depth insight of purchase intention of organic vegetables through digital media platforms. The reason for using purposive sampling in this research study is because the participants had prior exposure to digital marketing as well as shopping experience through digital media platforms. The sample size was determined by using rule of thumb, since this research study consists of total 5 constructs with 24 items ($24 \times 10 = 240$) (Hair et al., 2010; Kline, 2015). However, to gain better accuracy in the results, 403 samples were included.

Results

This section outlines the analysis and results of the research study. The data collected have been analyzed using Smart PLS V4 and results obtained through it have been mentioned in this chapter. This chapter has been categorized into four sections; the first section deals with the demographic profile of the research study. The second section outlines results of descriptive statistical tools like mean, standard deviation, outer loadings and VIF. The third section highlights inferential statistics where hypotheses formed were tested by using statistical tolls like regression and correlation. Lastly, the fourth section outlines major findings of the research study.

Descriptive Analysis

Descriptive analysis was carried out to summarize the demographic details of the respondents. This includes measures like mean, standard deviation. Demographic

variables like age, gender, education, level of income of the respondents were analyzed. Demographic statistics were used to understand the views of digital media marketing and purchase intention of organic vegetables. The result of this analysis helped to draw out general patterns of consumer behavior which helped to provide platforms for carrying out other inferential statistical analysis which further helps to understand the relationship between digital media marketing and purchase intention of organic vegetables.

Table 1

Assessment of Scale Items

Variables	Item Names	Outer loadings	VIF	Mean	Standard Deviation
Availability	A1	0.761	1.565	5.144	1.738
	A2	0.914	3.385	5.117	1.594
	A3	0.822	2.19	4.674	1.812
	A4	0.872	2.566	5.057	1.547
Environmental Factor	EF1	0.749	1.62	5.144	1.738
	EF2	0.896	3.395	5.117	1.594
	EF3	0.803	2.208	4.674	1.812
	EF4	0.871	2.806	5.057	1.547
	EF5	0.748	1.683	4.741	1.787
Price	P1	0.804	2.468	4.376	1.924
	P2	0.808	2.974	4.816	1.841
	P3	0.897	3.169	4.276	1.893
	P4	0.886	3.371	4.184	1.975
	P5	0.838	2.023	3.333	1.947
Trust	T1	0.893	3.198	4.667	1.947
	T2	0.882	3.024	4.271	1.97
	T3	0.844	2.403	4.368	2.061
	T4	0.834	2.472	3.928	1.943
	T5	0.922	4.314	4.219	1.99
Purchase Intention	PI1	0.895	3.19	5.617	1.465
	PI2	0.872	2.81	5.02	1.777
	PI3	0.818	2.673	5.02	1.811
	PI4	0.863	2.883	5.087	1.847
	PI5	0.819	2.231	5.577	1.488

Note. Smart PLS

Table above shows the item scale assessment used in this research to find out the outer loadings and Variance Inflation Factor (VIF) values. All Items in the tables reflect accepted outer loadings values which exceed the 0.7 benchmark which overall are significant for the given constructs. The outer loading value ranges from 0.748 on Environmental Factor to 0.922 on Trust which indicates reliability on the given items. Secondly, VIF is used to measure multi-collinearity where most of the VIF value is below the benchmark value of 3 and all the VIF value is below the acceptable value of 5 ranging from low of 4.314 on trust to high of 1.565 on availability. This result shows that the given analysis has no issue of multi collinearity and the given items of variables are unique enough to capture the construct of given variables. Thirdly, most of the mean values are on the higher side of the scale that is above 4 which shows agreeableness for the given construct of the stated variables. Fourthly, standard deviation shows how much deviation is there from the center value where most of the value is good ranging from 2.061 on trust to 1.465 on purchase intention. Hence, we can conclude that the data given on the table have significant psychometric attributes which validate as a good fit for further analysis.

Table 2
Construct Reliability and Validity

Variables	Cronbach's alpha	CR (rho_a)	CR(rho_c)	AVE(AVE)
Availability	0.863	0.865	0.908	0.712
Environmental Factor	0.873	0.877	0.908	0.666
Price	0.906	0.963	0.927	0.718
Trust	0.924	0.928	0.943	0.767
Purchase Intention	0.908	0.916	0.931	0.729

Note. Smart PLS

Table 2 contains the value of Cronbach Alpha, Composite Reliability (CR) and Average Variance Extracted (AVE) to analyze the convergent validity of the variables inserted in this research study. The Cronbach Alpha value for the given variables exceeds the benchmark value of 0.705, correlating adequate contribution of each scale item for the evaluation of the construct of stated variables. Secondly, the Construct Reliability value for rho_ and rho_c exceeds the minimum required value of 0.7 indicating a good measure of internal consistency. Thirdly, Average Variance Extracted also surpasses the benchmark value of 0.5 which explains that each variable used in

this research study contributes more than 50 percent of the given explained variance. The data represented in the above table gives a green signal for the establishment of convergent validity. As a concluding note, the result presented in the table passes for the quality criteria measures.

Table 3

Discriminant Validity

Variables	Availability	Environmental Factor	Price	Purchase Intention	Trust
Availability					
Environmental Factor	0.763				
Price	0.444	0.416			
Purchase Intention	0.707	0.708	0.318		
Trust	0.441	0.418	0.888	0.433	

Note. Smart PLS

Table 3 contains the HTMT ratio of correlation matrix, that examines the discriminant validity of the latent variables. The HTMT ratio value ranges from 0.318 to 0.888. The HTMT ratio values should be less than the benchmark value of 0.9, which is acceptable. Hence, the above table validates the presence of discriminant validity among the construct of stated variables.

Table 4

Fornell-Larcker Criterion

Variables	Availability	Environmental Factor	Price	Purchase Intention	Trust
Availability	0.844				
Environmental Factor	0.765	0.816			
Price	-0.406	-0.386	0.847		

Purchase Intention	0.637	0.641	-0.329	0.854	
Trust	0.394	0.379	-0.851	0.413	0.876

Note. Smart PLS

Table 4 contains the Fornell-Larcker Criterion, a critical discriminant validity assessment in a structural equation model. This criterion is significant when the Average Variance Extracted (AVE) for each construct is greater than the squared correlation between the given construct and any other construct in the given analysis. The diagonal entries, that is square root of AVE of each construct should be higher than the off-diagonal values of the given columns and rows. As stated in Table 4, diagonal values of Availability (0.844), Environmental Factor (0.816), Price (0.847), Purchase Intention (0.854), Trust (0.876) are higher than inter-construct correlation. This shows that analysis of the given model that is discriminant validity is reliable as construct of the given variable is unique and signifies a distinct segment of the given variance. As a conclusion, the construct of the stated variables does not intersect and analyze what it should be analyzed.

Table 5

Cross Loadings

Variables	Availability	Environmental Factor	Price	Purchase Intention	Trust
A1	0.761	0.649	-0.343	0.55	0.275
A2	0.914	0.596	-0.407	0.559	0.405
A3	0.822	0.203	-0.272	0.498	0.306
A4	0.872	0.471	-0.338	0.537	0.341
EF1	0.760	0.749	-0.343	0.55	0.275
EF2	0.614	0.896	-0.407	0.559	0.405
EF3	0.522	0.803	-0.272	0.498	0.306
EF4	0.472	0.871	-0.338	0.537	0.341
EF5	0.625	0.748	-0.19	0.46	0.202
P1	-0.305	-0.293	0.804	-0.177	-0.604
P2	-0.288	-0.276	0.808	-0.2	-0.558
P3	-0.388	-0.374	0.897	-0.278	-0.696
P4	-0.327	-0.299	0.886	-0.242	-0.705
P5	-0.373	-0.357	0.838	-0.392	-0.893

PI1	0.555	0.554	-0.351	0.895	0.454
PI2	0.579	0.589	-0.263	0.872	0.336
PI3	0.41	0.43	-0.088	0.818	0.17
PI4	0.514	0.503	-0.227	0.863	0.309
PI5	0.619	0.623	-0.408	0.819	0.433
T1	0.373	0.357	-0.838	0.392	0.893
T2	0.333	0.322	-0.692	0.386	0.882
T3	0.321	0.299	-0.679	0.338	0.844
T4	0.353	0.341	-0.733	0.321	0.834
T5	0.348	0.34	-0.78	0.364	0.922

Note. Smart PLS

Table 5 includes the cross loadings values of all the items and variables used in this research study. According to benchmark value for assessing cross-loading, it is necessary to determine that an indicator variable should represent a loading value of at least 0.70 towards its own construct and must not have any cross-loading value greater than that of indicator variable. This recommendation is based on the work of Hair et al. (2014). To have significance of the discriminant validity of the constructs in the measurement model, Table 5 presents the loading values of each construct, which indicates that each item of stated variables has a loading greater than 0.70 on the construct with which it is associated. Next to this, the loading values of items associated with indicator variables are greater than the items which are not associated with indicator variables. Therefore, this table establishes significance for the discriminant validity of the constructs in the measurement model.

Model Fit Assessment

The SRMR fit indices evaluate the model's explanatory capability. The SRMR model value is 0.087 which is below the acceptable threshold of 0.10 (Bollen & Stine, 1992). Moreover, the effect size of Environmental Factor, Availability, Trust and Price on Purchase Intention is quantified as 0.029, 0.39, 0.071, 0.24 respectively. This signifies the Environmental Factor and Trust as weak impact on Purchase Intention whereas Price moderately influences Purchase Intention. In contrast, Availability has a significant impact on Purchase Intention (Cohen, 1988). Next to this R-Square values corresponding to Purchase Intention are 0.458. This signifies that Purchase Intention demonstrates moderate predictive ability (Hair et al., 2013).

Figure 1
Path Relationship Diagram

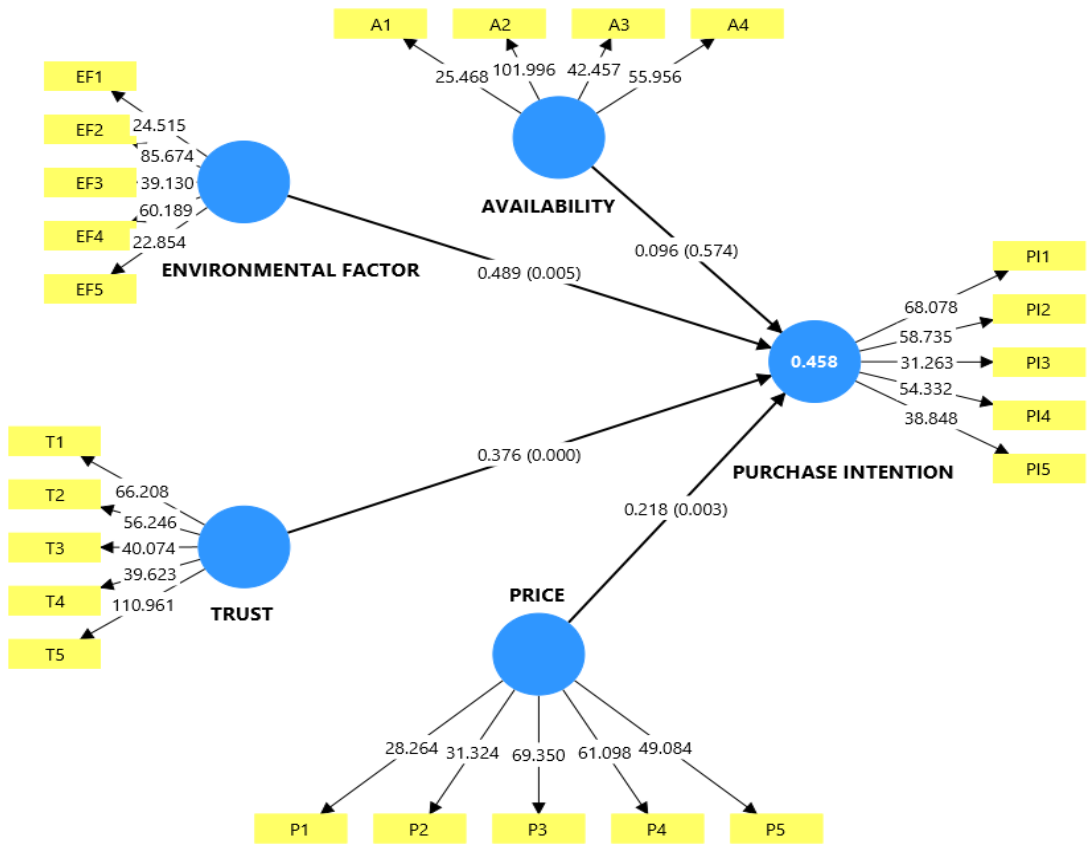


Table 6
Hypothesis Testing using Bootstrapping

Hypothesis	B	Mean (M)	Stdev	Confidence Interval		T Stat	P Value	Decision
				2.50%	97.50%			
H1: Environmental Factor -> Purchase Intention	0.489	0.478	0.174	0.108	0.795	2.812	0.005	Accepted
H2: Price -> Purchase Intention	0.218	0.217	0.073	0.078	0.365	2.99	0.003	Accepted

H3: Availability -> Purchase Intention	0.096	0.107	0.17	-0.204	0.464	0.562	0.574	Rejected
H4: Trust -> Purchase Intention	0.376	0.376	0.072	0.237	0.517	5.253	0	Accepted

Note. Smart PLS

Figure 1 and Table 6 show the results of a bootstrapping analysis performed with 10,000 sub samples which calculate decisions on the stated hypothesis. Hypotheses H1, H2, H4 are significant as the value is greater than the acceptance threshold of 0.05. But Hypotheses H3 is rejected as the p value is greater than 0.05. Thus, there is a positive and significant impact of Environmental Factor, Price and Trust on Purchase Intention of organic vegetables whereas there is positive and insignificant impact of availability on purchase intention of organic vegetables.

Table 7

Importance Performance Map Analysis

Variables	Lv Performance	Importance
Availability	66.887	0.096
Environmental Factor	66.132	0.489
Price	51.291	0.218
Trust	55.055	0.376
Mean	59.84125	0.29475
Purchase Intention	71.948	

Note. Smart Pls

Table 9 represents the total effects of availability, environmental factor, price and trust on purchase intention for the unstandardized effects. The impact of this variable is equal to the unstandardized sum of ordinary least square regression modelling (Hair et al. 2010). Secondly, the performance of the attribute purchase intention is calculated as 71.948.

To be noted, as shown in the figure the four quadrants are derived based on the mean value of the construct performance and importance value. As shown in Figure 2, if we add up 1 unit in environmental factor performance from 66.132 to 67.132, purchase intention increases from 71.948 to 72.434. Secondly, if we add up 1 unit in price performance from 51.291 to 52.291, purchase intention increases from 71.948 to 72.166. So here we can conclude that from the four determinants of purchase intention, the most viable factor is considered to be environmental factors.

Figure 2
Importance Performance Map Analysis

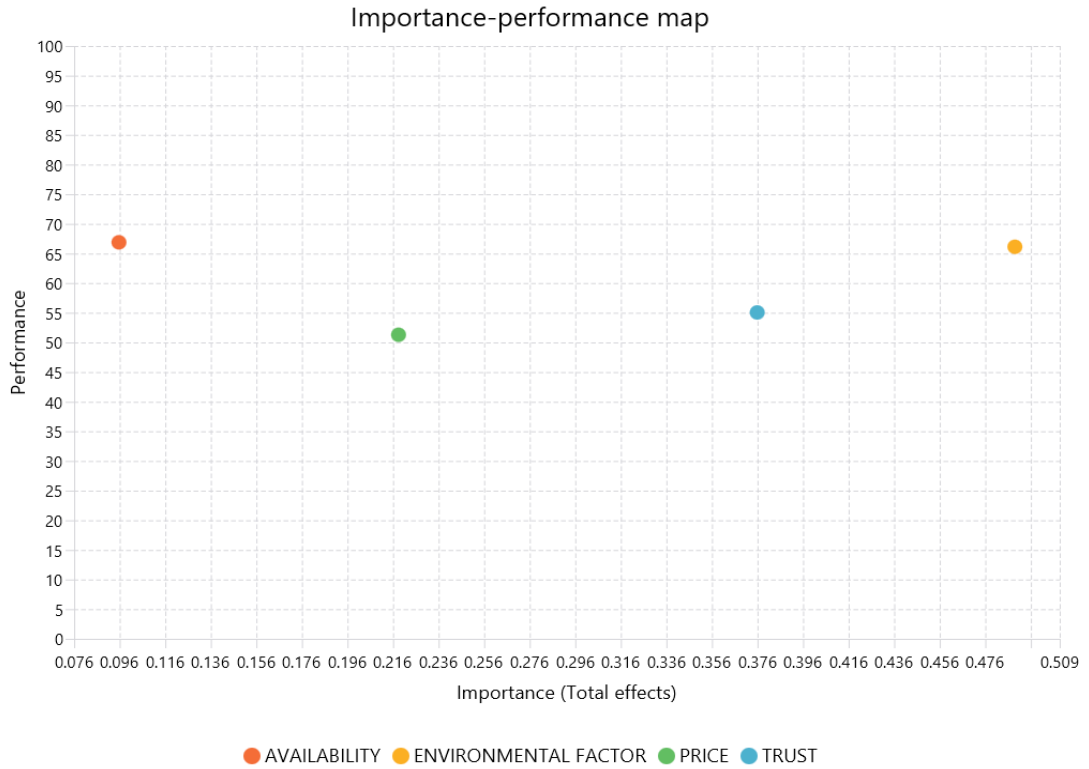


Table 8
Necessary Condition Analysis (NCA) – Bottleneck Values

	LV Scores - Purchase Intention	Lv Scores - Availability	Lv Scores - Environmental Factor	Lv Scores - Price	Lv Scores - Trust
0.00%	18%	NN	NN	NN	0%
10.00%	26%	NN	NN	NN	0%
20.00%	34%	NN	NN	NN	0%
30.00%	43%	NN	NN	NN	0%
40.00%	51%	NN	NN	NN	0%
50.00%	59%	NN	NN	NN	0%
60.00%	67%	NN	NN	NN	0%
70.00%	75%	20%	20%	NN	0%
80.00%	84%	26%	27%	NN	0%

90.00%	92%	32%	35%	NN	0%
100.00%	100%	39%	42%	21%	0%

Note. Smart PLS

Table 8 represents Bottleneck values of latent variables using Necessary Condition Analysis. To achieve 67 % of Purchase Intention, no factors are necessary. Secondly, to achieve 75 % of purchase intention, 20% of availability and 20 % of environmental factors are necessary. Thirdly, to achieve 84 % of purchase intention, 26% of availability and 27% of environmental score are necessary. Fourthly, to achieve 92 % of purchase intention, 32 % of availability, 35% of environmental factors are necessary. Lastly, to achieve 100% purchase intention, 39% of LV Score Availability, 42% of LV Score Environmental Factor, 21% of LV Score Price and 0% of LV Score Trust are necessary.

Discussion

The research titled “Impact of Digital Media Marketing on Purchase Intention of Organic Vegetables in Butwal Sub Metropolitan City, Nepal” gives a significant overview of the variables named environmental factors, price, trust and availability that is driven by digital media marketing which affects purchase intention of consumers. The structural model evaluation shows that environmental factors ($\beta = 0.489, p = 0.005$), price ($\beta = 0.218, p = 0.003$), and trust ($\beta = 0.376, p = 0.000$) have statistically significant and positive impact on purchase intention. Although, availability ($\beta = 0.096, p = 0.574$) indicates positive but insignificant effects which explain availability somehow affects the purchase intention, but availability is not a major catalyst that drives the consumer purchase intention through digital media marketing. The findings of the research study support Theory of Planned Behavior indicating that consumer perceived benefits like environmental and trust factors and economic factors like price greatly influence the purchase intention of the general public through digital media platforms. The R^2 value is 0.458 which shows average predictive capability of the model. Next to this, Importance-Performance Map Analysis shows environmental factors as the most influential factor which gives further insights that highlighting ecofriendly benefits through digital media platforms create a positive impact on purchase intention. These findings are consistent with prior literature supporting the increasing role of social media and digital marketing in molding consumer preferences, most importantly in green and health-conscious customer base (Lukman et al., 2024; Antczak, 2024; Francis et al., 2023). As a concluding note, digital campaigns that boost up trust and focus on environmental benefits can be strategic initiatives for fostering consumption of organic vegetables in Nepal.

Conclusion

The research study based on Theory of Planned Behavior examines how digital media marketing impacts purchase intention of organic vegetables in Butwal, Sub Metropolitan City. The findings show that environmental factors, price and trust positively and significantly impact purchase intention. Secondly, availability has negative and insignificant impacts indicating that logistic efficiencies may not drive-up consumer preferences on organic vegetables in a digitally mediated market. The analysis focuses on environmental benefits and building consumer trust to boost up the purchase intention of organic vegetables.

Regardless of valuable insights, the given research study has several limitations. Firstly, it adopted cross-sectional data, which limits the ability to examine behavioral changes over a longer period of time. Secondly, the use of purposive sampling restricts applicability of findings beyond consumers familiar with digital technology in Metropolitan areas. Lastly, the research study given only focused on one metropolitan area which may not be viable on drawing out insights about national trends in organic vegetables consumption and influence of digital media marketing.

Future research papers should embrace longitudinal design to draw insights into how digital media marketing influences changing consumer perceptions and behavior over long periods of time. Furthermore, broadening the study to include rural areas offers an all-encompassing view of regional differences about purchase intention and consumption behavior of organic vegetables. Next to this, incorporating psychographic variables like environmental advocacy and health consciousness can provide more theoretical insights on consumer motivation for consumption of organic products. And most importantly, researching on social media platform digital strategies specifically on TikTok, Instagram and Facebook can help producers and traders to identify and utilize specific digital tools which convert awareness into intention and action.

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Impact of Personnel Control on Organizational Performance of Elected Government Agencies in Kailali District

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Abstract

This study examines how personnel control influences the organizational performance of the elective government agencies in the Kailali District in Nepal and the mediating effect of employee motivation is tested. Primary data were gathered using a structured questionnaire in 216 employees in 13 elected local governments using a quantitative, cross-sectional explanatory research design. Personnel control was the multidimensional concept which included recruitment and training, monitoring and organizational culture, employee retention and promotion and workplace policies and socialization. Data analysis was performed based on descriptive statistics, correlation, multiple regression, and formal mediation analysis based on Hayes PROCESS macro (Model 4) using 5,000 bootstraps. The findings indicate personnel control to be a significant and positive factor in the performance of an organization. There are high positive influences in recruitment and training, monitoring and organizational culture, and employee retention and promotion show a relatively weak impact. Employee motivation is also greatly increased through personnel control and this leads to an improvement in organizational performance. The mediation analysis proves that employee motivation partially mediates the relationship between personnel control and organizational performance. The results can be viewed as providing an empirical evidence based on a Nepalese context of the public-service and can provide an implication on how to improve personnel control systems to enhance motivation and performance in an elected government agency.

Keywords: Employee motivation, Self-Determination Theory, Motivation Crowding Theory, Public sector



Introduction

Management control is crucial in an organization since it is required to make sure that the organization works in the interest of the employees. Management control is the process through which managers influence their employees to perform strategies of an organization, avoiding unwanted actions or inactions (Merchant & Stede, 2017). The management control is the process through which the management of an organization regulates the actions of the employees. Management control systems play a vital role in ensuring that personal behavior is aligned to organizational aims and a culture based on the institution supports the enhancement of performances (Ohemeng, 2024; Juknevičienė et al., 2025).

One of the important aspects of these systems is the personnel control, which involves formal and informal processes such as recruitment, training, monitoring, socialization, and promotion and that develops employees skills, attitudes, and motivational orientations (Chanapai et al., 2024). According to the recent evidence, appropriate personnel control practices contribute to the effective functioning of organizations as they promote the development of capabilities and engagement in work by employees (Juknevičienė et al., 2025; Ohemeng, 2024). Most of this research has however not been done on the context of the public sector or in systems of governance that are well developed and this casts doubt on whether the research would be applicable to the elected local governments in the developing nations.

The theoretical basis of the examining of such relationships in this study is based on Self-Determination Theory (SDT), highlighting importance of autonomy, competence, and relatedness in intrinsic motivation and performance (Gagné and Deci, 2005; as discussed by Juknevičienė et al., 2025), as well as Motivation Crowding Theory, which implies that external controls can either facilitate or suppress intrinsic motivation, therefore, depending on the ways of their perception and enforcement (Maharani, 2021).

Stakeholders increase the expectations on the public-sector organizations to be efficient, accountable, and high in terms of quality of the provision of the public services (Chanapai et al., 2024). These tensions are more severe in the decentralized forms of governance where elected local governments have to ensure the balance between political control, bureaucratic limitations, and a limited managerial freedom in an attempt to achieve performance targets (Ohemeng, 2024).

Within the framework of the new federal local governments in Nepal, there is insufficient empirical data concerning the effects of personnel control on organizational performance using employee motivation. The literature on the topic has failed to investigate properly the mechanism by which the personnel control results to the performance of an organization and specifically how employee motivation

mediates this in the public sector. The paper bridges this gap by providing answers to the following questions: (i) how personnel control impacts on the performance of an organization, (ii) how personnel control impacts on motivating the employees, and (iii) how organizational employee motivation mediates personnel control and organizational performance in elected government agencies in Kailali District.

Literature Review

Personnel Control and Organizational Performance

Empirical research always reveal the positive impact of recruitment, training and monitoring systems on the performance of the organization through increasing employee capacity and alignment (Gamage, 2014; Merchant & Van der Stede, 2017). Nonetheless, there is some evidence of bureaucratic barriers undermining the efficiency of retention and promotion systems as recorded by the organizations within the public sector (Georgellis et al., 2011). Recent research shows that an effective performance management system positively impacts employee job performance and engagement because a formalized monitoring and feedback provision system contributes to hiring more alignment between the individual effort and organizational objectives (Zhang et al., 2025). In a similar fashion, findings of private universities in Kenya have shown that integrated HRM bundles consisting of recruitment, talent management, and HR information systems have a positive impact on the performance of the faculty, implying that the concerted application of personnel controls can give better performance results (Mutua & Karanja, 2025). The control of personnel, including recruitment, training, and career development, in the context of the public sector organization, has been identified to reinforce affective commitment, job satisfaction, which in turn enhances in-role performance, but the effectiveness of incentive and job security practices is situation-specific because of the constraints of bureaucracy (Rana & Malik, 2025).

Personnel Control and Employee Motivation

Skill development and equitable monitoring personnel control practices are likely to have a positive effect on intrinsic motivation, which is in line with SDT (Ryan & Deci, 2000). On the other hand, strict regulations and excessive control can demotivate, which is the anticipation of MCT (Frey & Jegen, 2001). Empirical research has shown that autonomy-supportive personnel controls, competence-supportive controls, and relatedness-supportive controls that promote the core psychological needs suggested by SDT were positively linked with intrinsic motivation and positive work-related outcomes including employee engagement, employee performance, and employee well-being, whereas overly controlling controls were negatively related to these outcomes (McAnally & Hagger, 2024).

Employee Motivation and Organizational Performance

Motivated employees are more committed, higher service quality and high-performing, especially in the public organizations where the monetary incentives are scarce (Van der Kolk et al., 2019; Mwosi et al., 2024). Recent researches support the fact that employee motivation remains a fundamental determinant of organizational performance in any setting. As an example, motivational variables, including salary, promotion, training, and job security, have a positive impact on productivity and effectiveness in the organization, and it is important to note the influence of intrinsic and extrinsic motivators, which was identified in Nepalese organizations (Bhandari, 2024). Intrinsic and extrinsic motivation in the context of the public sector are an important means of improving job performance, even during the time of structural reforms, which implies that motivational strategies continue to be critical when it comes to boosting the employee output and service delivery (Elamalki et al., 2024). Also, systematic reviews demonstrate that positive leadership styles and work motivation could be used together to boost employee performance, which explains the current importance of personalized motivational and leadership approaches in enhancing performance (Rahmanda & Rino, 2025).

Theoretical Foundation

The Self-Determination Theory (SDT) is a useful theory through which the effects of personnel control systems on employee performance can be explained using motivation. SDT postulates that motivation is qualitative, and it falls along a continuum between intrinsic and extrinsic motivation, and is determined by the satisfaction of three core psychological needs: autonomy, competence and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2020). These needs can be fostered or crushed in organizations by personnel control practices that include training, performance evaluation, supervision and reward mechanism. These types of controls, applied in a supportive and developmental manner, increase the sense of autonomy and competence among the employees and, therefore, result in increased intrinsic motivation and well-internalized extrinsic motivation, which, in turn, leads to higher performance outcomes (Gagné et al., 2015). Conversely, very restrictive or controlling practices can cause frustration to psychological needs, which will result in low motivation and performance.

These ideas are further developed by the Motivation Crowding Theory (MCT) which points to the fact that external motivational stimuli and restraints can demotivate intrinsic motivation in some conditions, including monetary rewards, strict control, or rigid performance standards (Frey & Jegen, 2001). MCT states that extrinsic interventions may either crowd in motivation (when perceived as autonomy supporting and competence enhancing) or crowd out intrinsic motivation (when viewed to be controlling or undermining personal agency). This interaction is significant as in case

control by personnel is perceived as controlling but not supportive, personnel may accidentally diminish the intrinsic interest and internal motivation of workers towards work activities and produce poor quality performance despite designed rewards or punishments.

SDT describes the motivational process by which the influence of personnel control on performance is possible whereas MCT explains in which cases controls can crowd in or crowd out motivation. The combination of these theories helps to advance the hypothesis that employee motivation is the mediator between the personnel control performance relationship. In particular, systems of personnel control affect the motivational status of the employees which affects the quality and level of the performance outcomes. This composite view is especially applicable to public sector and professional companies, where intrinsic motivation is the key issue and in which over-reliance on formal controls can have a de-motivating effect on performance by inhibiting the intrinsic motivation of employees (Van der Kolk et al., 2019; Ryan & Deci, 2020).

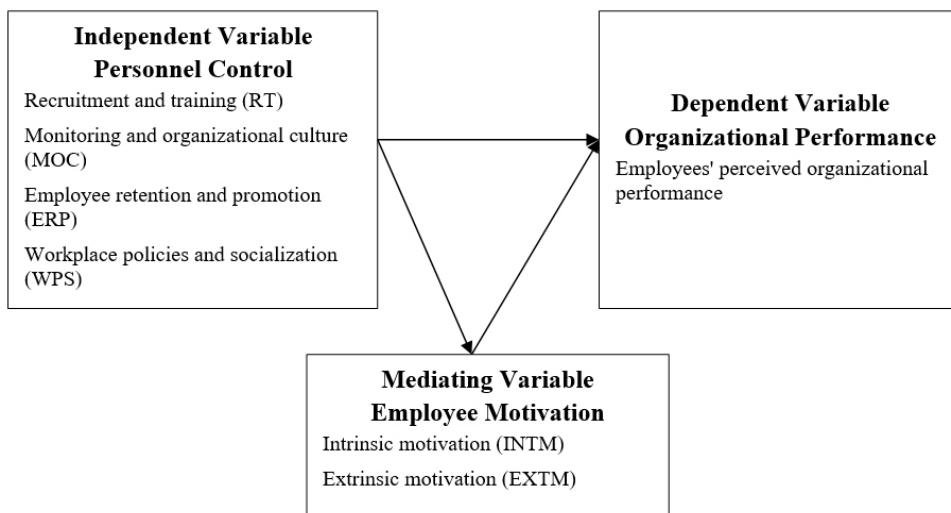
Despite the existence of links between personnel control, motivation, and performance in previous studies, there is little empirical evidence of the same in elected local governments in developing countries. Further, very little research has used formal mediation analysis to describe the role of personnel control in organizational performance by motivating employees. The paper addresses these gaps in the context of elected government agencies in Kailali district.

Conceptual Framework and Hypothesis

Empirical studies consistently show that recruitment, training, and monitoring.

Figure 1

Conceptual Framework



Personnel control is conceptualized as a second-order construct composed of four dimensions: recruitment and training, monitoring and organizational culture, employee retention and promotion, and workplace policies and socialization. Employee motivation (intrinsic and extrinsic) is proposed as a mediating variable between personnel control and organizational performance.

H1a: Recruitment and training positively influence organizational performance.

H1b: Monitoring and organizational culture positively influence organizational performance.

H1c: Employee retention and promotion positively influence organizational performance.

H1d: Workplace policies and socialization positively influence organizational performance.

H2: Personnel control positively influences employee motivation.

H3: Employee motivation positively influences organizational performance.

H4: Employee motivation mediates the relationship between personnel control and organizational performance.

Methods and Procedures

Research Design

The quantitative, cross-sectional explanatory research design is suitable in the study since the objective measurement and statistical analysis of the correlation between personnel control and the performance of organizations is possible. The information gathered at one point in time on the elected government agencies within the district of Kailali gives an effective picture of the prevailing practices and performances levels. The design is explanatory, which supports testing hypotheses and assists in finding out the impact of personnel control on the performance of an organization.

Population and Sample

The study population consisted of 423 employees in 13 local government agencies which were elected in Kailali District (Field survey, 2081). Based on a formula calculated by Yamane (1967) a sample of 206 or more respondents was calculated and used to come up with a 95 percent level of confidence. The convenience sampling was used because there was low accessibility and administration approval that was common in the public sector organization. Even though it is not a probability-based method, the approach was able to incorporate employees representing various departments and different levels of hierarchy, which ensured a reasonable level of representativeness of the available population (Etikan et al., 2016; Taherdoost, 2017).

Data Collection Instrument and Procedure

A structured and self-administered questionnaire composed of four sections was used to collect primary data namely demographic information, personnel control, employee motivation, and organizational performance. The measurements of the responses were taken using a seven point Likert scale of strongly disagree to strongly agree. This was done by physical distribution with institutional consent of the respective agencies being obtained.

Reliability and Validity

Cronbach alpha was used to evaluate the internal consistency reliability. The acceptable content validity was achieved with the help of the established and already tested scales that were used in previous research.

Data Analysis Techniques

Data analysis was done using SPSS. Descriptive statistics, Pearson correlation and multiple regression analyses were carried out. The Hayes macro PROCESS (Version 4.2), Model 4, bootstrap samples of 5,000 and confidence intervals of 95 percent, were used to conduct a mediation analysis.

Ethical Considerations

The matter of ethics was prioritized during the course of the research to safeguard the rights and welfare of the participants. Respondent participation in the study was voluntary and no kind of pressure or coercion was applied to respondents to participate in the study. Before data collection, the respondents were made well aware of the academic nature of the study and how the data obtained would be utilized by the scholar only. Their answers were promised anonymity and confidentiality and that the information they gave would be kept confidential and no one by any means would get to know. In order to preserve confidentiality and minimize the risks, no personal or distinguishing data were gathered, which prevents the potential risks of negative effects on the respondents due to their involvement.

Results

The most critical procedure that is needed in the research project involves the conclusion of the results of the data analysis. The data received in its details is analyzed in terms of objectives and hypothesis, which has been already established.

Descriptive Analysis

Table 1

Descriptive Analysis of Demographic Information

<i>Gender-wise Classification of the Respondents</i>		
Gender	Frequency	Valid Percent
Male	165	76.40%
Female	51	23.60%
Total	216	100

<i>Age-wise Classification of the Respondents</i>		
Age Group	Frequency	Valid Percent
Below 25	9	4.20
25-35	98	45.40
35-45	69	31.90
45-55	36	16.70
Above 55	4	1.90
Total	216	100

<i>Educational Qualification of the Respondents</i>		
Educational Level	Frequency	Valid Percent
SLC/SEE	6	2.80
Proficiency Certificate Level/10+2	46	21.30
Bachelor	84	38.90
Masters	80	37
Total	216	100

<i>Years of Experience of the Respondents</i>		
Work Experience	Frequency	Valid Percent
0-4	50	23.10
5-9	85	39.40

10-14	34	15.7
15-19	9	4.2
20 years & above	38	17.60
Total	216	100

Religion of the Respondents

Religion	Frequency	Valid Percent
Hindu	214	99.10
Islam	2	0.90
Total	216	100

Source: Computed from the primary survey

The demographic profile of the 216 respondents shows that majority of the respondents are mostly men (76.4 percent) and young (45.4 percent) people aged between 25 and 35 years. Most hold higher education degrees, with 38.9% possessing a Bachelor's and 37% a Master's degree. Work experience is mainly in the 5 to 9 years range (39.4%), and the majority identify as Hindu (99.1%), with only 0.9% following Islam.

In conclusion, the respondents are primarily male, middle-aged, well-educated, moderately experienced, and mainly Hindu, which informs the study's context and interpretation of results.

Reliability Test

Table 2

Coefficients of Cronbach's Alpha

Variables	No of items	Cronbach's Alpha
Recruitment and training (RT)	6	0.793
Monitoring and organizational culture (MOC)	6	0.836
Employee retention and promotion (ERP)	6	0.796
Workplace policies and socialization (WPS)	6	0.852
Intrinsic motivation (INTM)	5	0.791
Extrinsic motivation (EXTM)	5	0.736
Employee perceived organizational performance (EPOP)	9	0.847
Overall	43	0.943

Source: Computed from the primary survey

The consistency test performed on the personnel control tools

questionnaire presented good consistency and Cronbach alpha of different categories were between 0.736 to 0.852, of which all were greater than the 0.7 threshold. The total alpha is 0.943 which means that the instruments employed are valid and are necessary in personnel control (Nunnaly, 1978).

Normality Test

Table 3

Normality Test (Using Skewness and Kurtosis)

Variables	N	Skewness Statistic	Kurtosis Statistic	Remarks
Recruitment and training (RT)	216	-0.090	-0.272	Normally distributed
Monitoring and organizational culture (MOC)	216	-0.571	0.438	Normally distributed
Employee retention and promotion (ERP)	216	-0.363	0.060	Normally distributed
Workplace policies and socialization (WPS)	216	-0.758	1.603	Normally distributed
Intrinsic motivation (INTM)	216	-0.470	-0.133	Normally distributed
Extrinsic motivation (EXTM)	216	-0.686	-0.054	Normally distributed
Employee perceived organizational performance (EPOP)	216	-.479	-.159	Normally distributed

Source: Computed from primary survey

** Represents a 5% level of significance

The table 3 indicate that the distributions of various variables related to personnel control and organizational performance are approximately symmetric. Skewness values for all variables range from -1 to +1, while kurtosis values fall between -3 and +3, confirming a lack of extreme peaks or tails((Kim, 2013). Consequently, all variables are classified as normally distributed, thus allowing for reliable use of parametric statistical analyses, including correlation, regression, and ANOVA, in evaluating personnel control and organizational performance in elected government agencies.

Multicollinearity Test

Table 4

Multicollinearity Test (Using VIF and Tolerance value)

Variables	Tolerance value	VIF	Remarks
Recruitment and training (RT)	0.450	2.222	There is no multicollinearity problem
Monitoring and organizational culture (MOC)	0.428	2.339	There is no multicollinearity problem
Employee retention and promotion (ERP)	0.474	2.110	There is no multicollinearity problem
Workplace policies and socialization (WPS)	0.451	2.217	There is no multicollinearity problem
Intrinsic motivation (IINTM)	0.533	1.877	There is no multicollinearity problem
Extrinsic motivation (EXTM)	0.584	1.712	There is no multicollinearity problem

Source: Computed from primary survey

** Represents a 5% level of significance

Table 4 of multicollinearity test demonstrates that the Tolerance of all the variables exceeds 0.1 and VIF are less than 10. Therefore, there are no multicollinearity problems in the regression models of personnel control and organizational performance (Gujarati & Porter, 2009; Hair et al., 2010).

Correlation Analysis

Table 5

Correlation between Personnel Control Dimensions and Organizational Performance

Personnel control	Employee perceived organizational performance		Remarks
Recruitment and training (RT)	Pearson correlation P value	0.681** 0.000	Moderate to strong correlation Significant
Monitoring and organizational culture (MOC)	Pearson correlation P value	0.632** 0.000	Moderate to strong correlation Significant
Employee retention and promotion (ERP)	Pearson correlation P value	0.500** 0.000	Moderate correlation Significant

Workplace policies and socialization (WPS)	Pearson correlation	0.567**	Moderate correlation
	P value	0.000	Significant

Source: Computed from primary survey

** Represents a 5% level of significance

Table 5 reveal that the significant positive relationships between all dimensions of personnel control and employee-perceived organizational performance ($p < .01$). Recruitment and training exhibit the strongest correlation, followed by monitoring and organizational culture, while employee retention and promotion demonstrate comparatively weaker, though still significant, associations. Employee motivation is also positively and significantly correlated with both personnel control and organizational performance, providing preliminary support for mediation testing.

Direct Effect of Personnel Control on Organizational Performance: Hypothesis Testing (H1a – H1d)

Table 6

Model Summary of Personnel Control on Employee Perceived Organizational Performance

Model	R	R Square	Adjusted R Square	F value	p-value
1	0.620 ^a	0.385	0.373	32.959	0.000 ^{b**}

Source: Computed from the primary survey

α. Dependent Variable: Employee Perceived Organizational Performance

β. Predictors: (Constant), Workplace_policies_socialization, Recruitment_training, Employee_retention_promotion, Monitoring_organizational_culture

**Represents a 5% level of significance

According to the model summary (Table 6), the personnel control dimensions, in combination, have a high impact on employee perceived organizational performance with a R value of 0.620 and a R² of 0.385. It implies that the four personnel control variables can explain 38.5 percent of the change in organizational performance. The general model is statistically significant (F = 32.959, $p = 0.000 < 0.05$) which proves the appropriateness of the regression model in testing the hypothesis.

Table 7

Coefficients of Personnel Control Dimensions and Organizational Performance

	Unstandardized Coefficients		Standardized Coefficients	t value	p value
	B	Std. Error	Beta		
(Constant)	-0.080	0.499	-	-	-
Recruitment and training (RT)	0.507	0.114	0.341	4.435	0.000
Monitoring and organizational culture (MOC)	0.288	0.107	0.214	2.683	0.008
Employee retention and promotion (ERP)	0.049	0.090	0.041	0.546	0.586
Workplace policies and socialization	0.168	0.108	0.123	1.553	0.122

Source: Computed from the primary survey

a. Dependent Variable: Employee Perceived Organizational Performance

Based on the results of the coefficient (Table 7), H1a is accepted since recruitment and training have a positive and significant impact on the organizational performance ($p = 0.000 < 0.05$). Likewise, H1b is accepted as monitoring and organization culture positively and significantly impact on organizational performance ($p = 0.008 < 0.05$). Nonetheless, H1c is rejected due to the fact that retention and promotion of employees are not only positive but they do not have a significant effect on organizational performance ($p = 0.586 > 0.05$). Similarly, H1d is rejected because there is no statistically significant influence of workplace policies and socialization on the performance of the organization ($p = 0.122 > 0.05$).

In conclusion, only recruitment and training, and monitoring and organizational culture significantly and positively influence organizational performance in elected government agencies in Kailali district.

Effect of Personnel Control on Employee Motivation: Hypothesis Testing (H2)

Table 8

Model Summary of Personnel Control on Employee Motivation

Model	R	R Square	Adjusted R Square	F value	p-value
1	0.537 ^a	0.288	0.285	86.695	0.000 ^{b**}

Source: Computed from the primary survey

α . Dependent Variable: Employee motivation

β . Predictors: (Constant), Personnel control

**Represents a 5% level of significance

Based on the result presented in Tables 8, the model summary shows a strong

positive relationship between personnel control and employee motivation ($R = 0.537$), with R^2 value of 0.288. It indicates that the personnel control explains 28.8% of the variance in employee motivation. The overall regression model is statistically significant ($p = 0.000 < 0.05$), confirming the model's adequacy.

Table 9

Coefficients of Personnel Control and Employee Motivation

	Unstandardized Coefficients		Standardized Coefficients	t value	p value
	B	Std. Error	Beta		
(Constant)	2.608	0.345	-	7.551	0.000
Personnel control	0.581	0.062	0.537	9.311	0.000

Source: Computed from the primary survey

a. Dependent Variable: Employee motivation

The outcomes of the coefficient reveal that the impact of personnel control on the employee motivation is positive and statistically significant ($p=0.000<0.05$). Thus, the null hypothesis is rejected, and the alternative hypothesis (H_2) gets accepted. It implies that employee motivation is greatly affected positively by the personnel control. The authors of the study came to the conclusion that the enhancement of the recruitment and training processes, monitoring and workplace policies can have a substantial positive impact on the intrinsic and extrinsic motivation of the employees.

Effect of Employee Motivation on Organizational Performance: Hypothesis Testing (H_3)

Table 10

Model Summary of Employee Motivation on Organizational Performance

Model	R	R Square	Adjusted R Square	F value	p-value
1	0.590 ^a	0.348	0.345	114.437	0.000 ^{b**}

Source: Computed from the primary survey

χ . *Dependent Variable: Employee perceived organizational performance*

δ . *Predictors: (Constant), Employee motivation*

****Represents a 5% level of significance**

According to the model summary, employee motivation has a strong positive correlation with employee perceived organizational performance ($R = 0.590$), and employee motivation has a variance of 34.8% in explaining organizational performance ($R^2 = 0.348$). The regression model is found to be statistically significant ($p = 0.000 < 0.05$).

Table 11*Coefficients of Employee Motivation and Organizational Performance*

	Unstandardized Coefficients		Standardized Coefficients	t value	p value
	B	Std. Error	Beta		
(Constant)	2.192	0.327	-	6.699	0.000
Employee_motivation	0.599	0.056	0.590	10.698	0.000

Source: Computed from the primary survey

a. Dependent Variable: Employee_perceived_organizational_performance

The results of the coefficient indicate that employee motivation positively and significantly influences the performance of an organization ($p = 0.000 < 0.05$). Thus, H3 is accepted and the null hypothesis is rejected. It validating the hypothesis that increased employee motivation goes a long way in improving the performance of the organization within elected local government agencies in Kailali district.

Mediation Analysis using PROCESS Macro: Hypothesis Testing (H4)**Table 12***Total, Direct, and Indirect Effects of Personnel Control on Organizational Performance (Bootstrap Results based on Hayes Process Macro)*

Effect type	Mediator	Effect	SE/Boot SE	t-value	p-value	LLCI	ULCI
Total effect	-	0.7852	0.0525	14.9611	0.000	0.6818	0.8887
Direct effect	-	0.6143	0.0584	10.5146	0.000	0.4991	0.7294
Indirect effect	Employee motivation	0.1710	0.0363	-	-	0.0983	0.2419

Source: Computed from the primary survey

According to the mediation analysis results (Table 12) the overall effect of personnel control on the performance of the organization is positive and statistically significant ($\beta = 0.7852$, $p < 0.05$) which shows that personnel control significantly contributes to the performance of the organization. When the issue of employee motivation is incorporated in the model, the direct impact of the personnel control on the organizational performance is positive and significant ($\beta = 0.6143$, $p < 0.05$), indicating that personnel control still has a certain impact on the performance even when the mediator is introduced. The indirect impact of personnel control on the performance in an organization by motivating the employees is also positive and

statistically significant ($\beta = 0.1710$, $\text{BootSE} = 0.0363$), with the bootstrapped confidence interval not including zero ($\text{Boot LLCI} = 0.0983$, $\text{BootULCI} = 0.2419$). This proves the existence of a mediation effect. As both the direct and indirect impact is huge, employee motivation partly mediates the correlation between personnel control and organizational performance.

These results indicate that Personnel control is not only beneficial to organizational performance directly but indirectly as well because they increase employee motivation, which is the main focus of motivational processes in the performance improvement of the elected government agencies.

Discussion

The research findings give a strong empirical evidence for the positive role of personnel control in promotion of organizational performance in elected local government agencies in Kailali District. In line with previous studies, recruitment and training came out as the most valuable predictor of employee perceived organizational performance (Gamage, 2014; Mutua & Karanja, 2025). This can be correlated with the idea that the effective development of competence of employees through the process of recruitment and continuous development of skills helps them to do certain tasks effectively, thus increasing the overall organizational performance (Chanapai et al., 2024; Juknevičienė et al., 2025). The significance of monitoring and organizational culture observed in terms of performance influences is consistent with the published research in the public sector in recent times, which emphasizes the role of formal supervision and favorable organizational climate on the development of performance congruence between individual and organizational objectives (Zhang et al., 2025; Rana & Malik, 2025).

On the other hand, the direct effect of the employee retention and promotion and the workplace policies and socialization did not show statistically significant effect on the organizational performance. Such outcomes are indicative of context-boundedness of bureaucracy where strict hierarchical systems and a lack of managerial discretion can limit the effectiveness of retention approaches and policy-based socialization practices (Georgellis et al., 2011; Ohemeng, 2024). This observation builds on the available literature because it shows that not every dimension of personnel control has a similar impact on performance in the context of the public sector, especially in recently decentralized governance systems where the systemic constraints can come in the way of realizing the HRM interventions.

It is also established in the study that the personnel control part plays a significant role in improving the employee motivation whereby recruitment, training, monitoring and supportive practices in the organization have a positive impact to the intrinsic

and extrinsic motivation. This result aligns with the Self-Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2020), which argues that the accomplishment of the autonomy, competence and relatedness needs by employees is the key to developing motivation. These findings also correspond to the Motivation Crowding Theory, which suggests that properly executed personnel control provisions can not only crowd in motivation through boosting the sense of competence and autonomy of employees, but also can remove intrinsic interest (Frey & Jegen, 2001; Maharani, 2021). These observations aid in underscoring the vital mediating power of employee motivation that lies between HR practices and organizational results and note that performance gains are somewhat dependent on the internal motivational conditions of employees.

The mediation analysis forms a strong argument that personnel control and organizational performance have a mediating relationship that is partially due to employee motivation. This partial mediation indicates that personnel control has a direct impact on the performance although its effect is further boosted by the increased motivation of the employees. These results support the idea of the primary role of psychological mechanisms in converting HR interventions into physical organizational results, especially in the context of the public sector when extrinsic incentives can be few, and intrinsic motivation is the key to performance (Bhandari, 2024; Van der Kolk et al., 2019; Mwosi et al., 2024).

Finally, these findings indicate that employee motivation is a key factor that has connected the personnel control to the organizational performance within the public sector environment. Through HR practices that improve the capability and fostering of intrinsic motivation, public administrator can empower organizational performance even in a limited administrative setting.

Conclusion

This research comes up with empirical evidence that the practices of personnel control are closely related to the performance of the organization when it comes to elected local government agencies in the Kailali District and it affects the performance of the organization both directly and indirectly through employee motivation. The results of this paper point to the fact that out of the four dimensions of personnel control, recruitment and training, monitoring and organizational culture are the most effective ones in increasing employee perceived organizational performance.

It is further found in the research that there is a positive impact that personnel control practices have on employee motivation, which confirms the Self-Determination Theory that asserted that autonomy, competence, and relatedness were essential in intrinsic motivation (Deci & Ryan, 2000; Ryan & Deci, 2020). The motivation crowding theory continues to elaborate that when applied in a supportive and developmental way,

such practices crowd in motivation boosting intrinsic and extrinsic engagement (Frey & Jegen, 2001; Maharani, 2021). The partial mediation effect of employee motivation highlights the idea of the motivational mechanism being an important channel through which the Human Resources interventions can be converted into better organizational performance, and the personnel control is not enough without the promotion of employee engagement and internal commitment.

From a practical perspective, the findings imply that the local government administrators should focus on specific HR practices especially recruitment, training, and performance-focused monitoring and foster an organizational culture that will help develop the employees. Retention-only, promotion-only, or socialization-only policies might produce a minor positive impact on performance unless they are supported by some motivationally supportive intervention (Ohemeng, 2024; Bhandari, 2024). The study adds to the body of research on the management of the public sector, as it shows that personnel control has been shown to be more effective, context-specific in the system of decentralized governance in developing countries, and that motivation is the key mediator between the HR practice and the performance of organisations (Van der Kolk et al., 2019; Mwosi et al., 2024).

To sum up, a motivation-focused and personnel control are a successful strategy of performance improvement in elected government agencies. Further studies are needed into longitudinal designs to capture dynamic impacts of personnel control interventions and other mediators including organizational commitment or job satisfaction to gain a further understanding of the mechanisms between HR practices and organizational effectiveness in a public sector setting.

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Trading Day Effect and Volatility Clustering in NEPSE Returns: An Empirical Analysis of Market Anomalies

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Abstract

This study examines the seasonality of stock returns across trading days in Nepal's stock market. The analysis is based on 4,504 trading days of the NEPSE composite index from 2005 to 2024. The study utilized descriptive statistics, OLS regression, and EGARCH (1,1) estimation incorporating weekday dummy variables. A nonparametric Kruskal–Wallis H Test is also employed to measure the robustness of the results. The study found negative average returns on Sundays and Mondays, and positive returns on Tuesdays, Wednesdays, and Thursdays. NEPSE operates five days a week, with Friday and Saturday being closed. During the study period, mean returns on Wednesday were higher than on any other day of the week. The ANOVA (one-way) results report a significant difference in mean returns on Wednesday and Sunday. The regression results reveal that the returns vary systematically across weekdays. The study found significantly higher returns on Wednesday and Thursday compared to Sunday, indicating seasonality in returns across operating days in a week. The results of the EGARCH (1,1) model, significant ARCH and GARCH coefficients indicate that shocks immediately increase volatility and that volatility persists over time, confirming both short-term clustering and long-term dependence in NEPSE returns. However, the insignificant volatility term (γ) suggests there is no asymmetric volatility response to negative shocks. The findings of this study are beneficial for stock market investors in Nepal, suggesting that they should buy stocks at the start of the week and sell them by the end.

Keywords: ANOVA, EGARCH, mean difference, dummy variables, seasonality



Introduction

In an efficient market, stock returns are typically not expected to exhibit predictable patterns. However, numerous studies worldwide (Cross, 1973; French, 1980; Aggarwal & Rivoli, 1989) have documented a phenomenon known as the Weekdays effect, where returns vary systematically depending on the trading day. These patterns challenge the theory of market efficiency, suggesting the presence of behavioral or structural inefficiencies. Fama (1970) states that in an efficient market, stock returns are generally not expected to show predictable patterns.

Eugene Fama proposed the concept of market efficiency in 1970, which suggests that the stock prices accurately reflect all accessible information. Therefore, no investor can continuously surge returns without taking additional risk. However, empirical studies conducted in various stock markets worldwide have found persistent patterns in stock returns that contradict the EMH. The contradicting factors of EMH theory are known as market anomalies. The identified factors that challenged the market efficiency have been classified into calendar anomalies (like daily return anomaly, turn of the month, months of the year, holiday, festival effect, etc.), technical anomalies (like momentum, reversal), and fundamental anomalies (like size effect, profitability effect). Anomalies suggest that markets may not be perfectly efficient; therefore, the study of Fama (1970) classified market efficiency into three distinct forms: the weak form, the semi-strong form, and the strong form of efficiency. The calendar anomalies violate the weak efficiency condition in the market. Moreover, the market efficiency in its weakest form states that the current trading price of the stock market fully reflects all available information contained in the past price and returns (Fama, 1970). Moreover, in the weak form of efficiency, investors cannot earn additional returns by analyzing past price movements or return patterns. Samuelson (1965) and Malkiel (1973) argued that stock prices move randomly, meaning that price changes are unpredictable by supporting the idea that technical analysis and market timing don't work consistently. While, empirical studies found persistent return patterns or seasonality within the weekdays (Cross, 1973; French, 1980; Agrawal & Tandon, 1994; Hasan et al., 2021), months of the year (Rozeff & Kenney, 1976; Dangol, 2010; Agrawal & Jha, 2023), turn of the month (Ariah, 1987), at the time of festivals, and holidays (Ariah, 1990). The evidence of seasonal patterns found in the stock returns contradicts the random walk theory, which forms the theoretical foundation of the market efficiency hypothesis.

The weekly seasonality in returns is a calendar anomaly where average returns exhibit systematic differences across the weekdays. This effect is also called the weekend effect in the study of market anomalies. Two consecutive studies conducted in the 1970s and 1980s by Cross (1973) and Keim and Stambaugh (1984) found significant negative returns on Monday and positive returns on Friday in the US stock

markets. A similar study of Kato (1990) investigated significantly lower returns on Tuesday and higher returns on Wednesday in the Tokyo Stock Exchange of Japan. The most recent studies have also reported daily return anomaly in developed countries' stock markets as well as developing countries like South Asia. A study by Aggarwal and Jha (2023) reported the weekday effect and return volatility clustering in the Indian stock markets.

This study focused on the variation in stock returns across trading days in the Nepal Stock Exchange market (NEPSE). In the Nepalese context, few studies have been conducted to examine the calendar anomalies in NEPSE. A study conducted by KC and Joshi (2005) reported a significant negative return on Monday across weekdays. The NEPSE, an emerging market characterized by a limited number of related studies, offers a unique context for examining such anomalies. Despite an increase in investor interest, empirical research on market anomalies in NEPSE is scarce, particularly regarding the calendar-day anomaly. Therefore, the goal of the study is to investigate whether the NEPSE exhibits a notable trading day effect and what implications this might have for market efficiency and trading strategies in Nepal. This study employed very recent statistical tools, the EGARCH model with dummies, to observe the weekdays' returns patterns on NEPSE. This study aims to achieve the following objectives:

1. To examine the presence of the trading day effect in NEPSE stock returns
2. To analyze the volatility clustering behavior in NEPSE returns
3. To examine whether stock returns volatility in the NEPSE varies systematically across trading days of the week

Literature Review

Researchers in the stock market have shown a growing interest in calendar anomalies. Numerous studies have been conducted on various calendar anomalies, including the trading day effect across different stock markets worldwide. The first study on weekday anomaly was conducted in the S&P 500 stock market of the United States (US) in 1973 by Frank M. Cross. Cross (1973) investigated the significant difference in average returns among the weekdays. The author found the difference in mean returns between Monday and Friday during the study period of 1953-1970. Similarly, French (1980) re-examined seasonal effect in the S&P 500 stock market using an OLS regression model. The study reported a significantly lower mean return on Monday compared to other days of the week, and the phenomenon is known as the Monday effect. Moreover, Lokonishok and Smidt (1988) found that Monday returns were significantly negative and differed from those on other days. The study was conducted over a lengthy period, from 1897 to 1986, spanning approximately 90 years

on the stock returns of the Dow Jones Industrial Average (DJIA). Afterward, Wang et al. (1992) examined weekday return variation in the stock markets of five countries: Hong Kong, Taiwan, Malaysia, Singapore, and Thailand, covering the period from 1975 to 1987. The study utilized a non-parametric test (Kruskal-Wallis) and found a statistically significant weekday return variation in four of the five countries, except for Taiwan.

In the 1980s and 1990s, the majority of the studies focused on the testing of seasonality, like the weekday return effect in developed and developing security markets. However, in the 2000s, some related studies claimed to have eliminated the effect in the stock markets. Kohers et al. (2004) found that the DOW effect faded away in the 1990s, whereas the effect was found in the 1980s. The study was conducted taking a sample of eleven developed countries' stock markets from 1980 to 2002. The study found that the seasonal effect in the stock market can be time-varying and inefficient market positions. The results indicated that market efficiency can cover the anomalies that appear in the financial markets. A similar study of Basher and Sadorsky (2006) examined the calendar-related trading pattern in 21 emerging stock markets from different countries from 1992 to 2003 and found a significant effect only in three countries. This finding indicates that the effect may not be present in all stock markets. The study of Doyle and Chen (2009) found an inconsistent pattern of returns among the weekdays, analyzing the daily returns of eleven countries' stock markets from 1993-2007. The study's results suggest that the weekly seasonal patterns can change over time, with the well-documented Monday effect also varying. Additionally, the study of Gao et al. (2015) found an insignificant relationship between the Monday effect and short-selling strategies in the Hong Kong Stock Exchange during the study period of 1980-2003. Whoever, in previous empirical studies such as Chen and Singal (2003), reported a significant relationship between the trading day effect and short-selling strategies in the stock markets.

Khan and Rabbani (2019) investigated the calendar effect in bull and bear market conditions of the Japanese Stock Markets from 1977 to 2017. The study employed the OLS regression and GARCH (1,1) model to examine the daily seasonal behavior and other calendar anomalies, and reported that the seasonality in the Japanese stock markets depends on the market condition. The study found inter-day returns fluctuation only in the bull market condition, not in the bear or down markets. A study by Pandey (2022) used the GARCH family models (i.e., SGARCH, TGARCH, and GARCH-M) to examine the calendar effect on Egyptian stock markets from 2012 to 2019. The study examined the weekday anomaly in terms of mean returns and volatility clustering, and reported the weekday effect, persistent volatility, and leverage effect in the Egyptian stock markets. The study observed that the negative market shocks tend to cause greater volatility than positive shocks, indicating asymmetry in market behavior. In

this context, Aggarwal and Jha (2003) utilized several GARCH models to examine the trading day returns behavior and volatility dynamics in the Indian National Stock Exchange (NSE) market from 1990-2022, and found a significant positive pattern in returns within the weekdays and the leverage effect in returns during the study period of 28 years.

Empirical studies conducted in the different stock markets of the world provided presence and absence of the weekday return anomaly in different periods. But, in the context of the Nepal Stock Exchange Market (NEPSE), there are limited studies conducted, particularly on the trading day effect. The first study on market seasonality on NEPSE was conducted by KC and Joshi (2005). The study examined the trading day effect in NEPSE returns during the study period of 1995-2004, using OLS regression with dummies and mean comparison between the weekdays, and reported different returns patterns in the weekdays and persistently negative returns on Thursday. The weak form of efficiency and the random walk hypothesis have been tested on NEPSE by various researchers in different periods (Pradhan & Upadhyay, 2006; Dangol, 2011; Maharjan, 2018) and found that NEPSE does not exhibit the weak form of market efficiency. If the market is inefficient in its weak form, seasonality in stock returns is evident (Kohers et al., 2004). This study examines seasonality in the Nepal Stock Exchange (NEPSE) by testing the weekday return anomaly using robust statistical tools, including the EGARCH, which incorporates seasonal dummy variables in the variance equation. There are limited studies on NEPSE that have examined the weekly seasonal pattern over an extended period, employing robust models. Therefore, this research represents a significant and original contribution to the literature on Nepalese stock markets.

Methods and Procedures

Data

This study utilized quantitative and secondary data sources, obtained from the NEPSE website. The sample period selected spans from April 2005 to July 2024, based on the operating days of the week established by the NEPSE. The study period was selected based on the consistent trading week structure of NEPSE (Sunday-Thursday) beginning from April 2005. To ensure uniformity in trading days throughout the week, the study period began on April 24, 2005, which was the first day the NEPSE operated on a Sunday. The daily closing index of the NEPSE has been taken to calculate the mean returns of a trading day. The results are based on R_t , representing the return rate for period t is calculated as the logarithmic first difference, $R_t = \ln(P_t/P_{t-1}) \times 100$, where P_t and P_{t-1} are the current day's and last trading day's closing value of the index.

Research Design

This study adopted a quantitative and explanatory research design, and a causal-comparative approach was employed to identify whether systemic differences exist in return and volatility across trading days. This study used a multi-stage methodological framework. At the initial stage, the OLS Regression with Dummy Variables (French, 1980) was applied to identify the preliminary presence of the seasonal effect on returns across the weekdays. The model is as follows:

$$R_t = \alpha + \beta_1 D_1 + \beta_2 D_2 + \dots + \beta_4 D_4 + \epsilon_t \dots\dots\dots 1$$

Where, R_t is the dependent variable, the stock return at time t (e.g., daily), and α is the intercept term, $D_1, D_2, D_3,$ and D_4 are dummy variables for trading days, where the value 1 is assigned if the day is Sunday and 0 otherwise, similar to all weekdays. β_i is the coefficient associated with dummy variable j . The coefficient of α represents the mean return of Sunday, since Sunday is taken as the base day. A significantly positive or negative β_i suggests that the mean return on Tuesday is notably higher or lower than the mean return on Sunday (base day), similar to other trading weekdays.

The series of returns analyzed in this study does not follow a normal distribution, since there may be a problem related to autocorrelation and heteroskedasticity. However, the OLS assumptions are often violated in stock return time series. The significant p -value of the JB test indicates the return series used in this study is not normally distributed. Hence, the OLS results are taken as an initial benchmark.

To overcome the limitation of the OLS model and account for the problem of normality, an EGARCH (1,1) estimation has been used. Nelson (1991) claimed that the EGARCH model is relatively robust to outliers because it models the logarithm of conditional variance and allows asymmetric volatility responses of shocks. Thus, this model provides a more realistic representation of the return series used in this study and helps identify whether the trading day effect persists after controlling for volatility dynamics. Diagnostic tests, such as DW, ARCH-LM, and Ljung-Box Q statistics, were conducted to assess the validity of the estimated EGARCH (1,1) model. Similarly, the Unit-Root test has been conducted to verify stationarity in the data set. The EGARCH model provides results from two equations: the mean equation for return variability and the variance equation for volatility dynamics across the trading days in the week, which are mentioned in equations 2 and 3 as follows:

Mean Equation

$$R_t = \alpha + \beta_0 R_{t-1} + \sum_{i=1}^k \beta_i D_{ij} + \epsilon_t \dots\dots\dots 2$$

Variance Equation

$$\ln(\sigma_t^2) = \omega + \delta \ln(\sigma_{t-1}^2) + \alpha \frac{|\epsilon_{t-1}|}{\sqrt{\sigma_{t-1}^2}} + \gamma \frac{\epsilon_{t-1}}{\sqrt{\sigma_{t-1}^2}} + \sum_{i=1}^k \beta_i D_{ij} \dots\dots\dots 3$$

Where, R_{t-1} : Representing lagged effect (past return), σ_t^2 : Conditional variance of the error term at time t . $\ln(\sigma_{t-1}^2)$: Natural logarithm of the conditional variance (used in

EGARCH to ensure positive variance), ω (omega): Constant term (intercept in the variance equation), δ (delta): Coefficient for the lagged log, variance term $\ln(\sigma_{t-1}^2)$ representing volatility persistence, ε_{t-1} : Lagged residual or shock term from the mean equation, α (alpha): Coefficient capturing the magnitude effect (how large shocks affect volatility, regardless of sign), γ (gamma): Coefficient for the leverage effect (captures asymmetry — whether negative shocks affect volatility more than positive ones), D_{it} : Dummy variables representing days of the week (e.g., Monday to Thursday; one day is omitted as a base), and B_i (beta): Coefficients for the dummy variables D_{it} , measuring the volatility dynamics across the weekdays. This model shows the ARCH, GARCH, returns patterns, and volatility clustering among the weekdays.

Based on the research question, “Are mean returns and volatility different across the weekdays?” The following hypotheses are formed and tested in this study. H_0 : The daily mean returns and volatility across the weekdays are expected to be the same in the NEPSE index.

This study also incorporated an ANOVA test to identify whether the mean return of at least one weekday is significantly different from the other days. H_0 (null) = $\mu_1 = \mu_2 = \mu_3 = \dots = \mu_k$ (All days of the week mean are equal), and H_1 (alt) = At least one weekday mean is different. The post hoc Test is performed when the ANOVA results lead to rejection of the null hypothesis. A post-hoc test shows a significant difference between the mean returns on weekdays.

Finally, to validate the robustness of the weekday effect obtained from parametric models, non-parametric tests, Kruskal-Wallis, and Mann–Whitney U tests were applied. These test results provide evidence that the mean difference observed on trading days is not influenced by the assumptions of the parametric models. The Kruskal–Wallis test examined whether the distributions of returns differ across all weekdays under the null hypothesis that all median returns are equal. Upon detecting significant overall differences, pairwise comparisons were performed to determine whether the median returns of any two weekdays are identical. When the null hypothesis is rejected in either set of tests, it indicates that daily returns are not uniformly distributed, implying the presence of a weekday anomaly in the market.

Results

Descriptive Statistics

Table 1 provides a statistical overview of the distribution of 4504 observations of daily returns of the NEPSE composite index from 2005 to 2024. The average returns among the weekdays during the period are very diverse. The mean on Sunday and Monday has been negative, and the remaining days have been positive. Monday and Wednesday have the lowest returns. This evidence of mean returns indicates a

persistent pattern in the mean returns of NEPSE. The highest standard deviation on Sunday (1.58%) shows high volatility in returns on this day, and the lowest standard deviation on Thursday (1.0749) indicates the lowest return volatility. However, all days except Sunday exhibit fat tails (Kurtosis > 3), which violates the assumption of normality. Similarly, a highly significant Jarque-Bera (JB) test value shows that the series does not conform to a normal distribution.

Table 1

Summary Statistics of NEPSE Daily Returns from April 2005 to July 2024

Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Overall
Mean	-0.0402	-0.024	0.0674	0.1284	0.1192	0.0502
Median	-0.1446	-0.0396	-0.0081	0.0322	0.0127	-0.0208
Std. Dev	1.5824	1.3218	1.3296	1.2369	1.0749	1.3202
Minimum	-7.2281	-6.2262	-6.2056	-5.1592	-6.2052	-7.2281
Maximum	5.8659	5.831	5.8846	5.836	5.6972	5.8846
Skewness	0.346	0.132	0.08	0.568	0.613	0.288
Kurtosis	2.13	3.587	3.607	3.444	4.53	3.433
JB	46.032***	15.656***	14.760***	55.910***	144.469***	97.449***
N	894	907	899	902	902	4504

Note: ***, **, and * indicate significance of P-value at 1, 5, and 10 percent levels.

Figure 1

Graphical Presentation of Daily Returns on a Bar Chart from April 2005 to July 2024

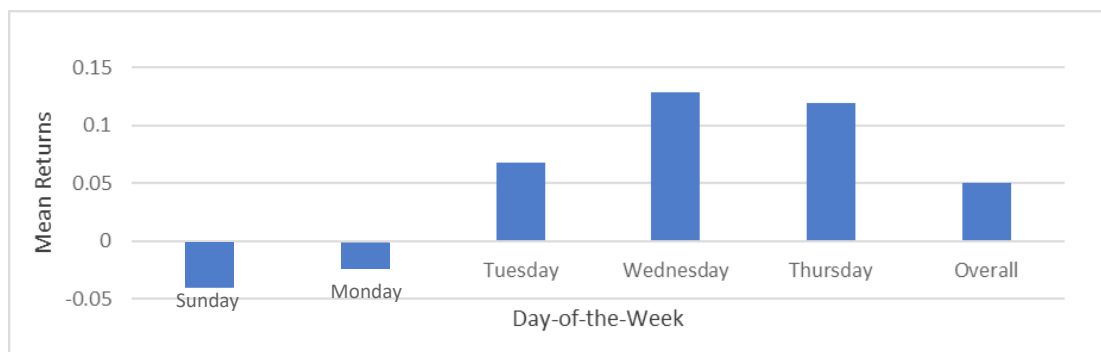


Figure 1 presents the bar chart to illustrate the mean daily returns of the NEPSE index across trading days. The pattern reveals clear variations in returns across the weekdays, indicating the existence of a trading-day effect. The negative returns on Sunday and Monday indicate a weak start to the trading week. The positive returns started from Tuesday and gained their highest on Wednesday, followed by moderately high returns on Thursday. The overall average return during the sample period is positive but smaller with compared to midweek returns. This pattern suggests that

investors tend to experience lower or negative returns at the beginning of the weekly trading days and higher returns in midweek.

Figure 2

Trend of Daily Returns on a Line Chart

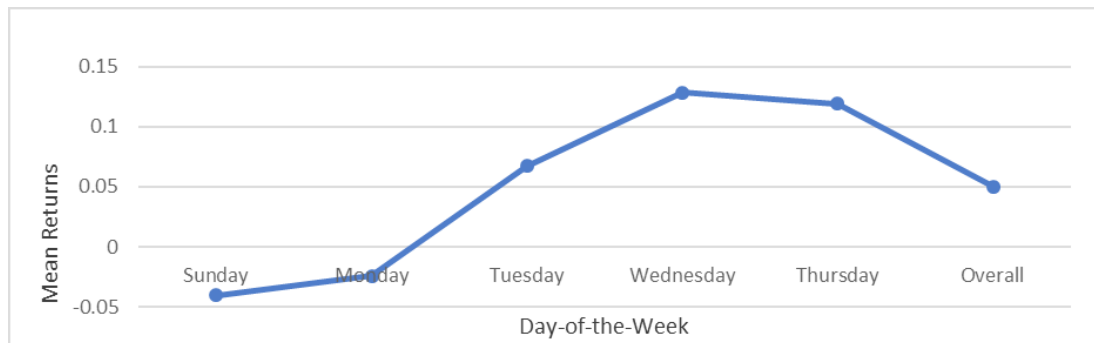


Figure 2 depicts the mean daily returns across the trading weekdays in the line chat. The trend line shows a low and negative return on Sunday and Monday, and a positive return on Tuesday to Thursday, providing the highest mean return on Wednesday. The overall mean return is positive.

The pattern of mean returns suggests the presence of a trading day effect, showing weak performance at the beginning and stronger returns during the middle of the week. The negative Sunday and positive midweek returns may reflect investor mood and trading behavior, consistent with the investor sentiment hypothesis (Thaler, 1987; Hirshleifer & Shumway, 2003). Since the Nepali trading week begins on Sunday, the weak start may be equivalent to the “Monday effect” observed in Western markets.

Stationarity Test

The Augmented Dickey–Fuller (ADF) test was performed to measure the stationarity of the stock market returns series. H_0 : Returns have a unit root (non-stationary) and H_1 : Returns are stationary.

Table 2

ADF Test Results for Non-stationarity

Test statistic	Value	1% level critical value	P-value	Conclusion
With trend and intercept	-45.5509	-3.9609	0.0001	Stationary
With intercept	-45.5511	-3.4316	0.0001	Stationary
Without intercept	-45.4572	-2.5654	0.0001	Stationary

Table 2 shows the results of the stationarity test, indicating returns are stationary.

The significant p-value shows the stationary nature of returns during the study period. So, further inferential tests can be performed.

Regression Analysis

The Ordinary Least Squares (OLS) regression with dummy variables has been applied to compare the mean returns across the trading days in a week. The model used is as follows:

$$R_t = \beta_0 + \beta_1 D_{\text{Monday}} + \beta_2 D_{\text{Tuesday}} + \beta_3 D_{\text{Wednesday}} + \beta_4 D_{\text{Thursday}} + \epsilon \dots\dots\dots 4$$

Where β_0 : Mean return on Sunday, D: Dummy variables indicating the day, and ϵ : Error term

Table 3
OLS Regression Results of the Dummy Variables

Day	Coefficient (B)	Std. Error	t-Statistic	p-Value
Constant	-0.0402	0.0441	-0.9105	0.3626
Monday	-0.0160	0.0622	0.2595	0.7953
Tuesday	0.1080	0.0623	1.7273	0.0842
Wednesday	0.1690	0.0622	2.7082	0.0068
Thursday	0.1590	0.0622	2.5610	0.0105
R ² = 0.003				
F-Statistics = 3.217				
P Value (F) = 0.012				
Se. error = 1.318				

Note: The weekday dummies were created; if the particular day is Sunday, it holds the value 1 and 0 otherwise, and so on for other days in the week. Sunday is set as a base day, and n-1 dummies have been used in the model to control the dummy trap.

Table 3 presents the results of the OLS regression of dummy variables, Sunday as the reference day, which represents the constant term in the model. The coefficient for the base day (Sunday) is compared with other days to determine whether their returns significantly differ from that of Sunday. The results exhibit that Wednesday and Thursday returns are significantly higher compared to Sunday. Tuesday shows a marginally significant positive effect, indicating slightly higher returns, though at a weaker significance level (10%). The Monday returns do not differ significantly from those of Sunday. The overall F-test (F-statistic = 3.217, P = 0.012) confirms a calendar day anomaly. Despite being statistically meaningful, the low R² (0.03%) value suggests that most of the variability in returns is driven by factors other than day of the week, which is typical for financial return data.

Exponential Autoregressive Conditional Heteroskedasticity (EGARCH) Model

Model Justification

This study employed the EGARCH (1,1) model to analyze the difference in mean returns and volatility on the days of the week. This model can capture volatility clustering and time-varying variance features, which are commonly found in the stock market returns series. Previous studies have found that although financial return series are stationary, they often exhibit volatility clustering and ARCH effects, making GARCH-family models more suitable than OLS. For example, Engle (1982) and Bollerslev (1986) demonstrated the limitations of constant-variance models. The OLS regression models are inadequate when volatility is not stable over time (Engle, 1982). In the Nepalese study, Pradhan and KC (2010) and Bhattarai (2016) have found time-varying volatility in NEPSE, justifying the use of GARCH-type models. Before selecting the EGARCH model, different GARCH-family models (i.e., SHARCH, EGARCH, TGARCH, GJR-GARCH, and GARCH-M) were tested based on the Akaike Criterion (AIC) and the Log likelihood. The EGARCH model has been best fitted to the return series used in this study.

Table 4

Results of the Mean and Variance Equation of the EGARCH (1,1) Model

Variable	Coefficient	Std. Error	z-Statistic	Prob.
Mean Equation				
Constant	-0.0656	0.0294	-2.2293	0.0258
Returns (-1)	0.2259	0.0139	16.2672	0.0000
Monday	0.0415	0.0359	1.1559	0.2477
Tuesday	0.1067	0.0384	2.7784	0.0055
Wednesday	0.1220	0.0370	3.2966	0.0010
Thursday	0.1491	0.0391	3.8140	0.0001
Variance Equation				
Intercept (ω)	0.0240	0.0309	0.7773	0.4370
ARCH (α)	0.5360	0.0196	27.3660	0.0000
Volatility (γ)	-0.0082	0.0120	-0.6837	0.4942
GARCH (-1) (δ)	0.8546	0.0086	99.7731	0.0000
Monday	-0.6128	0.0517	-11.8587	0.0000
Tuesday	-0.4856	0.0449	-10.8194	0.0000
Wednesday	-0.5365	0.0486	-11.0350	0.0000

Thursday	-0.3152	0.0437	-7.2141	0.0000
R-squared	0.0438			
Adjusted R-squared	0.0428			
S.E. of regression	1.2907			
ARCH-LM test (1): F test	0.0060			0.9381
Ljung-Box Q ² (36)	28.9380			0.7920
Durbin-Watson stat	2.0087			

Table 4 shows the EGARCH (1,1) estimated results that reveal the significant weekly seasonal patterns in both returns and volatility, using Sunday as the reference day. In the mean equation, the constant term is negative and significant, indicating lower average returns on Sundays. The Sunday returns are significantly lower than those of Tuesday, Wednesday, and Thursday, with Thursday exhibiting the highest positive coefficient. Monday returns, however, are not statistically different from Sunday, suggesting the absence of the traditional Monday effect. In the variance equation, past returns significantly influence current volatility, as shown by the highly significant ARCH (α) and GARCH (δ) coefficients, while the Volatility (γ) term is insignificant, indicating no asymmetric volatility response to negative shocks. The trading day dummy variables in the variance equation are all negative and highly significant, indicating that volatility is highest on Sundays and systematically declines throughout the week, reaching its lowest levels on weekdays, especially Mondays and Thursdays. Diagnostic tests, including the ARCH-LM and Ljung-Box Q², confirm the absence of residual autocorrelation and heteroskedasticity, suggesting that the model is well specified. Overall, the results demonstrate a clear mid-week return premium and a pronounced weekend volatility effect.

Analysis of Variance (ANOVA) Test

In addition to the OLS and EGARCH (1,1) model, an ANOVA test is conducted to assess whether the mean returns differ across the trading days. Although the results from the OLS and EGARCH (1,1) model provide evidence of trading day return variability in the NEPSE index daily returns. To enhance the robustness and credibility of the findings, the ANOVA test has been performed. The ANOVA test provided an independent and robust assessment of whether the mean returns across the trading weekdays differ noticeably. The test hypothesizes that the mean return across the trading days is equal. Table 5 reports the results.

Table 5*One-Way ANOVA of Returns by Weekdays*

Source	Sum of Squares	d.f.	Mean Square	F-stat	p-value
Between groups	22.382	4	5.596	3.217	0.012
Within groups	7825.968	4499	1.739		
Total	7848.351	4503			

Table 5 presents the outcome of the ANOVA test. Since the significance (P-value = 0.012 < 0.05) test value indicates that at least one day's mean return is different from the others, suggesting the presence of a trading day effect on the NEPSE return. To identify the significant variation in mean returns across trading days, a post hoc test of Tukey's has been performed, and only significant results have been shown in Table 6.

Table 6*The Post Hoc Test Results for the Statistically Meaningful Variables*

Comparison	Mean Difference (%)	Std. Error	p-value	95% CI
Wednesday vs. Sunday	0.169	0.062	0.043	[-0.001, 0.338]
Thursday vs. Sunday	0.159	0.062	0.078	[-0.010, 0.329]

Note: There were 10 pairwise comparisons of 5 trading days of the week in the post Hoc test, but only significant results are presented in the table.

Table 6 shows the Post Hoc test, which reveals that Wednesday returns are significantly higher than Sunday returns (P value = 0.043). However, the returns on Sunday and Thursday are significant at the 10 percent level, suggesting a mid-week effect with Wednesday showing notably stronger performance relative to Sunday.

Kruskal–Wallis Test (non-parametric test)

For robustness and validation of the results found from the parametric tests, non-parametric tests have been employed to compare mean returns across the trading weekdays. The hypotheses set for the test are: H_0 : The median outcome is the same for all days (Monday = Tuesday = ... = Sunday), and H_1 : The median outcome for at least one day is different from the others.

Table 7*Test Outcome of Kruskal-Wallis for Weekdays Grouping Variable*

Statistic	Value
Chi-Square	23.608
Degree of Freedom (DF)	4
P-value	0.000

Table 7 presents the significance (P-value < 0.01) test results of the Kruskal–

Wallis test, indicating that at least one day's median return is different from other days. Hence, the test result shows weekly seasonal pattern exists in the NEPSE returns during the study period.

Mann–Whitney U tests

The Kruskal-Wallis test result (Table 7) shows at least one day's return that is different from the others, but it does not indicate which day's return is different, so a further test, the Mann-Whitney test, has been applied to assess whether the median returns of two trading days are meaningfully different. The hypothesis tested is: H_0 : The median returns of two trading days are the same (no difference), and H_1 : One day's median return is different than the other. The study utilized the Bonferroni adjustment, as described by Dunn (1959), for multiple assessments to reduce the risk of false positives when conducting several statistical tests simultaneously.

Table 8

Pairwise Mann–Whitney U tests between Weekdays and Bonferroni Correction

weekday pair	Z- value	P-value	Significant after Bonferroni (<0.005)
Sunday vs Monday	-1.643	0.100	No
Sunday Vs Tuesday	-3.183	0.001	Yes
Sunday Vs Wednesday	-3.767	0.000	Yes
Sunday Vs Thursday	-4.095	0.000	Yes
Monday Vs Tuesday	-1.761	0.078	No
Monday Vs Wednesday	-2.293	0.022	No
Monday Vs Thursday	-2.531	0.011	No
Tuesday Vs Wednesday	-0.441	0.659	No
Tuesday Vs Thursday	-0.598	0.550	No
Wednesday Vs Thursday	-0.167	0.868	No

Note: The Bonferroni significance level is calculated by dividing the original alpha (0.05) by the number of independent hypotheses (m) (i.e., α adjusted = $\alpha / m = 0.05/10 = 0.005$). The null hypothesis is rejected only when the P-value falls below 0.005.

Table 8 presents a series of pairwise comparisons conducted to measure mean differences between weekdays. The Z-values and p-values were calculated for each comparison. To eliminate the multiple pairwise comparisons error, a Bonferroni adjustment (Dunn, 1959) was applied. The weekdays pair having $p < 0.005$ is considered significant for the ten pairwise comparisons conducted.

The results of the Bonferroni correction, significant differences in mean returns found on Sunday compared to Tuesday, Wednesday, and Thursday ($p < 0.005$). These results indicate that Sunday's mean returns differ significantly from Tuesday,

Wednesday, and Thursday. while other weekday comparisons do not show statistically significant differences after controlling for the multiple comparisons effect. The result provides evidence of a calendar day anomaly in NEPSE.

Discussion

The results of the descriptive statistics, the mean returns across trading days, show an unequal distribution of returns. The results show negative returns on the beginning operating days of the week, and positive returns on the remaining weekdays. The finding is consistent with the study of (KC & Joshi, 2005). The one-way ANOVA test results indicate a rejection of the null hypothesis regarding equal mean returns across various trading days. The analysis shows a substantial difference in mean returns between Wednesday and Sunday, indicating that at least one day's average return deviates from the others. The results provide evidence of the existence of calendar-based variation in stock performance.

The results of the OLS regression also show significantly higher returns on Wednesday and Thursday as compared to Sunday (base day on weekdays dummy variables).

The significant value of the JB test (Table 1) suggests that the NEPSE daily returns deviate from being normally distributed, indicating the presence of fat tails.

For more validity and robustness of the results, the EGARCH (1,1) model has been employed to examine the seasonality on daily returns and volatility dynamics on the NEPSE daily returns. The empirical results of the EGARCH (1,1) show that the mean returns of Sunday is significantly lower than Tuesday, Wednesday, and Thursday returns, suggesting weak performance of the NEPSE on the beginning operating day of the week. The finding supports the commonly known weekend effect (Monday effect) found in developed stock markets around the world. Similarly, the empirical finding of highly significant ARCH (α) and GARCH (δ) coefficients indicates that the past returns significantly influence current volatility (volatility clustering) in the daily returns of the NEPSE. The insignificant coefficient of the Volatility (γ) term indicates no asymmetric volatility response to negative shocks in the returns. More specifically, bad news has no greater impact than good news on the markets.

This study includes weekday dummy variables in the EGARCH (1,1) variance equation to estimate how volatility varies across weekdays. The empirical results show that the coefficients of weekday dummies are negative and highly significant, indicating that volatility is higher in Sunday returns than on other trading days. The higher volatility on Sunday returns than on other operating days of the week provides evidence of seasonality in volatility in the NEPSE. The result may help predict the price movement based on the specific trading days.

The Jarque-Bera (JB) test results indicate that the returns series in the study deviates from being normally distributed. Given this non-normality, non-parametric approaches give more valid results. The Kruskal-Wallis test outcomes suggested that at least one day's median of returns differs significantly from the others, providing evidence of heterogeneous performance across trading days. The results of the Mann-Whitney U test suggest the presence of a notable difference in median returns among specific weekdays. The result is similar to the findings in the global stock markets.

The Sunday effect found on NEPSE is similar to the “Monday effect” noted in Western markets (Cross, 1973; French, 1980; Lakonishok & Smidt, 1988). The negative returns found on Sundays in NEPSE can be understood through three basic assumptions of behavioral, informational, and liquidity theories. Based on a behavioral finance view (Thaler, 1987; Hirshleifer & Shumway, 2003), the investor mood hypothesis suggests negative mood of investors at the beginning of the workweek leads to lower returns.

Similarly, the information flow on weekend days leads to price adjustments and negative returns on the beginning trading days of the week (Damodaran, 1989; Berument & Kiyamaz, 2001). The lower return on Sunday and Monday may be due to the accumulation of unprocessed information during Nepal's non-trading weekend (Friday–Saturday). This is consistent with findings in other emerging markets (Balaban, 1995; Chia et al., 2008). Rogalski (1984) argued that the lower returns at the beginning of the trading week are the cause of thin trading and increased volatility. Whereas an increase in liquidity in the midweek tends to increase returns. Similar kinds of return patterns are found in both developed (Jaffe & Westerfield, 1985) and emerging markets (Chia et al., 2008; Alam & Uddin, 2009; Raj & Kaur, 2018). In the Nepalese stock market, empirical evidence from KC and Joshi (2005) confirms findings showing significantly negative Sunday returns and stronger mid-week performance.

The findings of this study disclose that the weekday returns seasonality found in the NEPSE index returns is consistent with the trading days effect anomalies in the financial markets.

Conclusion

The study reveals a significant trading-day effect in NEPSE stock returns. The negative mean return of Sundays is significantly lower than Wednesdays, providing empirical evidence of the seasonality in weekday returns. This consistent return pattern suggests predictability in market behavior. The findings challenge the weak-form efficiency of NEPSE, as it contradicts the random walk hypothesis. The returns can be forecasted based on weekly trading days. The findings of this study are beneficial for Investors, providing insights into optimal trading days and risk mitigation strategies. For policymakers: Sheds light on market inefficiencies, potentially guiding regulatory

improvements. For Academics: Enriches the behavioral finance literature in emerging markets.

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Factors Influencing the Adoption of Management Accounting in Nepal's Co-operatives

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Abstract

The management accounting is deliberative to decision-making, long-term planning and long-term sustainability of co-operatives run on the values of supportive and democratic governance. Despite the growing importance of financial management, the adoption of management accounting within Nepalese cooperatives remains under-researched, particularly regarding the interplay between organizational, technological, and environmental factors. This study adopts quantitative framework by using descriptive research design and causal-comparative research design to question the identified determinants. Ten cooperatives - savings and credit, multipurpose and dairy cooperatives - located in Prashuram Municipality were the target of the investigation. The data was collected by using structured questionnaire that was sent to a sample of 112 respondents, including the board members, the management employees, and the general members. The SPSS was used to analyze the data that incorporated the use of descriptive statistics, correlation analysis, and regression analysis. The results show that technological aspects ($r = 0.65$), organizational aspects ($r = 0.62$), rivalry ($r = 0.60$) and environmental aspects ($r = 0.58$) are positively and significantly related to management accounting adoption. The results of multiple regressions suggest that these predictors reveal 61 percent of variance in management accounting adoption ($R^2 = 0.61$), and there are no problems with multicollinearity or autocorrelation. The study notes that technology and organizational support are the main drivers for competitive and environmental pressures. The practical implications of this paper propose that to enhance the leadership, increase capacity, to refine decision-making processes and enhance the financial performance, the management accounting must be used by the cooperative boards, policymakers and training institutions to promote the sustainable development of the cooperatives in Nepal.

Keywords: Competitive intensity, environmental factors, organizational factors, technological factors

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Introduction

Management accounting is instrumental in promoting good decision making, strategic planning and the sustainability of cooperative enterprises over the long run. With the principles of mutuality and democratic management that shape cooperatives, there is need to utilize accounting systems that are not parallel to those that have been utilized by investor-owned companies. Empirical data provided by the international collaborative research and the Nepalese context specifically prove that, despite the emerging pattern of adopting both traditional and modern management accounting instruments, cooperatives still face significant barriers (Birchall, 2014; International Co-operative Alliance [ICA], 2015; Pandey, 2019).

Previous studies suggest that the effectiveness of management accounting (MA) implementation largely depends on organizational size, the level of leadership support, competitive conditions, and institutional pressures (Alleyne & Marshall, 2011). MA serves as a key tool for financial control, strategic decision-making, and performance measurement in organizations, including cooperatives. In Nepal, cooperatives play a significant role in socio-economic development by promoting financial inclusion, reducing poverty, and supporting rural development, with more than 30,000 cooperatives registered nationwide (Department of Cooperatives, 2023). The application of MA practices is also scarce because of the lack of resources, the scarcity of highly qualified individuals, the lack of technological resources, and the lack of the enforcement of regulations (Khadka & Aryal, 2021). Although the legislative advancement that has been created by the Cooperative Policy 2012 is present, the effectiveness of the sector remains compromised by vital flaws in financial literacy and a lack of effective regulatory regulation (Acharya, 2022).

The knowledge of the determinants of efficient management accounting can help cooperative leaders to develop better planning strategies, monitor performance more strictly, provide the policymakers with empirical data to develop specific training programs, promote digitalisation, and strengthen regulatory frameworks, which will ultimately contribute to greater transparency and involvement of members in cooperative governance (Buang & Samah, 2020; Sudha et al., 2024). None of the theories applied in the current study is based on the Technology Organization Environment (TOE) model and the contingency theory that have been well-defined theoretical models, but have not been empirically tested in the context of management accounting adoption in cooperative organizations. This study attempts to offer information that may help improve governance procedures, strengthen the sustainability of the industry in the long term, and increase its contribution to the inclusive economic growth by examining the determinants that can determine the practice of management accounting within Nepalese cooperatives (Birchall, 2014).

Earlier studies on the application of management accounting (MA) have mainly concentrated their attention to manufacturing companies, big corporations or SMEs in both the developed and emerging economies, with little attention paid to cooperatives (Channel, 2003). Although research has been conducted on financial reporting and internal controls, there is no systematic research on the factors that affect the adoption of MA in Nepal cooperatives (Paudel & Acharya, 2022; Subedi, 2022). Cooperatives have their own set of problems such as socio-economic limitations, governance issues and dependence on government schemes.

This research used the Technology-Organization-Environment (TOE) model to state that effective implementation of MA can be achieved through the technological categories of accounting software, IT infrastructure, and advisory services. Ready and able to change is very much dependent on the organizational factors such as cooperative size, structure, management support, and skills of staff, whereas formalized adoption depends on the environmental factors such as government regulations, competition, and market volatility (Permatasari et al., 2024). This research associates the adoption of MA with not only financial results but also the quality of governance, transparency and sustainability. The research, which is an expansion of the same theoretical framework into the Nepal cooperative sector, offers both theoretical and practical recommendations on how policy-makers and cooperative leaders can enhance the financial practices and governance by applying the same theoretical framework (Pramono et al., 2023).

Despite the consideration of Management Accounting (MA) practices to be critical towards improving the governance, transparency, sustainability, and the overall financial performance, little empirical research has been conducted to assess their application in the cooperative sector (Teh & Khan, 2024). There is an apparent salient lacuna especially on the aggregate impact of organizational, technological and environmental antecedents in adoption of MA in cooperatives. The current study attempts to fill this gap by providing empirical data on the overall combination of these determinants to influence MA practices. Furthermore, the paper presents a new perspective by focusing specifically on Nepalese cooperatives an environmental space, which has not received much academic focus on the uptake of MA and its implications (Khadka et al., 2024).

Particularly, the paper analyses the impact of organizational variables, that is, cooperative size, managerial support, and the level of staff skill, on the adoption of MA practices. It also analyses the effect of the technological aspects, such as accounting software, IT infrastructure and external advisory services on the uptake as well as the level of MA implementation.

This paper examines how environmental contingencies, that is, uncertainty and intensity of competition affect adoption of management accounting (MA) practices. This aims at explaining the synergistic impact of organizational, technological, and

environmental influences especially in the unique socioeconomic and governance setup of Nepalese cooperatives (Al-Mawali & Al-Tobi, 2016; Scupola, 2023).

Literature Review

This paragraph integrates and critically connects all the mentioned works (Anderson & Lanen, 1999; Barreto et al., 2025; Chenhall, 2003; Fouché, 2024; Ismail & King, 2007; Khadka et al., 2024; Mahataman, 2024; Moustafa & Mcillan, 2013; Naushad, 2020; Neupane, 2021; Nguyen et al., 2020).

The contingency theory provides a solid theoretical foundation of the adoption of management accounting (MA) practices in cooperatives. Fundamentally, the contingency theory holds that there is no universal best management or accounting system, rather the immenence of all such systems depends on the extent to which they are sensitive to the internal qualities of an organization and the external environment (Chenhall, 2003). In this context, the practice of management accounting is seen as a responsive mechanism that the organizations tune with respect to the different technological, organizational, and environmental contingencies.

In the current study, technological aspects such as accounting software, IT infrastructure, and advisory service accessibility are found to be internal contingencies influencing sophistication and high levels of adoption of MA. The contingency theory also indicates the existence of the enterprises that are equipped with strong technological capabilities which are more flexible to use advanced accounting tools which enable them to plan, control and make decisions (Chenhall, 2003; Ismail & King, 2007). In the case of Nepalese cooperatives, where resources are often limited, technological preparedness is a critical variable that defines the possibility of introducing MA.

Conditions within an organization, such as size of a cooperative, governance structure, managerial support and competence of the staff are closely linked with the contingency theory framework, which is based on the idea that suitability of managerial practices, such as management accounting is dependent on the specific attributes of an organization. The bigger and more resourceful organizations that are characterized by effective leadership and highly skilled staff are the ones that are proportionately more likely to adopt formalized and sophisticated management accounting systems in this theoretical perspective (Silalahi & Kesuma, 2025).

The democratic form of government coupled with the active membership involvement helps to cool down the design and the use of management accounting practices in cooperatives. This kind of arrangement is compatible with the contingency perspective according to which the internal organisational circumstances, i.e. governance structures, participative systems, and managerial participation, are of critical importance in determining the accounting system performance (Fouché, 2024).

Environmental factors (i.e., regulatory pressure, market uncertainty and institutional expectations) however, they are external contingencies emphasized by contingency theory; in dynamic and competitive environment, management is more likely to reliance on MA information for reducing uncertainty and improving strategic responsiveness (Otley, 2016).

Competitive intensity is a contextual force that increases the relationship between these contingencies and the adoption of management accounting. In line with contingency theory, an increase in competition increases the need of accurate cost data, the performance measurement, as well as strategic analysis and therefore promotes the more active management use of management accounting (Al-Mawali et al., 2025). This explains why the impact of the technological, organisational, and environmental factors is moderated by the competitive intensity in the current research.

Technological Factors

Technological advancement serves as a primary driver in the evolution and increasing complexity of management accounting systems (MAS). As organizations integrate sophisticated digital tools, the scope and capability of accounting practices have expanded significantly. A recent systematic literature review conducted by Barreto et al. (2025) highlights this trajectory, analyzing studies published between 1992 and 2024. Their research delineates a gradual yet transformative process wherein digital innovations are embedded into accounting frameworks, leading to progressive improvements in both cost management efficiency and sustainability outcomes.

Despite these advancements, the current body of knowledge remains unevenly distributed across organizational types. Barreto et al. (2025) note a significant gap in the literature regarding the application of these technologies within smaller entities. Specifically, they identify a lack of empirical evidence focusing on small businesses and cooperatives, suggesting that while large enterprises may be capitalizing on digital accounting innovations, the specific challenges and benefits for smaller, community-focused organizations remain under-researched.

Previous studies show that a company ability to use technology is very important for choosing management accounting practices. Ismail and King found out in 2007 that if a company has technology, like computers and software that work well together it is more likely to use management accounting practices effectively. Nguyen et al. (2020) clarified that companies, in Vietnam that are ready to use technology are more likely to use management accounting practices that need a lot of technology. Management accounting practices are important for companies to use technology well. Technology is a part of management accounting practices. Naushad (2020) further argued that cloud-based accounting systems enhance accessibility and reduce operational costs, particularly for organizations with limited financial and human resources. Collectively,

these studies support the view that the availability and integration of digital technologies substantially increase the likelihood of MAP adoption (Kathayat, 2024).

H1: Technological factors significantly influence the adoption and intensity of management accounting practices in cooperatives.

Organizational Factors

Fouche (2024) has focused on the adoption of corporate reporting practice in the Global Top 300 cooperatives and sought to determine the determinants of the adoption of corporate reporting practices. This study closed a significant divide in the existing body of literature by examining cooperatives, the ownership structure as well as the stakeholder relationships, which are distinctly different with investor-owned businesses. The analysis model identified the market conditions, country specific, institutional and cooperative specific factors, including cooperative specificity and profit distribution mechanisms. Ordinal regression and binary logistic models were used to examine adoption of various categories of reports- such as annual, governance, environmental, social, and management reports in 2024. Results showed that cooperatives that had external shareholders, had strong cooperative identities, and restricted the distribution of profits to the members were more likely to embrace holistic reporting practices. The importance of rationalizing reporting practices by cooperative values and identity that has been emphasized by the study implies that the rationalization will lead to transparency and stakeholder trust. Therefore, the research contributes to our understanding of the impact of organizational factors, especially cooperative identity and the governance patterns, on the implementation of the Management Accounting Practices (MAPs) in cooperatives.

Anderson and Lanen (1999) examined how the size of the firm and organization structure affected the adoption of management accounting practices and found that the larger, more complex operations, and resource-endowed firm could implement more sophisticated accounting systems. Their study also pointed out that smaller companies and firms such as cooperatives usually have difficulties with the adoption of such practices due to limited financial and technical resources.

On the same note, Chenhall (2003) highlighted the crucial importance of managerial support in developing the environment that will allow implementing contemporary accountings systems by stating that the commitment and vision of leadership are the keys to the successful implementation. In the cooperative environment, where the governance serves a lot on the involvement of the members, the significance of leadership and management support is compounded. Abdel-Luther (2008) emphasized that one of the key factors that be determined successful implementation of costing, budgeting, and performance-measurement tools are staff expertise and training. Simultaneously, Joshi (2001) noted that in developing economies, the lack of technical knowledge and the absence of training is often a barrier to the process.

H2: Organizational factors have a significant positive effect on the adoption of management accounting practices in cooperatives.

Environmental Factors

The systems of environmental dynamics which include institutional pressures, uncertainty and market competition have a tremendous impact on the uptake of management accounting systems. Alnaim and Metwally (2024) found that the adoption of Environmental Management Accounting (EMA) in Egyptian manufacturing companies is influenced by institutional and regulatory pressures significantly, and the environmental strategy has a moderating effect on the relationship. According to Gordon and Narayanan (1984), organizations that have to work in unpredictable environments have more elaborate and flexible accounting systems to improve decision-making in risky situations. In the same spirit, Cadez and Guilding (2008) have offered empirical support to the fact that competitive intensity is a determinant of the use of cost-control and strategic management accounting tools, e.g., competitor analysis and market-based costing. These results highlight that the external conditions, i.e., the uncertainty of the environment and the competitive pressures of the market, make the firms use the highly-developed management accounting practices as the means of gaining a strategic advantage. In cooperatives, which often function in volatile and highly competitive environments, external pressures can be addressed more effectively through the adoption of well-designed accounting systems. Prior studies suggest that robust management accounting practices enable cooperatives to better monitor costs, respond to market uncertainty, and support long-term resilience and sustainability (Pavlatos, 2021).

H3: Environmental factors have a significant positive effect on the adoption of management accounting practices in cooperatives.

Accounting Views on Management Accounting Practices

The results obtained in Nepal make coherent with the evidence presented in other parts of the world that point to similar barriers in the adoption of sophisticated management accounting instruments. In a study of companies in the Gulf Cooperation Council, McLellan and Moustafa (2013) discovered that most companies used the conventional budgeting strategies as opposed to the use of strategic management systems like activity-based management, and balanced scorecard. The research also found out that the consumption of modern tools was higher among international and large scale based firms and this fact corroborated that organizational size and ownership determine the accounting practices. This tendency testifies to a continuing gap between the practice of traditional and strategic management accounting, especially in the developing economies and branches of cooperation. The effective prevalence of the

traditional ones shows that structural and situational factors significantly influence the volume of MAP exploitation, which suggests a merit of cooperatives of customized structures that would suit their unique governance and resource situation (Naushad, 2020).

Accounting Undertakings within Management in Cooperatives

Several studies have examined the use and effectiveness of management accounting practices (MAPs) in Nepalese cooperatives. For instance, Pandey et al. (2024) evaluated financial management accounting mechanisms in agricultural cooperatives in Dang District and found that, although budgeting was commonly practiced across all cooperatives, techniques such as standard costing and responsibility accounting were rarely adopted. On the same note, Neupane (2021) found that less than 20 percent of cooperatives applied other more learnt technologies like performance measurement and capital budgets, in part due to poor technical ability and financial limitations, despite using ratio analysis and cash flow statements. To reinforce these observations, Mahataman (2024) was able to establish that information on the accounting access and quality has been where the investment and marketing decision is most effective with regards to cooperatives, thus adding to the efficiency and competitiveness of the operations.

Management Accounting Adoption Competitiveness

Based on these views, Al-Mawali et al. (2025) examined the roles that strategic management accounting (SMA) and business analytics (BA) play in developing sustainable competitive advantage. They found that there is a relationship between SMA and competitive nature, which is mediated by dynamic capabilities, and the relationship is moderated by competitive intensity, which indicates that management accounting practices (MAPs) are more effective in a competitive environment with high market pressure. This means that the integration of modern accounting and analytical systems in management contributes to the fact that organizations become strategic and improve the results of their performances (Alsolmi et al., 2021). As a result, despite ongoing challenges such as limited knowledge and experience, technological constraints, and resource scarcity, substantial evidence indicates that the successful adoption of management accounting practices enhances financial performance, strengthens governance, and improves long-term competitiveness in collaborative organizations (Dahal, 2022).

Competitive Intensity

Competitive intensity is the level of competition between companies of a given industry, which has a great influence on the strategic decision-making process, as well

as the market dynamics. As Porter (2008) has argued, competitive rivalry is the major factor in the profitability of a particular industry because companies never stop their strategies in order to retain or improve their position in the market. The number of competitors, market growth rate, product differentiation, and exit barriers are key determinants of competitive intensity, which in turn influence firms' pricing, innovation, and marketing strategies of firms (Ketchen & Short, 2019). Higher competitive intensity typically drives firms toward aggressive strategies such as cost leadership, product innovation, and enhanced customer engagement, whereas lower competitive intensity can foster market complacency and reduce incentives for performance improvement (Porter, 2008; Luo & Zhao, 2016). The nature and extent of competitive intensity play a critical role in shaping an organization's strategic responses and its ability to achieve sustainable competitive advantage, as firms operating in highly competitive environments are driven to develop and leverage capabilities that enhance long-term performance outcomes (Lee et al., 2022).

H4: Competitive intensity has a significant moderating effect on the relationship between environmental factors and the adoption of management accounting practices in cooperatives.

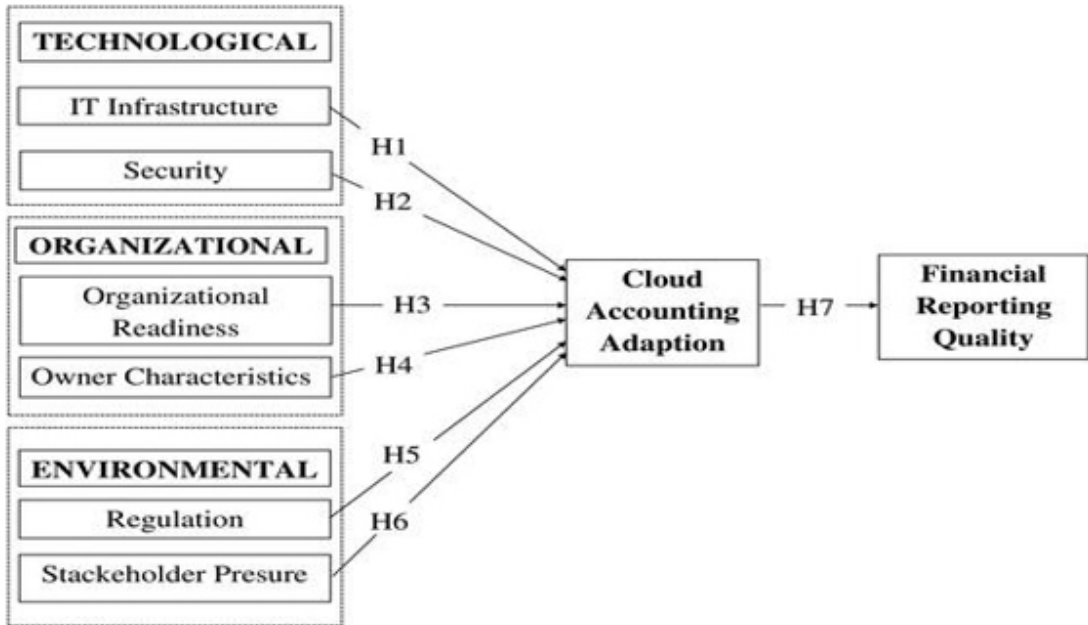
In general, it can be concluded that the studies demonstrate high levels of traditional accounting systems compliance and the high dependency of Nepalese cooperatives on the use of modern management accounting tools is explained by limited resources, structural restrictions, and an apparent lack of specialized knowledge. This observation therefore highlights the need to have in place total capacity-building initiatives and strategic adoption of technology in order to increase the effectiveness of financial management in Nepalese cooperatives.

Theoretical Review

In the last few years, the necessity to combine the TOE framework with other theoretical models to enhance the insight into the digital technology adoption in cooperatives has been highlighted. Cao et al. (2025) used TOE framework and the Technology Acceptance Model (TAM) to study the intention of farmer cooperatives in China to use digital technologies. The researchers established that perceived ease of use and external antecedents (use of internet and training) had a significant effect on adoption intentions. Putri et al. (2025) in their study searched the implementation of cloud accounting by Micro, Small, and Medium Enterprises (MSMEs) in Indonesia based on the TOE framework. The article declared IT infrastructure, organizational readiness, stakeholder pressure and regulatory compliance as important determinants of adoption which consequently improved quality of financial reports.

Figure 1

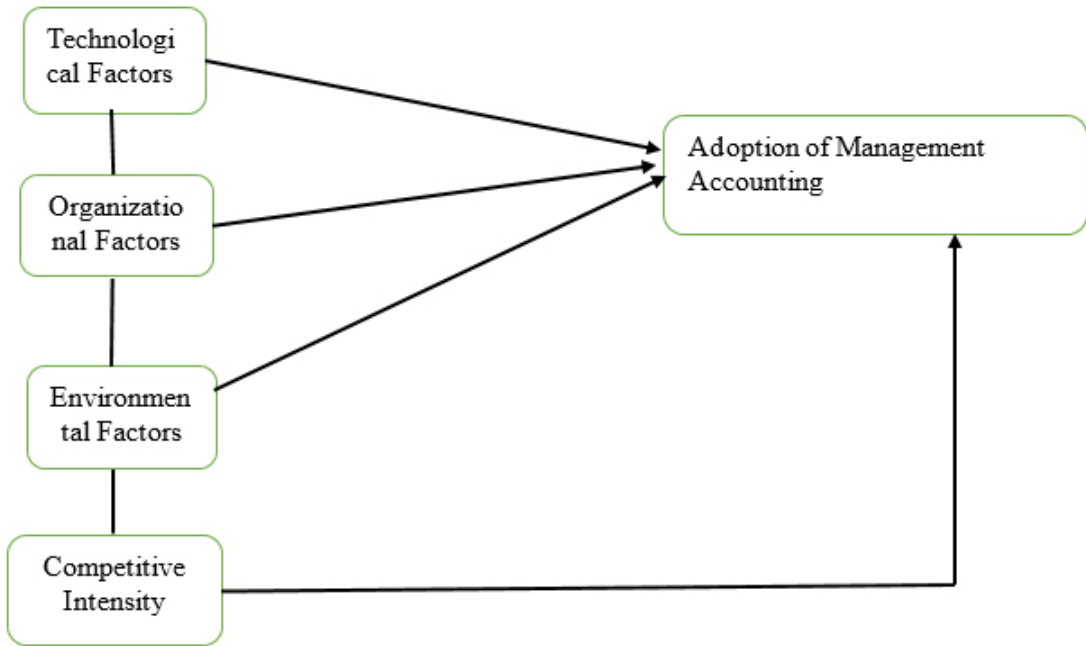
Technology, organization, and environment framework (Putri et al., 2025)



Conceptual Framework

The integration of modern technological factors such as the availability and use of accounting software, robust IT infrastructure, and online advisory services has been shown to support the adoption of management accounting practices by enhancing information quality and improving the efficiency of managerial decision-making (Lutfi et al., 2022). Organizational factors such as managerial support, employees' skill sets, the size of the cooperative, and internal procedural frameworks significantly influence cooperatives' readiness and ability to adopt and effectively implement management accounting practices. In addition, environmental factors particularly environmental uncertainty, including market volatility, regulatory changes, and competitive pressures can constrain the extent to which management accounting practices are utilized to enhance strategic planning and operational control in cooperative organizations (Naushad, 2020). The interplay of these variables implies that internal strengths and external situations work together to create successful integration of MA and the important role of cooperatives investing in technology, building organizational capabilities and creating adaptive strategies to handle uncertain situations.

Figure 2
Conceptual Framework



Methods and Procedures

This study adopts a positivist research philosophy, which emphasizes the objective measurement and analysis of observable phenomena. A descriptive-correlational research design is employed to quantify the level and types of management accounting practice (MAP) adoption among cooperatives, as well as to examine the relationships between organizational, technological, and environmental factors influencing this adoption.

Study Area

Purposive sampling is particularly appropriate in studies where the focus is on specific characteristics of the population that are critical to the research problem, rather than random representation (Etikan et al., 2016). By targeting cooperatives with relevant structures and respondents with varied knowledge levels, this study maximizes the relevance, richness, and validity of the collected data.

The study was conducted in Parashuram Municipality, which encompasses a

diverse range of cooperatives, including Savings and Credit Cooperatives, Agricultural Cooperatives, Dairy Cooperatives, and Forestry Cooperatives. The total population for this study consisted of 15 cooperatives. To ensure relevance to the research objectives, purposive sampling was employed to select 10 cooperatives as the study sample, comprising 7 Savings and Credit Cooperatives, 2 Multipurpose Cooperatives, and 1 Dairy Cooperative.

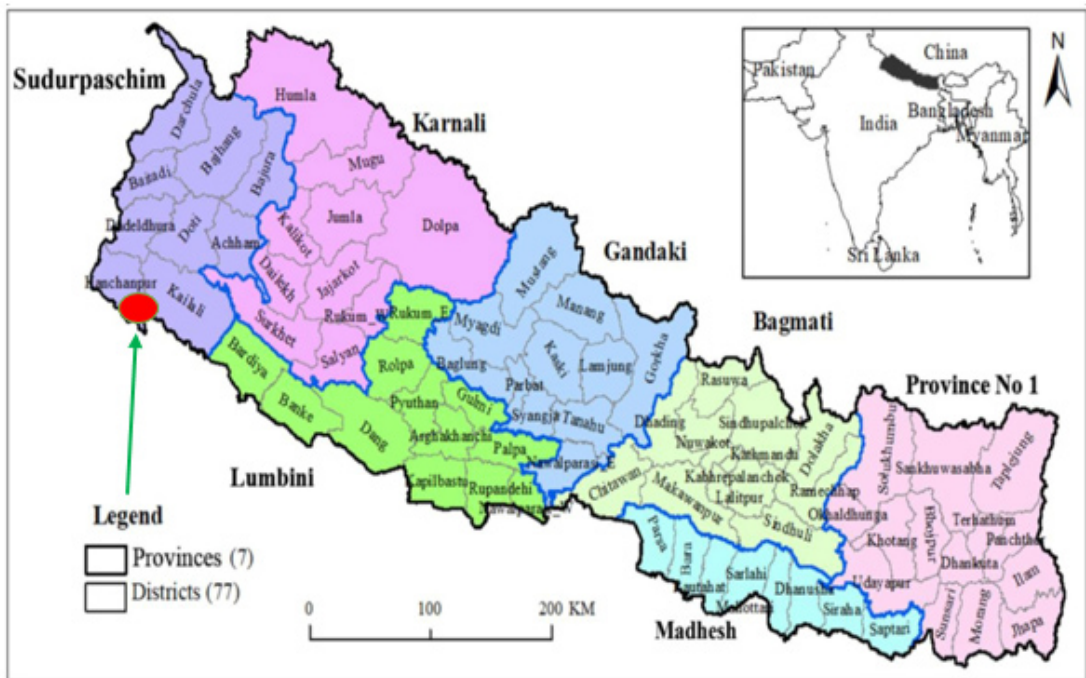
Table 1

Distribution of Respondents by Type of Cooperative

Type of Cooperative	Number of Cooperatives	Board Members	Employees	General Members	Total Respondents
Savings and Credit	7	21	19	21	68
Multipurpose	2	12	11	11	26
Dairy	1	4	8	5	18
Total	10	37	38	37	112

The people in charge of this study picked cooperatives on purpose. They wanted to choose the ones that are the best examples of how cooperatives are organized and how they work. This way the study can get a look at what helps cooperatives adopt management accounting practices. The people doing the study call this process screening. They looked at information they already had about the cooperatives to find the ones that are different, from each other in how they work and are organized. This helps the study find out what factors are important for cooperatives to adopt management accounting practices.

Within each selected cooperative, respondents were further categorized into management directors, employees, and general members, reflecting differing levels of knowledge and understanding of cooperative financial mechanisms. This approach enabled the collection of diverse perspectives on MAP adoption, enhancing the depth and reliability of the data. In total, 112 responses were gathered, providing a robust dataset suitable for descriptive and correlational analysis.



Data Collection

Before the screening of the cooperatives, Five Point Likert was used a structured questionnaire to gather information about the target respondents. The questionnaire contained the general information on the cooperatives and financial supporting statements, which fit in the investigation of the financial mechanisms of the cooperatives. Purposive sampling was adopted to select the target population deliberately, according to the pre-existing criteria i.e. board members, employees and general members, which were relevant to the research questions.

Data Analysis

Data collected were then coded and inputted into the statistical analysis packages such as SPSS and excel where were analyzed. The descriptive statistics were used to determine the demographics of the respondents using frequency counts and percentage distributions. To test the hypothesis, inferential statistical methods were used, the regression analysis, correlation analysis, and chi -square tests were applied to explore the relationship between organizational, technological, and environmental variables and the adoption of MAPs.

Cronbach alpha, composite reliability and average variance extracted (AVE) were used to measure the reliability and validity of the constructs. Moreover, there

was a multicollinearity diagnostics and model fit indices analysis to guarantee the soundness of the findings.

The descriptive statistical procedures were utilized to describe the perception of the respondents with reference to accuracy of reporting, timeliness and transparency. The calculation of measures which included the arithmetic mean, the standard deviation and the frequency distributions were done to evaluate how cooperatives prepared and presented their financial reports.

Inferential statistics was used to test the relationship between the standard of financial reporting and the use of management accounting practices. To determine the strength and direction of this relationship, the correlational analysis was employed and to quantify the predictive effect of financial reporting variables, that in turn includes accuracy, data accessibility, and compliance, the multiple regression analysis method was utilized to determine the degree to which the management accounting practices were adopted.

Reliability

Table 2

Reliability Statistics of the Variables

Construct (variable)	No. of items	Cronbach's Alpha	Interpretation
Technological Factors	5	0.82	Good internal consistency
Organizational Factors	5	0.78	Acceptable
Environmental Factors	5	0.75	Acceptable
Competitive Intensity	5	0.74	Acceptable
Adoption of Management Accounting (Dependent)	5	0.85	Good
Overall questionnaire	25	0.88	Excellent

The report of the pilot testing of the questionnaire, given in Table 2, shows that the extent of reliability is high in all the constructs that are represented by the Cronbach alpha coefficients. The total scale, consisting of 25 question items, had a good value of reliability ($\alpha = 0.88$), which proves that the scale is very internally consistent and can be used in future studies. At the construct level, Technological Factors ($0.82 = 0.82$)

and Adoption of Management Accounting (0.85 = 0.85) were showing good internal consistency levels that would not necessitate any major changes. Organizational Factors (0.78), Environmental Factors (0.75) and Competitive Intensity as a moderating variable (0.74) had an acceptable level of reliability, though slightly lower than the other constructs, indicating that they could be slightly improved to help them become more consistent. On this note, researchers are therefore recommended to check item-total correlations, which may have ambiguous or redundant items, and may want to do factor analyses to ascertain the unidimensionality of these constructs. Since all constructs exceeded the generally established standard of 0.70, the instrument can be regarded as being appropriate in data collection though further refinement can contribute to more effective psychometric properties of the instrument (Nunnally & Bernstein, 1994).

Results and Discussion

Table 3

Demographic Profile of the Respondents

Demographic	Categories	Frequency (n)	Percent
Age Status	20–30	21	18.75
	31–40	36	32.14
	41–50	30	26.79
	51 above	25	22.23
Gender	Male	61	54.46
	Female	51	45.54
Marital Status	Single	42	37.5
	Married	67	59.82
	Widow	3	2.68
Educational Status	Secondary or below	12	10.71
	Intermediate / +2	41	36.61
	Bachelor's Degree	37	33.04
	Master's or above	22	19.64
Work Experience	Less than 1 year	14	12.50
	1–5 years	22	19.64
	6–10 years	32	28.57
	11–15 years	21	18.75
	Above 15 years	23	20.54

The current research paper provides an overview of demographic data of 112 participants of different types (age, gender, marital status, education, and work experience). In terms of age, most of the respondents fell within the age of 31-40 years

32.14 percent, 41-50 years 26.79 percent, 51 years above 22.23 percent and 20-30 years 18.75 percent. This distribution indicates that there are many respondents who are at the middle of their careers and this fact may increase their understanding and practice of management accounting practices.

The gender distribution showed that there was a little more proportion of male 54.46 percent than females 45.54 percent, which means that the level of participation was relatively balanced. On marital status, most of the respondents were married 59.82 percent with 37.5 percent constituting the solo respondents and a small percentage constituting respondents who were widowed 2.68 percent.

The educational backgrounds revealed that the majority of the respondents were bearers of an intermediate or +2 certificate 36.61 percent or a bachelor degree 33.04 percent, with few having a master degree or above 19.64 percent or secondary and below 10.71 percent. This sample represents a relatively highly-educated group that has an ability to understand financial and management accounting concepts.

The respondents also had different work experience with the highest percent of 28.57 representing 6-10 years, 20.54 representing more than 15 years, 19.64 representing 11-15 years, and 12.50 representing less than one year of work experience. This trend indicates that majority of the respondents have adequate experience in practice to make informed opinions about management accounting practices in their cooperatives. In general, the demographics show that the sample of respondents is balanced and experienced and is suitable to test the adoption and efficacy of the management accounting practices.

Inferential Statistics

As described in the research methodology, correlation analysis conducted to explore the Correlations among the variables.

Table 4

Correlations Analysis of Dependent and Independent Variables

Variables	TF	OF	EF	CI	AMA
TF	1				
OF	.52**	1			
EF	.47**	.49**	1		
CI	.45**	.43**	.50**	1	
AMA	.65**	.62**	.58**	.60**	1

** Correlation is significant at the 0.01 level (2- tailed).

Table 4 shows the outcomes of correlation analysis and it indicated that all the independent variables, i.e. technological factors (TF), organizational factors (OF), environmental factors (EF), and moderating variable was competitive intensity (CI),

have a positive and significant correlation with adoption of management accounting (AMA) at $p < 0.01$. Among the variables, technological factors show the strongest correlation with AMA ($r = .65$) then next are organizational factors (.62), competitive intensity (.60) and environmental factors (.58). These results imply that the adoption of management accounting is aided much more by the advances in technologies, organizational support, and competitive awareness. The resultant moderate to high inter-relations of the independent variables (.43 to 0.52) show that even though the independent variables are interrelated, they are not overlapping, implying the possibility of integrated or interactive impacts on adoption of management accounting.

Table 5

Model Summary of Multivariate Regression Analysis

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.78	0.61	0.60	0.42	1.95

a. Predictors (Constant), TF, OF, EF, CI

Table 5 below shows that the combination of predictors (technological factor, organizational factor, environmental factor, competitive intensity) has a strong and statistically significant relationship with the adoption of management accounting (AMA). The overall relationship is high with a multiple correlation coefficient $R = 0.78$ and the coefficient of determination $R^2 = 0.61$ demonstrates that 61% of the variance in AMA can be explained by these predictors. The adjusted $R^2 = 0.60$ also proves the reliability of the model after the number of predictors was adjusted and a standard error of 0.42 also suggests fairly accurate predictions. Durbin-Watson = 1.95 shows that there is no significant autocorrelation of the residual and, therefore, the assumption of independence is acknowledged. Overall, the model shows that the combination of these elements has a significant impact on management accounting adoption in SMEs, and it is thus important to reiterate that technology, organizational support, environmental factors, as well as competitive intensity are key factors in determining management accounting practices.

Table 6

ANOVA of Independent and Dependent Variables

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	45.72	4	11.43	65.02	.000**

Residual	29.28	167	0.18
Total	75.00	171	

α. *Dependent variable: AMA*

β. *Predictors (Constant), TF, OF, EF, CI (Technological Factors, Organizational factor, Environmental factor and Competitive Intensity)*

The findings in the ANOVA table 6 indicate that the regression model has been found to be statistically significant in terms of adoption of management accounting (AMA). It is observed that the predictors- tech, organizational, environmental, and competitive intensity- explain a significant percentage of the variance in AMA since it has a regression sum of squares of 45.72 compared to a residual sum of squares of 29.28. The F-value of 65.02 because it is significant at $p < 0.001$ demonstrates that the model offers a significantly better fit compared to a null model that does not include any predictors. This result means that the overall combined effect of the independent variables has a strong and significant effect on AMA, thus supporting the general effectiveness of the model in predicting the use of management accounting in cooperatives.

Table 8
Coefficient of Multiple Regression Analysis

	Unstandardized		Standardized		Collinearity	
	Coefficients		Coefficients	t		Sig.
	B	Std. Error	Beta			Tolerance
Model	0.52	0.15		3.47	.001**	3.47
	0.28	0.05	0.34	5.60	.000**	5.60
	0.25	0.06	0.30	4.95	.000**	4.95
	0.21	0.06	0.24	3.78	.000**	3.78
	0.23	0.05	0.27	4.40	.000**	4.40

The coefficients in Table 8 indicate that all the four factors (technological factors, organizational factors, environmental factors and competitive intensity) are statistically significant predictors of management accounting adoption (AMA), as the p-values are less than the .001 value. It is worth noting that technological factors (0.34, $t = 5.60$) and organizational factors (-0.30, $t = 4.95$) have the strongest influences, and subsequently comes the competitive intensity (-0.27, $t = 4.40$) and environment factors (-0.24, $t = 3.78$). The tolerance values, with a range of values of 0.63 to 0.68, and the relative variance inflation factors (VIFs) of 1.47 to 1.59 can be considered to be evidence that multicollinearity is not an issue and, along with the nature of values provided to support the reliability of the parameter estimates. These findings suggest

that in Nepalese cooperatives, the adoption of management accounting practices is primarily shaped by internal readiness rather than external pressure. These findings suggest that in Nepalese cooperatives, the adoption of management accounting practices is primarily shaped by internal readiness rather than external pressure. This aligns with contingency theory, which emphasizes that management systems are most effective when they fit an organization’s internal capabilities and context. The results underscore the need for policies and interventions that prioritize technological upgrading and capacity building within cooperatives as a prerequisite for enhancing governance, transparency, and financial sustainability.

Table 9

Summary of Hypothesis Testing

Hypothesis	Statement	Result
H1	Technological factors have a significant positive effect on the adoption of management accounting practices	Accepted
H2	Organizational factors have a significant positive effect on the adoption of management accounting practices.	Accepted
H3	Environmental factors have a significant positive effect on the adoption of management accounting practices in cooperatives.	Accepted
H4	Competitive intensity has a significant moderating effect on the relationship between environmental factors and the adoption of management accounting practices in cooperatives.	Accepted

The statistical support of all the hypotheses proposed was tested. The use of management accounting is significantly aided by technological aspects, especially the IT infrastructure, accounting software, and technical support. Furthermore, organizational factors like managerial support, organizational size and employee competence positively impact on this adoption. The adoption is also promoted by environmental determinants such as regulatory changes and uncertainty in order to improve the decision-making processes. Furthermore, competitive intensity seems to intensify such relationships suggesting that the influence of a technological, organizational, and environmental factor is larger under a highly competitive environment. Therefore, the drivers that promote the adoption of management accounting are both internal and external.

Discussion

This paper has considered the impact of technological, organizational, environmental factors in the adoption of management accounting (MA) practices in the cooperative industry in Nepal, with the competitive intensity as a mediating factor. The regression analysis has shown that technological factors had a strong, positive and significant impact on MA adoption (0.52; $p=0.001$). These results show that improvements in IT infrastructure, accounting software, and advisory services are likely to implement MA tools, which support the validity of the model and is in line with the available literature (Ismail & King, 2007; Alzoubi, 2018; Sulaiman et al., 2008).

Organizational factors also became important predictors of MA adoption (0.28; $p=0.000$). This implies that managerial support, competence of the employees, and cooperative size have a positive impact on the use of MA tools. These findings are consistent with previous studies that provide the significance of managerial commitment and human resource capabilities in encouraging innovation in accounting systems (Ahmad, 2012; Waweru et al., 2004; Uyar & Kuzey, 2016).

The environmental factors had a positive and significant effect on MA adoption (0.25; $p=0.000$). This reveals that the presence of external uncertainties, regulatory frameworks, and market pressures encourage cooperatives to implement MA tools to improve the decision-making and competitiveness. The findings are in line with research by Abdel-Luther (2008), Cadez and Guilding (2008), and Chenhall (2003), which pointed out the role of the dynamism in the environment on accounting practices.

The analysis identified competitive intensity as a significant moderating variable that strengthens the relationship between external challenges and the adoption of management accounting (MA) practices. Specifically, under conditions of high competitive intensity, the positive association between environmental pressures and MA adoption becomes more pronounced, indicating that cooperatives facing intense competition are more likely to implement MA practices to improve efficiency, strategic planning, and performance control.

The results consequently confirm previous studies which have zeroed in on the relationship between the competitive forces and strategic uses of accounting systems (Hoque, 2011; Hyvonen, 2007).

Conclusion

The current research paper has established that technological, organizational, environmental and intensity of competition are of great importance in the adoption

of management accounting (AMA) in cooperatives. Of these, technological factors ($\beta = 0.34$) and organizational factors ($\beta = 0.30$) proved to be the most salient factors, but competitive intensity (2007) and environmental factors (2007) also had a significant impact. The correlational and regression analyses revealed that the predictor variables jointly explained a significant proportion of the variance in adoption of management accounting (AMA). Moreover, no evidence of multicollinearity was detected, indicating that both internal capabilities and external pressures independently and significantly contribute to the effective adoption of MA.

Co-operatives must give more emphasis on investing in technology and strengthening of organizational support, including the development of managerial commitment, and capacity building of staffs, to enable them to adopt management accounting practices. At the same time, environmental variables and competitive intensity should be tracked with utmost urgency so that the accounting practices could be compatible with the market forces and the regulations.

Co-operatives should have training programs that are well organized. The people, in charge should use accounting information systems in a way. They should also make sure management accounting is a part of the decision-making process.

For the boards that make decisions together this means using management accounting tools when they make plans and check on performance. The people who make policies should help with this by making policies that allow it to happen providing help and making sure everyone can use digital accounting tools. The places where people go to learn should play a role by teaching programs that help people get better at managing and accounting. Management accounting is important. These programs should help people understand it better. Management accounting should be used to make decisions. Collectively, these measures empower cooperatives to effectively leverage both internal capabilities and external conditions, thereby promoting sustainable growth and improved organizational performance.

Scope of Future Research

1. Sector and Geographical Growth Future research can focus on the adoption of management accounting in a variety of sectors and geographic locations, which could include rural cooperatives and small-to-median enterprises (SMEs) in a number of provincial settings to clarify the role of technological, organizational, and environmental factors on the performance of the system in heterogeneous settings.
2. Longitudinal and Causal Studies: Additional investigation would be done by use of longitudinal research studies to assess how the changes in technologies, organizational structure, and competitive forces over time affect the adoption and efficacy of management accounting practices.

3. Adoption of the Emerging Technologies: The study of how avant-garde digital technologies, including artificial intelligence, blockchain, and big data analytics, may impact the adoption of management accounting can offer substantive information on the future development of accounting practices in a collaborative context.

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From Youth Bulge to Ageing Society: Dependency Ratio, Life Expectancy and Disability among Older Adults in Nepal (1991–2021)

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Abstract

Nepal is witnessing a very fast demographic transition of the young to the aging society with dire consequences in the social, health and development policies. The article is intended to be a review of population composition, dependency ratio, and survival rates. The National Population and Housing Census (NPHC) was used to calculate life expectancy and disability rates among older individuals (60 and older) in Nepal from 1991 to 2021. The results indicate that the percentage of children (0-14 years) has been on the decline since 1991, varying between 42.4% and 27.8% as at 2021. At the same time, there is an increase in the population of working-age (15-59 years) and older people (5.8% to 10.2%). There are regional and gender-based differences as well: the greatest life expectancy in age until 60 is found in hilly regions and among women, whereas the expected lifespan at the age of 60 differs across provinces, with a higher expectancy in the Mountain and Sudurpashchim regions. Disability in the aged is estimated at 6.9 percent, with the most common impairments being physical, visual and auditory impairments. The provincial and ecological disparities predict that aging in Nepal is heterogeneous, and context-specific policies are needed. The findings highlight the importance of leveraging the demographic dividend, improving health and long-term care systems, and implementing inclusive social protection and age-friendly policies. The paper presents evidence of a nationally representative and sub-nationally

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disaggregated study that can be used to shape the approach to healthy aging and proactive planning to guarantee longer, healthier, more autonomous, and dignified lives.

Keywords: Ageing, Dependency Ratio, Disability, Life Expectancy, Older Adults

Introduction

Nepal is experiencing a high rate and widespread demographic transition, shifting towards an ageing society. This is a change that has been characterized as a shift between a youth bulge and an older age structure occurring due to continued falls in fertility, child survival, and constant increments in life expectancy (Chalise, 2006; Shrestha et al., 2014). Though the ratio, along with an absolute number of younger generations, remains high, the burden of older people is growing faster than over the last decades, establishing new dependency trends and giving a new picture to social and economic, health systems (Jane Osareme et al., 2024). When considering effective policy planning in the context of a lower-middle-income and post-conflict country, such as Nepal, with formal welfare institutions remaining uncommon and even family-supporting structures being stretched due to population shift, it is critical to understand why this demographic shift can have such a significant impact on dependency ratios, life expectancy, and disability of elderly people (Speck & Müller-Boker, 2020).

The age distribution in Nepal in the past had been highly fertile, with a high number of young dependents who survived to old age with very few ageing years. The total fertility has decreased significantly over the last 30 years, and the increases in longevity have become solidified by the achievements in primary health care, the growth of immunization coverage, and better access to basic services (Ministry of Health and Population, 2022; Dumka et al., 2024). The population pyramid is gradually transforming into a more rectangular shape, and the rate of population ageing, although still slower than in certain neighboring countries, is definitely increasing (KC et al., 2021; United Nations, 2022). These population shifts are manifested through growing old-age dependency rates, as well as a greater focus in national development strategies and social protection policies (Harasty & Ostermeier, 2020). On the national level, this reconfigured demographic is an indication that the time to enjoy the benefits of a demographic dividend could run out sooner than expected unless the government undertakes concerted efforts to reform health, education, employment and other social protection.

Dependency ratios describe Nepal's changing demographics. The dependency ratio of older people to working-age people is expected to increase dramatically, despite the fact that the country is still in the early stages of the aging process (United Nations, 2022; World Bank, 2023). Due to decreased fertility, old-age dependency is becoming the defining feature of the overall dependency load, which affects the labor

market, family economics, and state budget (Abbas et al., 2024; Dhakal et al., 2024; Shrestha et al., 2021). Demographic aging, however, entails not only dependency but also social and economic participation, as older people often engage in communal activities, farming, and unpaid care, in addition to being dependents (Tausig & Subedi, 2022).

The ageing of the population in Nepal is largely due to the growth of the lifespan of the population due to the important changes in the control of infectious diseases, health of mothers and children, as well as in part due to improved chronic disease management (Cambois et al., 2023). However, as multimorbidity and the shift to noncommunicable diseases (NCDs) raise concerns about the quality of additional years, healthier lives do not always translate into longer lifespans (Zou et al., 2022; Abebe et al., 2020). According to the data, a considerable amount of later life can be characterized by functional limitation, chronic illness, or disability (Ahmad et al., 2023; Sharma & Shakya, 2025). For this reason, it is important to ask whether morbidity is expanding or contracting in Nepal and whether there are enough health services available to support the growing number of cases of long-term care and chronic disease management.

Older adults with disability in Nepal are a serious but poorly studied problem. Noncommunicable diseases, injuries and the disadvantages of a lifetime of poverty, poor dieting, low education and physically demanding labor cause high rates of physical, sensory and functional impairment. Not only are rural inhabitants and people with limited resources or lack of access to health services disproportionately affected, but out-migration of younger family members only increases social isolation and caregiving issues. Although the subject of demographic indicators and dependency ratios in relation to life expectancy and the lived experience of disability is becoming more popular, little research exists (Acharya et al., 2023; Risal et al., 2020).

Methods and Procedures

Research Design

The study's research design was descriptive and analytical, intending to investigate demographic changes and ageing trends in Nepal between 1991 and 2021. It is a quantitative study that examines trends in demographic composition, dependency ratios, life expectancy, and disability among older persons. The article employs secondary data in order to provide a comprehensive understanding of the aforesaid shift from a youth-dominated population to an ageing society, as well as the implications for health and social policies.

Data Source

The research utilizes secondary data based on the Census data of Nepal of 1991, 2001, 2011 and 2021. The census contains the information related to survival and life expectancy at 60 years old in detail. These data on population size, age composition, dependency ratios, regional distribution of older adults and prevalence of disability amongst persons aged 60 and above are nationally representative.

Study Population

This paper is concerned with older people in Nepal aged 60 years and over, with reference to younger age groups (0-14 and 15 -59 years), to evaluate the overall demographic transition. The analysis is further done on regional variations among the provinces, ecological areas and districts in order to find out the spatial patterns of ageing and health outcomes of these.

Variables

The research was based on dependent and independent variables. The old-age dependency ratio, life expectancy at 60 and prevalence of disability in old age were key dependent variables. The independent variables are age, sex, year of census, province, and ecological zone and district.

Data Analysis

Descriptive statistical analysis was performed on the information. To demonstrate age composition changes, survival to age 60 and prevalence of disability, the percentage distributions were calculated. Time trends were examined to bring out changes in population structure, dependency ratios and ageing indexes. A comparative study between provinces, ecological regions, and districts was conducted in an attempt to determine the regional differences regarding the ageing population. The findings were more comprehensible to policymakers and academics because of the clear presentation of the temporal and spatial patterns in tables.

Procedure

The study included a number of methodical techniques. First, relevant datasets and tables were taken from NPHC publications. Data cleaning ensured consistency across age groups and verified annual population balancing. Standard formulas were used to determine important demographic indicators, such as the index of ageing, the old-age dependence ratio, and the overall dependency ratio. The population distribution, survival, life expectancy, and disability by year, sex, province, and ecological zone were then totaled using tabular representations. Finally, the patterns and trends were interpreted in light of Nepal's demographic shift and the policy implications for social and health planning.

Ethical Considerations

Since the research was based on the use of solely publicly available secondary data, it did not imply any encounter with human subjects. The ethical standards were ensured because the data sources were properly cited and no data misrepresentation was made.

Results and Discussion

Results

Composition of Population by Size and Growth

Structure of the population in terms of size and increase. Table 1 reflects the structure and demographic development of the Nepalese population between 1991 and 2021 in terms of broad age ranges. The percentage of the age group 0-14 years was decreasing consistently during the last 30 years, reaching a minimum of 27.8 percent in 2021, which is a sign of the continuous decline in fertility and reduction in the number of young people. On the other hand, the proportion of the working-age population (15-59 years) rose from 51.8 to 62, and this portrays a demographic transition of the population to a bigger labor force that may have the potential of boosting economic growth.

Table 1

Population Composition and Growth of Broad Age Groups in Nepal: 1991, 2001, 2011, 2021

Years	1991		2001		2011		2021	
Age group	Total population	%	Total population	%	Total population	%	Total population	%
0-14	7,840,771	42.4	8,948,587	39.4	9,248,246	34.9	8,115,575	27.8
15-59	9,579,092	51.8	12,310,968	54.1	15,091,848	57.0	18,071,685	62.0
60+	1,071,234	5.8	1,477,379	6.5	2,154,410	8.1	2,977,318	10.2
Total	18,491,097	100	22,736,934*	100	26,494,504	100	29,164,578	100

Source: National Population and Housing Census (NPHC) 1991, 2001, 2011, 2021

The older adult population (60 and above) increased in Nepal between 5.8% in 1991 and 10.2% in 2021, which illustrates the fact that the Nepalese population is gradually ageing, and the issue of elderly care, social security, and health-related demands is becoming more prominent. The general population growth is clear, and the total population grew by 18.5 million from 1991 to 29.2 million in 2021. The trends indicate that Nepal is moving towards an ageing society and out of the youth-dominated society, which presents the dependency ratio implications, resource allocation, and policy planning. These transitions provide a clear need to plan for the

ageing population, taking the opportunity of the demographic dividend of the growing working-age population.

Districts with the Highest and Lowest Proportions of Elderly Population

Table 2 displays the 15 districts in Nepal with the highest and lowest percentages of the population aged 60 and up in 2021. The statistics show that there is a great regional difference in the distribution of the older population. Gorkha has the greatest level of old age at 17.1 percent, followed by Ramechhap at 16.92 percent and Lamjung at 16.75 percent, indicating that the high population of the hilly and mid-hill regions was older. Conversely, Dolpa exhibits the lowest percentage of 6.19 percent, and Jumla (6.85%) and Jajarkot (6.95%) also have the lowest percentages; hence, remote mountain and a few parts of the Terai districts have lower population ageing and younger age structures.

Table 2

Nepal's 15 Districts with the Highest and Lowest Populations of People Aged 60 and up in 2021

Districts with the highest % of 60+ population				Districts with the lowest % of 60+ population			
S.N.		Number	%	S.N.		Number	%
1	Gorkha	42,937	17.10	1	Dolpa	2,650	6.19
2	Ramechhap	28,818	16.92	2	Jumla	8,111	6.85
3	Lamjung	26,113	16.75	3	Jajarkot	13,154	6.95
4	Syangja	41,354	16.34	4	Mugu	4,830	7.48
5	Dolakha	27,423	15.87	5	Kalikot	11,280	7.76
6	Parbat	19,657	15.01	6	Banke	46,968	7.78
7	Sindhupalchok	39,001	14.85	7	Surkhet	20,613	8.05
8	Gulmi	36,142	14.66	8	Rautahat	66,256	8.14
9	Myagdi	15,274	14.27	9	Bara	64,099	8.39
10	Nuwakot	37,578	14.26	10	Parsa	55,556	8.48
11	Okhaldhunga	19,757	14.15	11	Kathmandu	174,057	8.52
12	Dhading	45,573	13.99	12	Humla	4,730	8.53
13	Arghakhanchi	24,562	13.87	13	Salyan	33,426	8.64
14	Manang	764	13.50	14	Dang	58,435	8.65
15	Khotang	23,364	13.32	15	Bhaktapur	38,146	8.82

Source: NSO,2024

Trends in Dependency Ratios and the Ageing Index

Table 3 indicates that the dependency ratio and index of ageing indicate the demographic strains in relation to the ageing population of Nepal. On the national level, the overall dependency ratio in the form of 60+ population is 61.38, and the child dependency is 44.91 and the old-age dependency of 16.48, which suggests that older adults are increasingly becoming dependents. The ageing index of 36.69 percent also highlights the increasing ageing ratio between older people and children. The provincial distinctions are highly accentuated. Gandaki Province is the province with a high old-age dependency ratio (21.25%), index of ageing (55.9%), and with a rapidly ageing population (compared to Karnali and Madhesh), whereas Karnali and Madhesh have lower indices (24.06% and 27.57%, respectively), indicating a younger population structure. Province with high ratios of child dependency, e.g., Madhesh (57.5%), is also a reflection of the general burden of youth, but provinces with low indices of total dependency, e.g., Bagmati (48.85), though with a high index of ageing (48.3), are a reflection of the combined impact of falling fertility and rising longevity.

Table 3

Trend of Dependency Ratio and Ageing Index - 2021

Area	Based on the age of 60+				Based on the age of 65+			
	Total dependency ratio	Child dependency ratio	Old-age dependency ratio	Index of ageing	Total dependency ratio	Child dependency ratio	Old-age dependency ratio	Index of ageing
Nepal	61.38	44.91	16.48	36.69	53.28	42.65	10.63	24.91
Province								
Koshi	59.25	41.38	17.86	43.16	50.38	39.08	11.3	28.92
Madhesh	73.35	57.5	15.85	27.57	65.23	54.81	10.42	19.01
Bagmati	48.85	32.94	15.91	48.3	41.55	31.33	10.22	32.63
Gandaki	59.27	38.02	21.25	55.9	49.41	35.67	13.75	38.54
Lumbini	61.51	46.06	15.44	33.53	53.82	43.87	9.95	22.69
Karnali	69.68	56.17	13.52	24.06	61.88	53.58	8.29	15.48
Sudurpashchim	67.95	52.09	15.86	30.46	60.17	49.67	10.5	21.14

Sources: NSO,2024

On the whole, this data indicates that the process of ageing is unevenly distributed in Nepal, and it has certain implications on social policy, healthcare planning and resource allocation to support both older adults and children.

Percentage of Survival to Age 60 per Ecological Zone and Province

Percentage of Local Area to Age 60 by Ecological Zone and Province, Table 4 displays the percentage of Nepal's population that survived to the age of 60 per ecological zone and province. Nationwide, 80 percent of the population lives to reach 60 years, and women (84.7 percent) live significantly better than men (75.1 percent). The Hill region has the highest survival (81.2% overall; 86.4% women), whereas the Tarai has the lowest (79% overall; 74.4% men), hence a difference in the health outcomes and life expectancy between regions. Provincial analysis. Provinces with the highest survival to age 60 (82.6% both sexes; 87% women) are Bagmati Province and Lumbini Province has the lowest (76.8% both sexes; 70.6% men). The socioeconomic status, access to healthcare services, and life and environmental aspects differ across the provinces and ecological regions. Altogether, the statistics show that the women outlive the men and that there are more chances to survive in the hilly and urbanized provinces, which reflect the area of specific health intervention and planning policies related to ageing.

Table 4

Percentage of Surviving to Age 60 by Ecological Zone and Province, 2021 Census, Nepal

Area	Both sex	Women	Men
Nepal	80.0	84.7	75.1
Ecological zone			
Mountain	80.6	84.3	77.0
Hill	81.2	86.4	75.9
Tarai	79.0	83.5	74.4
Province			
Koshi	78.5	83.2	73.9
Madhesh	81.1	83.9	78.3
Bagmati	82.6	87.0	78.3
Gandaki	80.5	87.0	73.4
Lumbini	76.8	82.7	70.6
Karnali	81.7	86.0	77.2
Sudurpashchim	79.1	85.3	72.4

Source: NSO,2024

Remaining Life Expectancy

Table 5 shows the remaining life expectancy at age 60 in Nepal regions and ecological zones. At the national level, those over 60 have a life expectancy that is 19.4 years longer, and women will live longer than men (18.2 years) at a rate of 20.7 years,

making their overall lifespan biased in favor of women. The age 60 life expectancy is highest in the Mountain area (20.7 years for both sexes, 22.3 years for women) and lowest in the Tarai (19 years for both sexes, 18 years for men), indicating regional disparities in living circumstances, health, and nutrition.

Table 5

Life Expectancy at Age 60, according to Ecological Zones and Provinces

Area	Both sex	Women	Men
Nepal	19.4	20.7	18.2
Ecological zone	Both sex	Women	Men
Mountain	20.7	22.3	19.2
Hill	19.7	21.2	18.3
Tarai	19.0	20.0	18.0
Province	Both sex	Women	Men
Koshi	19.3	20.5	18.2
Madhesh	19.6	20.3	19.0
Bagmati	19.3	20.7	18.0
Gandaki	20.0	21.4	18.6
Lumbini	18.8	20.0	17.7
Karnali	19.8	21.5	18.3
Sudurpashchim	19.8	21.9	17.8

Source: NSO,2024

Table 5 shows that at the province level, Sudurpashchim and Karnali have higher life expectancies for women (21.9 and 21.5 years, respectively), whereas Lumbini Province has the lowest (17.7 years). According to statistics, women live longer than men, and to address regional inequalities in older adult survival and life expectancy, particular health and social interventions are required.

Disability Status of the Nepalese Elderly

Table 6 shows the disability status of older adults in Nepal in 2021, with an age of 60 years and above. Among the total number of the elderly population (n=2,977,318), 206,036 (6.9 percent) had any form of disability. The most prevalent (60,739 cases) was physical disability, and the visual impairment -low vision (55,786) and blindness (6,646). There were cases of 49,252 older adults with impaired auditory (deafness and hearing difficulty). In general, the prevalence of disabilities in men was slightly higher in comparison with that of women (104, 238 men compared to 101, 798 women), but women were more affected by low vision and mental/psychosocial disabilities. Moreover, 14,245 aged adults indicated that they had multiple disabilities, which implied that they needed complex and combined care. Most older adults (2,770,100)

said they had no disability, indicating that disability is not prevalent among Nepal elderly people, given that it is important. These results ensure the effectiveness of the targeted interventions in the form of healthcare, social protection, and access with older adults with disabilities.

Table 6

Disability Status of Elderly People in Nepal, 2021

Disability and types	Men	Women	Total
Population with Disability	104,238	101,798	206,036
Physical disability	34,242	26,497	60,739
Low vision	25,729	30,057	55,786
Blind	3,023	3,623	6,646
Deaf	12,167	11,449	23,616
Hard of hearing	12,875	12,761	25,636
Deaf and Blind	2,078	2,335	4,413
Speech problem	4,174	3,712	7,886
Mental or Manosamajik	1,368	2,298	3,666
Intellectual disability	590	1,020	1,610
Hemophilia	520	493	1,013
Autism	207	573	780
Multiple disability	7,265	6,980	14,245
No disability	1,339,108	1,430,992	2,770,100
Not reported	561	621	1,182
Total senior citizens (≥60)	1,443,907	1,533,411	2,977,318

Source: NSO, 2024

Discussion

This article examined demographic transition in Nepal in terms of an aging society vs a previous demographic dominated by youth in terms of age structure, dependence ratios, survival at older ages, life expectancy at age 60, and disability in old age. The results demonstrate a sharp decrease in the share of children, an increasing percentage of working-age adults and a continuously increasing number of the aged population with a considerable regional and gender inequality in life expectancy and disability. These trends are consistent with the general trends in demographic transition in low- and middle-income countries, which are experiencing a late but rapid demographic transition, but they also have some distinct weaknesses due to Nepal's geography, migration patterns, and lopsided social and health development.

Youth Bulge to Ageing Society

The decline in the 0-14 years population of 42.4 percent in 1991 and 27.8 percent

in 2021 and the corresponding increase in working age population of 3.4 percent in 1991 and 6.4 percent in 2021 as well as the growth in 60 or above years of 5.8 percent in 1991 and 10.2 per cent in 2021 is a testament that Nepal is already in the later phases of demographic transition. Very comparable trends have been observed in South Asia and other developing areas: decreasing fertility, growing working-age groups, and increasing proportions of old-age (Sapkota et al., 2025; United Nations, 2022). These developments go in line with the declining total fertility rates, growing educational levels, and improved health access in Nepal (Government of Nepal, National Planning Commission, 2020; World Bank, 2023).

The increasing number of the elderly population is an opportunity and a challenge. On the one hand, the higher working-age ratio, compared to children, can create a possible demographic dividend as observed in the regional studies of age composition and economic developments (Mason & Lee, 2011; Sapkota et al., 2025). Conversely, this progressive growth in the elderly population, particularly those who live to live long, is an indicator that there will be a significant rise in the demand of health care, long-term care, and social protection (Chalise, 2023; World Health Organization, 2020). Current evidence indicates that Nepal is both at the same time at tail-end of the youth bulge and also at the beginning of the population ageing, having little time to reform its institutions to meet the demands of an ageing society, which is reflected in other lower-middle-income economies (Harper, 2016).

Dependency Ratios and Regional Differentials

A national old-age dependency rate of 16.48, child dependency rate of 44.91 and total dependency rate of 61.38 using the 60-plus-year-old as the standard indicates the society in which younger dependents still predominate but where older dependents increasingly stand out. The ageing index of 36.69% shows that older people have already occupied a large percentage in comparison with children. South Asian countries have also observed studies that have reported a negative child dependency ratio and a gradual yet constant increase in old-age dependency with significant implications for intergenerational transfers and pension systems (Wachs et al., 2020).

The trends of provincial inequality, i.e., the higher old-age dependence, index of the ageing process in Gandaki Province, and the lower values in Karnali and Madhesh, are similar to those in other multi-ethnic, geographically diverse countries, where fertility, migration, and mortality vary by region (Sapkota et al., 2025). The higher proportions of older adults in hill districts (such as Gorkha, Ramechhap, and Lamjung) are likely a combination of reduced fertility and enduring youth out-migration, evidenced by other research on internal and international labor migration of mountain and hill areas (Tausig & Subedi, 2022). Conversely, these lower proportions

of older adults in Dolpa, Jumla, and Jajarkot could be attributed to higher fertility, earlier deaths, or both, as the poorer access to health services and more deplorable living conditions in

The demographic variations, or, in other words, differences in ageing rates and dependency ratios, prove why subnational planning is better than national policies of the same nature. Geriatric and social care should be increased in provinces with high old age dependency; maternal and child health, education and employment should be more heavily invested in regions with high child dependency. Likewise, evidence on South Asia shows that it is appropriate to tailor interventions to local demographic and socioeconomic contexts (Chand, 2018).

Life Expectancy at Older Ages

In Nepal, there is evidence of sex and regional inequality in patterns of survival and longevity. Women have a better chance to live up to 60 (84.7 vs. 75.1) and live longer (20.7 vs. 18.2 years), which is a well-established female longevity benefit recorded worldwide (Barford et al., 2006; World Health Organization, 2020). There is significant geographical variation: high survival rates are observed in hill regions and provinces such as Sudurpashchim, while the Tarai is lagged in by the Tarai, particularly men. According to the previous research, these disparities are attributed to differences in exposure to non-communicable diseases, environmental hazards, and socio-economic disparities (Ghimire et al., 2021). These tendencies suggest that ageing is uneven in Nepal, and the policies should be region and gender sensitive (Beard et al., 2016).

Disability in the Aging Population

About 6.9% of the older adults respond with at least one disability, physical, visual and auditory impairments being the most prevalent, which is in line with global trends in ageing-related disability (World Health Organization, 2011; United Nations, 2022). Gendered disparities can be found: there are more cases of total disability among men than women, although they have higher rates of specific disabilities, which is consistent with the finding that women live longer, but with more functional impairments (Lee et al., 2021). The Complex health and care requirements are highlighted by the presence of many disabilities in the elderly (over 14,000 older adults) (Barnett et al., 2012).

Implications on Policy and Research

The demographic transition in Nepal, increased dependency on old age, and the lack of regional equity are also indicative of the necessity to increase social security, incorporate chronic care, rehabilitation, and disability-focused services (World Health Organization, 2017; HelpAge International, 2019). Specific measures of high-risk areas

and increased availability of assistive technologies and age-friendly environments are necessary. There are empty spaces in research, especially longitudinal data, analyses with disability as a dependent variable in relation to the social and economic conditions, to provide the population with equal and healthy ageing in the nation (Wagg et al., 2021).

Conclusion

The Nepal population is living through a significant demographic shift towards an ageing population, although the general population is comparatively young. Ageing is not uniform at both geographical locations and sex, with significant disparities in survival to 60 years, life expectancy and disability. It is based on these inequalities that the reason why health systems, social protection programs, and development planning must be adjusted to the necessity of an ageing population is urgent.

There are three major insights in this study. To begin with, the increased percentage of the workforce due to the ageing population leads to a decreased demographic dividend, but provides an opportunity to prepare systems in advance with an ageing population. Second, there are significant differences in old-age dependency, survival, and disability between provinces and ecological zones that prove the relevance of regionally and locally specific policies. Third, the high levels of functional limitations, especially amongst women and in certain provinces, underline the need to enhance geriatric and rehabilitative services, foster disability-inclusive social protection and develop community-based care.

Although the study is based on cross-sectional census data, which does not include detailed clinical measures, it is national and provides disaggregated data that is essential in policy planning. Long-term longitudinal research incorporating both demographic, health and socioeconomic variables is necessary to outline evidence-based interventions to facilitate longer, healthier, more independent and dignified lives of the older population in Nepal.

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Domestic Violence against Married Women in an Urban Informal Settlement

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Abstract

Domestic violence is common in every society at different levels, but it is often hidden in urban contexts. Urban informal squatter known as unmanaged settlements are home to economically disadvantage and socially underprivileged families. The daily life of women in informal settlements is influenced by patriarchal rigidity and multiple associated vulnerabilities that constrain women. The lived experiences of women under the social and cultural constraints of patriarchy in Kathmandu's Balkhu Corridor between the ages of 20 and 60 are examined in this study. This study is based on a qualitative approach. Data was collected from ten squatters, known as unmanaged settlement, women through an extensive case study discussion. Qualitative data were analyzed by organizing and collecting the codes of participants' words. Meaning of data was established from themes and patterns in qualitative information. Findings show psychological violence is reported more than repeatedly physical injury among the participants. Women also face emotional pain, mistrust, fear, control and financial dependence frequently within the family. Many effects remain silent because of social pressure, cultural expectations of respect, and fear of losing family dignity. Alcohol use, economic strain, and insecure jobs make their situation worse for violence at large. Despite the deep pain, women show internal strength by staying patient, providing family support, and looking after their children. The study shows that domestic violence is a social construct, not just an individual interferes. It shows the need to listen more closely to women's life histories. It also reminds us to observe their lives closely. Social perceptions shape their domination and economic pressure intensifies their suffering. Family expectations under patriarchy further deepen their suffering in the urban setting.

Keywords: Coercive control, emotional abuse, patriarchy, family dignity

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Introduction

Violence against women remains a serious human rights concern around the world (World Health Organization, 2022; UN Women, 2024). It is rooted in society by unequal power relations, patriarchal values, and androcentric social expectations that accept control and harm within closed relationships (Walby, 1990; Hunnicutt, 2009; Heise, 1998). Conceptually, domestic violence denotes a social violence by a partner. It is a structural and gendered issue rather than a private conflict and misunderstanding. Such androcentric social practices shape women's social position, bodily freedom, mental well-being, and future life chances (Bailey et al., 2020). Around the world, many women experience distinct physical or sexual violence (WHO, 2022). This violence creates deep physical and emotional suffering, long-term health problems, economic hardship and dependency, and cycles of vulnerability that affect entire families.

Nepal shows a similar pattern of domestic violence in its own social and cultural context. Domestic violence continues across communities in diverse forms even after provisions of laws against gender-based violence. Despite legal reforms and increased awareness of gender justice and social protection, it persisted in new form like women's trafficking to cities and abroad. Patriarchal family traditions and practices reinforce unequal gender roles. Religious beliefs and social expectations placed on women further strengthen these unequal roles. These practices begin within households at an early stage. Many Nepali women experience emotional, physical, or sexual abuse during their lives (Karki, 2023). Social stigma that persists for women because of gendered perceptions, economic dependence, and pressure to continue marriage for a lifetime discourages women from seeking safety from violence and speaking out against violence. Many social expectations under patriarchy pressure women to tolerate suffering to protect the family's reputation and identity. This makes domestic violence an accepted part of married life in the family and community, which supports to repetition of violence. In Nepal, 27% of women aged 15–49 have experienced physical, sexual, or emotional violence (MoH et al., 2023) and 17% reported intimate partner violence in the past year (Sapkota et al., 2024). These figures reflect how patriarchal norms normalize women's tolerance of suffering within marriage and family life is significant for further researcher to explore social context of women's violence.

Urbanization has further new layers of vulnerability in terms of social and economic risk (Heise, 1998). Being a capital city, Kathmandu is often seen as a place of opportunity so people are attracted. However, rapid migration, rising living costs, insecure and unstable jobs creates stress on people within households. These conditions are closely linked to the broader process of urbanization and urban development in Nepal. Among dozens of unmanaged settlements in the Kathmandu Valley, the Balkhu

Corridor is home to marginalized and vulnerable people. Gender roles are changing in the present context (Acharya, 2024). However, women still face economic insecurity and heavy domestic work with limited resources and support. This area reflects traditional cultural values combined with urban uncertainty creates clash. New urban expectations for women are emerging, but a strong patriarchal system controls to their freedom and choices. Such duality limits their capability and livelihood options.

The central focus of this study is to identify patterns of domestic violence against women in an urban context, particularly in marginalized communities. Structural patriarchy combines with marital hierarchy, economic dependence, religious beliefs, and community expectations that produce gendered harm and inequality between men and women (Walby, 1990; Kandiyoti, 1988). Existing studies focus mainly on economic perspectives but fail to show the emotional, social, and psychological dimensions of women's life patterns. Similarly, marginalized areas do not receive priority for study from a gender perspective in academia. The state declares unmanaged and informal settlements as illegal (Karki & Singh, 2022). The government often neglects its issues because the settlements are viewed as encroachments. Formal agencies of government are basically indifferent about squatter issues. As a result, many serious problems remain unaddressed and unattended. There is also a clear gap in understanding domestic violence in squatter settlements, where traditional gender norms are still practiced.

The exploration of domestic violence in urban so-called advanced areas are crucial for sociological research. Domestic violence, particularly under patriarchy, is multidimensional. It operates through unequal power relations between men and women. Similarly, it negatively affects women in multiple ways, including their social and economic progress. It adversely affects health, mental well-being, as well as social participation and a respectful life (Karakurt et al., 2014). It limits gender equality and livelihood options and sharply weakens women's agency, and creates long-term cycles of social poverty. Without understanding women's lived experiences, laws and programs fail to address the real needs of victims. It is therefore essential to explore how women in the Balkhu Corridor understand violence themselves, why they remain silent for long periods, how family pressure affects their decisions, and what emotional and social costs they carry because of social stigma. This study aims to strengthen feminist sociological knowledge by bringing forward women's voices and their experiences of power, suffering and control.

Guided by feminist standpoint theory, this research captures women's lived experiences (Smith, 1990). The main objective of this research is to understand the causes and consequences of domestic violence against women in the Balkhu Corridor of Kathmandu.

Literature Review

Initial feminist discourse explains that patriarchal societies build a social system where men hold authority and power and women are placed in subordinate roles with minimal social value (Walby, 1990; Hooks, 2014). Domestic violence against women is widely understood in feminist literature as a product of patriarchal power relations that have existed for a long time in society differently. These unequal power structures appear in marriage, sexuality, household division of work, and social norms and values. In many societies, cultural expectations that continue over time often make women responsible. Men are given social acceptance to control decision-making. In this unequal social setting, violence becomes a way to enforce gender hierarchy. Domestic violence in patriarchal households is a means of preserving control and restricting women's freedom and autonomy (Stark, 2007; Merry, 2006). It presents as an abusive behavior that is shaped by the androcentric social structure. It shows how social beliefs, cultural norms, and gendered power relations influence perceptions towards women (Merry, 2006). It also shows how the patriarchal system reinforces structural inequality, which supports male authority.

Domestic violence occurs through several interrelated layers and factors, including social and cultural factors within a shifting urban context. Individual characteristics, interpersonal patterns, societal norms, and social structures are key factors of perceptions of gender (Heise, 1998). Behavior for both genders is shaped by individual experiences within the patriarchy. These factors combine with relationship issues such as stress and control, all of which are shaped by gender socialization under a patriarchal society. All of these are guided by gender socialization. These interactions take place within communities that privilege to male authority and discourage women. In South Asia, marriage is often viewed as a sacred bond that continues throughout life, and divorce or separation carries social stigma. It makes women more dependent on their male partners and vulnerable (Ali et al., 2011). Structural patriarchy and androcentric social ideology work together to normalize violence against women.

Global research shows that violence by intimate partners and under family pressure remains a widespread and persistent social problem. Estimates show that nearly one-third of women worldwide have experienced physical or sexual violence. It shows women's multiple vulnerabilities associated with domestic violence (WHO, 2022; WHO, 2024). As per several studies of the World Health Organization, the effects of gender-based violence on a woman's life include depression, trauma and reproductive issues. It also affects future generations. Children who witness violence often develop emotional, social, and behavioral problems later in life (WHO, 2013). Global literature shows that violence occurs in every society in various forms. It is rooted in cultural norms and social values that support male dominance over women.

In South Asia, strong patriarchal norms, dowry pressure, fertility expectations, and androcentric expectations of women's role contribute to some of the highest rates of intimate partner violence (Ali et al., 2011). Women's economic dependence and the stigma of divorce or widowhood heighten their vulnerability. Studies across the region show that controlling behaviors against women often start before physical violence. Husbands often monitor and wives' mobility, communication, and social relationships. These actions become part of coercive control within the marriage that ultimately encourages violence (Stark, 2007). Similarly, alcohol misuse by husbands, marital tension related to economic hardship, social maladjustment, son preference, and intergenerational transmission of patriarchal values and practices appear as common contributors to violence against women.

Studies based on Nepal broaden understanding of domestic violence by showing the relationship with social structure how social and economic structures shape women's vulnerability. Research shows that emotional, physical, and sexual violence are widespread in Nepali society. Nearly one-third of married women report abuse (Karki, 2023). Under the patriarchal kinship systems, in-law authority within household, and patrilocal residence patterns after marriage create environments of domestic violence and control women by men, especially by her partner. Women who marry early often remain dependent and restricted in their marital home (Lamichhane et al., 2011). They do not have access on education, opportunities and legal provisions. Qualitative research shows that many women have experienced violence as normal (Dahal et al., 2022). Similarly, other research emphasizes that emotional and psychological violence is common but often ignored. It has a significant impact on women's identity, agency, and different issues of mental health (Poudyal, 2007).

These results suggest that social and cultural norms mainly guided by orthodox patriarchy in Nepal contribute to domestic violence. Despite various studies, there are still gaps in our knowledge of domestic violence, mainly in urban areas. Urban women facing risks and uncertainty due to economic stress and social isolation (WHO, 2013). Women's actual experiences in rapidly expanding urban areas, mainly for underprivileged groups, may be significant for sociological study. Traditional norms are difficult to adjust to the new pressures of urban settings. Urban spaces like Kathmandu experience shifting gender roles and rising household stress. However, most Nepali studies focus on rural and formal communities, even in urban areas, with quantitative data. It neglects to emotional and sociocultural dimensions of violence in diverse urban settings. This research addresses the gap by examining women's narratives and lived experiences in an urban informal settlement. It examines how violence begins and how the victims explain it. Similarly, it examines how it is experienced through daily interactions.

Methods and Procedures

This study applied a qualitative research design. It primarily followed a qualitative dominant approach to draw out women's lived experiences. Thematic analysis was used to identify key patterns of women's experiences and their life stories related to violence against women. Researcher reflexivity was maintained properly to reduce bias and strengthen the objectivity of the qualitative analysis. The aim was to examine the causes and consequences of domestic violence against women in the Balkhu Corridor of Kathmandu. The qualitative approach helped grasp information with rich qualitative stories of the victim's side. This method was able to capture as emotional, social, and cultural meanings attached to violence. Feminist researchers are interested in using qualitative analysis to grasp women's subjectivity (Harding, 1987; Smith, 1987). Understanding gender-based harm and power dynamics requires recognizing women's voices and experiences. Their lived experiences are essential for understanding the nature of violence within families and the community's function. There is a reason this qualitative approach was adopted in this research. Emotional distress and interpersonal relationships are aspects of domestic violence that need to be explored. It is also influenced by cultural norms, values and social perceptions. Quantitative data alone cannot adequately explain these individual-level life experiences.

The study was conducted in the informal settlement of the Balkhu Corridor during September to October of 2024. It is a marginalized urban settlement in Kathmandu characterized by dense population and social diversity. Different caste, ethnic, and religious groups from different parts of Nepal are represented in this area. The study area is a result of both urban economic pressures and traditional patriarchal norms simultaneously. This makes it appropriate for researching contemporary urban domestic violence trends. Ten women participated in the case study. This study was based on a qualitative case study. Data collection was discontinued when thematic saturation was reached based on research objectives. They represented a range of diverse characteristics mainly based on ages, caste and ethnic backgrounds and durations of marriage. The number of participants was suitable for a qualitative study because of its diverse characteristics. It allowed in-depth discussion among them individually and reached thematic saturation. For sensitive issues where direct contact with the respondent is difficult. Chain-referral sampling approach was appropriate for this study. Survivors rarely share their experiences without trust. Therefore, snowball purposive sampling was chosen to reach with appropriate sample. This ensured deeper insights into their subjective experiences and understandings.

Primary data were collected through case studies entirely. One focus group discussion (FGD) and field observation were used. The FGD was conducted with

different participants beyond involved in case studies of this research from the same community to collect community perspectives. marital dynamics in their own words and describe the emotional and social meaning of violence. The focus group discussion helped identify shared norms. It made it possible to assess community attitudes. It makes able to measure community attitudes and collective beliefs about marriage. Field observation also provided a context and conditions. All interviews were held in private spaces to maintain confidentiality. Researchers avoid interference from family members during data.

Data were analyzed using thematic analysis. Transcripts were read multiple times to identify repeated ideas. Similarly, emotional expressions and categories related to the causes, forms, and impacts of violence were organized. Codes were created manually and organized into broader themes. Ethical concerns were considered with great care due to the sensitive nature of the topic. Participants were informed about the study. They were assured of confidentiality and asked to give voluntary consent before responding. Identifying personal information was eliminated.

Results

This study shows the social and emotional realities of domestic violence in urban areas. It focuses on how violence occurs in the informal settlement of the Balkhu Corridor. Findings show that violence against women has a variety of causes and consequences. Women between the ages of 20 and 60 shared their diverse experiences in this study. Their stories and life experiences were shaped by cultural norms and the fear of social judgment. At first, many respondents were unwilling to discuss the violence and abuse they had experienced themselves in their lifetime. It shows how suffering becomes internalized as a part of gendering. As rapport with them developed during fieldwork, their statements slowly turned into emotional stories. Their accounts made it clear that violence is not only physical. It is also heavily emotional and socially embedded throughout their life course.

Patriarchal, Family Hierarchy and Gendered Loyalty

Women said they were raised and socialized from childhood to respect husbands, kin relations and accept hardship in the household in a common way. Social norms and values taught them that silence is an asset and that resistance against patriarchal norms is shameful and disrespectful. This made marriage give a space for male domination where whereas emotional pain and acute social obligation become normal for women.

Since childhood, we were told that a wife must tolerate everything. It was learned mainly by the mother. We learned that silence is often considered a duty,

particularly for women or daughters. I grew up believing that pain is a normal part of marriage. It made it easy to bear violence easily. I thought this was what every woman in every place and every age had to accept. (R-07, woman in her mid-30s, limited formal schooling, migrant from Kavre; Interview, Sept. 2025)

In this type of socialization under rigid patriarchy, violence is accepted as a moral obligation. It is not recognized as abuse. Many women said that replying to a husband is seen as disrespectful. It reinforces patriarchal discipline inside the home. This situation limits objections against women's violence, either inside the home or in public spaces.

Role of Husbands and Family Members for Violence

Different studies show that husbands were the main perpetrators (Sapkota et al., 2016; Gupta & Samuels, 2017). However, women also described emotional pressure and tortures from mothers-in-law and sisters-in-law equally. These in-laws often reinforced patriarchal norms and values through pressure and humiliation. Some even encouraged men to assert more control under androcentric social perceptions. No any loyalty is shown towards women even in their difficult condition.

If my husband scolds me without reason then his mother always says he is right. She supports his son's beating activities frequently. She keeps telling me that a wife must listen and observe only. No way to object. Sometimes she even encourages him to control me more without reason. It feels as if they both husband and mother-in-law support each other in keeping me powerless. (R-9, early-30s, limited schooling, migrant from Dolakha; Interview, Sept 2025)

This shows how older women sometimes repeat the same patterns they once suffered. It is because of patriarchal perceptions. It creating a chain of control across generations because patriarchal system has not yet broken down. Less education probably played a crucial role in violence in this case.

Economic Dependency and Material Power

Economic dependence limited women's choices and increased their feelings of being trapped. Women with no income, no employment and no family support felt especially vulnerable and unable to break down marriage relations. "I stay quiet because I have no job and nowhere to go safely. I have no knowledge and ideas for work in the market. I feel trapped. I want to accept this life because I do not see any other option. Without my own income, I cannot leave, and I fear becoming a burden to others, even to my family members. So I remain silent and powerless, even when the pain feels too heavy in my life." (R-03, early-30s, primary schooling, migrant from Dhading; Interview, Octo 2025)

Women who earn small amounts through informal work also frequently face suspicion and control from their family members. Interestingly, their efforts to support the household bring new tensions rather than support and freedom. Even simple interactions at work with other male colleagues become sources of conflict. The man thought that her wife is his property like a commodity.

If I talk to a male customer, my husband gets angry and controls. He thinks I might do something wrong, which is out of family morality. Instead of support and empowerment, I get more strict rules and more questions about my work, working time and people whom I met. (R-10, late-20s, informal worker, migrant from Rolpa; Interview, Sept 2025)

Emotional Abuse, Control and Suspicion

Psychological violence, as a form of harassment, was one of the strongest themes. Women described control by their husbands and family members over mobility, speech and clothing style. Emotional humiliation was common. Women were often hurt because of criticism about their education, work style, attitudes, or physical appearance. Silent treatment, charges of disloyalty, and claims of disrespect were also frequent in the study area.

My husband doesn't hit often, but his words hurt more than beating which is repeated and the hurt is associated to my parents' home, including family members. The pain from his insults stays with me much longer in my mind. Sometimes a single sentence or even words break my confidence for days and weeks. Because nothing is my fault for those insulting words. I try to stay strong but his targeted words to my parents and me make me feel sad and hopeless. (R-1, mid-30s, secondary incomplete, Kathmandu resident; Interview, Sept 2024)

Even laughing loudly makes my husband suspect me many times. He questioned and imagined who I was talking to and why I seemed happy. It was only suspected with me. I feel watched all the time, even inside my own home, by my husband and his family members. It is like my emotions are checked and controlled without any reason. (R-8, early-40s, basic literacy, migrant from Sindhuli; Interview, Sept 2024).

It shows that many women accepted this control as part of marital duty without extended objections.

Alcohol and Domestic Violence

Alcohol was frequently mentioned as a major component of conflict inside the family. It created fear, insecure and unpredictable situations inside the home.

When he drinks, anything can happen. His mood changes frequently, and the

whole house becomes tense and creating fear among family members. I stay quiet for my children because I do not want them to see or hear painful things like before. I thought keeping silent felt like the only way to keep them safe. (R-02, early-30s, no formal schooling, migrant from Makwanpur; Interview, Octo 2024)

Many women reported alcohol as a turning point of violence and creating moments of fear in the family. They said they stayed silent not because they accepted the violence as they thought, but because they wanted to protect their children from conflict and harm further. Research shows that their silence became a survival strategy.

Community Judgment and Family Pressure

Women feared criticism from parents and their own family members even more than their husbands' beatings. Community judgment and obligation and moral comments pressured them to endure violence quietly. Even natal families sometimes discouraged them from speaking out or returning home cause of the social stigma of family-based violence.

If I complain, they say wives don't respect their husbands. They blame us frequently instead of asking what is happening at home. I stay silent without any queries. So, we keep quiet, even when it hurts and causes pain. Speaking out only brings more judgment against them and shame for the house. (R-06, late-30s, basic literacy, Ramechhap origin; Interview, Sept 2024)

When I tried returning to my parents' home for a while and sharing with them about the family clash, they told me to tolerate everything. It was for our betterment and social prestige. They said a married woman must adjust to any difficult situations. In that moment, really, I felt alone from both families. I had no place to go and no one who truly understood my pain which I encountered since my married life. (R-4, early-40s, no formal schooling, migrant from Chitwan; Interview, Sept 2024).

These lived experiences show how community norms and family expectations collectively normalize women's suffering and limit their options and freedom.

Emotional Burden and Masked Pain

Women spoke about long-term emotional distress during the interview period. Chronic stress, headaches, sleeplessness, and exhaustion have become common problems for them due to the cause of psychological violence. However, they felt compelled to hide these signs to maintain family dignity.

I smile outside without pain, but inside I am dying slowly every day without support from family and hope of the future. I presented myself as fine, always

even with my parents. So, others do not worry or judge me. But the pain has stayed with me for a long time. No one sees and calculates how much I struggle inside. (R-05, late-20s, lower-secondary schooling, migrant from Nuwakot; Interview, Sept 2024).

This discussion shows that women carry pain inside that others cannot see and assume easily. It also shows that domestic violence harms them deeply in their minds and hearts psychologically.

Sacrifice and Maternal Duty

Most women said they stayed in violent nature of marriages for their children. They felt marriage breakdown is unsafe to their children cause of the unsafe future of children. Many had no steady income, no secure place to go, and no support from the community and natal families. Their decision to stay was shaped by fear of further uncertainty, responsibility towards children, and limited options of livelihood. It makes them accept violence. Even in hardship, they continued their marital life and daily duties to keep life stable for their children.

A mother does not run away without children. I stay for my children under family pressure and my husband's unsupported situation. They need me and I cannot leave them behind without any responsibility. Even when the situation feels unbearable to me, I tell myself to tolerate for their future. My children give me the strength to stay at home, where I have experienced violence for decades. (R-4, early-40s, no formal schooling, Kathmandu born; Interview, Octo 2024)

This diverse and experienced statement reflects what many women feel that motherhood demands survival even in painful situations. They carried heavy burdens within the household under social pressure. Yet, they continued to protect their children and manage their homes within a life filled with uncertainty and fear. These types of courage show the strength of women bring to their everyday survival under persistent violence.

Discussion

The findings show that domestic violence against women in the informal settlement of the Balkhu Corridor is a structural, relational, and emotionally ongoing process in society. Mainly, it is shaped by gendered socialization under structural patriarchy. Domestic violence occurs because of three main factors. These are women's survival strategies, family control and economic dependence. The varied causal factors of violence against women showed that violence was more social and cultural than

physical. It included persistent control within the patriarchal social structure and gender socialization. These findings are related to feminist claims that violence against women by patriarchal power is reproduced through patriarchal power in the home and society (Walby, 1990; Hooks, 2014).

Patriarchy and Gender Socialization

From childhood, women learned obedience to males and the social system, silence and sacrifice as signs of good womanhood in the process of socialization. This reflects patriarchal conditioning and androcentric perceptions at the household level in which emotional and moral discipline shapes women's behavior constantly. Walby (1990) notes that patriarchy works through family, culture, and male control of resources, and ultimately creates gender imbalance. This appeared clearly in society through women's limited autonomy, restricted freedom, and normalized suffering under social pressure and control from social restrictions. Hooks (2014) also argues that patriarchy sustains through everyday emotional conformity and expectations of female sacrifice. In this study, women treated patients as a moral duty and a social obligation. It shows how power operates under patriarchy through androcentric values and practices.

Coercive Control and Emotional Abuse

Most participants reported that emotional violence occurred first and it takes a huge form for physical violence. It consists of insults, blame, isolation, and unnecessary monitoring of women's personal lives. This is a match of Stark's (2007) concept of coercive control, which describes violence as ongoing regulation of women's actions, emotions, and identity under a patriarchal social system. Chaudhary et al. (2023) also identify emotional abuse as a dominant and often hidden part of husband violence in South Asia. Respondents from the study claim emotional suffering was a fundamental problem under domestic violence. This supports Stark's (2007) argument that control functions as a form of modern domestic abuse.

Economic Dependence and Material Power

Economic dependence was a major factor that sustained violence, especially in the underprivileged group. Women without income had few options for resources and even those who were working informally faced deep suspicion by their husbands and family members. Sen's (1999) idea is significant to this study for analyzing intra-household deprivation. It explains how unequal access to resources limits women's agency and is associated with the condition of women in the study area. Research from Nepal also shows that financially dependent women in abusive relationships (Lamichhane et al., 2011). In this study, the findings show that economic control by

men over women is a form of material power. In this regard, the results show that emotional control over women is strengthened by material power gained by men because of the patriarchal social structure.

Family Dynamics and Inter-Generational Patriarchy

Data from the victimized women suggests that husbands were not the only perpetrators of violence. Mothers-in-law and other in-laws also encouraged or supported the abuse in the household. This finding is consistent with Kandiyoti's (1988) theory of patriarchal bargaining. The theory explains how older women uphold the same standards they were subjected to in the past because of patriarchal values. Respondents claim that in-laws justify aggression by citing family discipline and dignity. This is relevant to studies conducted in Nepal that show in-law involvement in domestic violence (Lamichhane et al., 2011). These synthesize show that social violence is not just an individual act or perception but becomes a common family practice. It is therefore a structural phenomenon.

In urban areas, the forms of patriarchy are changing rather than decreasing. Family confrontation is started by androcentric behavior, economic crisis, and alcohol consumption in the study area. Research from Bangladesh and India shows similar trends in urban low-income families. It indicates how new demands on women coexist with patriarchal control and neglect (Clark, 2018). In Balkhu informal settlement, husbands and family members are suspicious of women who earn even modest wages from outside the home because of androcentric male dominance.

Conclusion

Domestic violence is still practiced as a form of social and emotional reality, even in urban settlements. In informal settlements, structural inequality and economic crises are significant issues for violence against women. Women's everyday lives are shaped by patriarchal norms and values which is historically practiced. It also continues abuse cycles among them. The stories of women from marginal areas show that they have faced multidimensional and multilayer violence they have faced. It includes a variety of suspicions against women. These suspicions emerge from androcentric thinking. They are reinforced by gendered socialization and cultural practices. Together, these processes produce male supremacy. Women face psychological trauma and emotional control reinforced by androcentric perceptions in the study area. Their experiences show how social and cultural norms, values and social practices normalize women's suffering. These findings are associated with feminist standpoint theory. Different cases have experienced domestic violence differently based on economic status caste and ethnicity. It emphasizes that women's lived experiences come from marginalized

positions. These experiences help to explore structural domination. They also disclose the everyday forms of gender-based oppression. These norms of women's subordination present women's survival as a shared responsibility. These circumstances contribute to the repeated victimization of women. Their options for escaping violence rooted in structural domination are extremely limited. Women from the study area feel forced by traditional social values to tolerate physical harm and psychological impact. They still try to protect their children from violence in their home despite difficult family situations. They do not resist gender inequality directly because family dignity controls them. They use survival strategies to manage daily life under social pressure and family control. The study shows that domestic violence continues as a structural issue linked to social and cultural contexts. It is closely related to household poverty, gender inequality, and urban vulnerability equally. Further research should consider women's subjective and emotional experiences through an intersectional approach. It is important to address the social and economic barriers deeply rooted in caste and ethnic groups that affect gender relations. These practices put women at risk for exploitation because of gender inequality. The recommendations associate women's experiences of violence with intersecting poverty, caste, and ethnicity. These intersections are particularly evident from this research in the Balkhu Corridor. It provides a theoretical basis for an intersectional approach to understand women's lived realities.

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Effectiveness of Project-Based Learning in Enhancing Mathematical Reasoning and Creativity: A Systematic Review

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Abstract

This systematic review incorporates empirical evidence about the effectiveness of Project-Based Learning (PBL) in developing the mathematical reasoning and creativity of students. Following PRISMA 2020 guidelines, twenty peer-reviewed empirical studies conducted on various educational levels and in different international contexts were identified and analyzed. Overall, findings across the included studies are largely in agreement in finding that PBL is related to positive effects on mathematical reasoning and creative thinking compared with more conventional teaching approaches, especially if projects are authentic and interdisciplinary and are supported with structured collaboration. PBL models combined with STEM learning, computational thinking or guided peer interaction (e.g. Think-Pair-Share) tend to report better outcomes. Greater flexibility, fluency, and originality in problem solving and deeper conceptual understanding and reflective reasoning are often exhibited by learners in real-world project tasks. Evidence from a meta-analytic synthesis also indicates a large positive effect of STEM-oriented PBL on creativity also suggesting that interdisciplinary PBL design may enhance creative outcomes. However, the generalizability of results is limited because of the short intervention periods, small sample sizes and the lack of consistency in assessment tools. The review concludes that well-conceived PBL - the provision of a solid foundation in inquiry, authenticity, and formative feedback - can be used to support the development of mathematical reasoning and creativity, while future research should focus on longitudinal and multi-site studies to consider the issue of sustainability in different contexts.

Keywords: Mathematical reasoning, creativity, STEM education, PRISMA systematic review

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Introduction

Mathematics is a cornerstone of education in today's world that contributes to individual cognitive development along with a wider social and economic development. Strong mathematical competence is closely attributed to technological innovation, productivity, and national development. Despite the importance of mathematics, for some reason, mathematics teaching has tended to be criticized for an over focus on procedural fluency, while there has been limited attention given to conceptual understanding, reasoning, and creative problem solving. Such approaches may limit the ability of learners to use mathematical knowledge in a flexible and meaningful way in a real-world context.

In response to these concerns, Project-Based Learning (PBL) has emerged as a learner-centered instructional approach based upon constructivist principles. PBL involves students in sustained inquiry, authentic problem solving and collaborative knowledge construction and develops the higher-order thinking skills. The rising importance of it has been closely tied to the education requirements in the twenty-first century, especially the attainment of critical thinking, creativity, collaboration, and communication skills (Ukobizaba et al., 2025). Within the field of mathematics education, PBL offers possibilities for learners to apply abstract concepts to practical situations and encourage logical reasoning, reflection and conceptual understanding (Ndiung & Menggo, 2024). Furthermore, the integration of PBL in the context of STEM education has proven especially promising in the achievement of mathematical reasoning and creativity in the context of interdisciplinary and context-rich tasks (Bicer et al., 2025; Kwon & Lee, 2025).

For the sake of conceptual clarity, this review defines mathematical reasoning as the capacity to analyze relationships, build logical arguments, make justifications, and make connections between mathematical ideas in different representations and in different situations. Mathematical creativity, in contrast, refers to learners' ability to create original, flexible and appropriate solution strategies (and often is reflected in fluency, flexibility, and originality in mathematical problem solving). These constructs are theoretically supported by the theory of constructivism in learning and the emphasis on active knowledge construction through inquiry and interaction, problem-solving theory and the importance of learning through involvement with complex and meaningful tasks, and creativity theory and the creative thinking perspectives of divergent thinking in particular, which emphasizes the generation of multiple ways to solve problems.

Although empirical interest in PBL with respect to mathematics education has increased substantially, its implementation and its claimed effectiveness remain uneven. Variations across to different regions and education levels, teaching methods

and teacher preparation, which contribute to mixed outcomes. For example, research in Indonesia and Malaysia has often achieved high gains in mathematical reasoning and creativity (Nasution et al., 2025; Hanafi et al., 2025), while studies in other settings have shown smaller or inconsistent effects, which are often explained by short intervention times, insufficient scaffolding or resource constraints (Wati & Wutsqa, 2024; Himmi et al., 2025). In addition, the way that reasoning and creativity are measured differs considerably between studies that limits the comparability between studies (Marfu'ah et al., 2023; Telegina et al., 2019).

More significantly, the available literature shows a number of critical gaps. First, most empirical research focuses on mathematical reasoning and creativity separately and relatively few studies investigate their joint development in PBL environments. Second, large methodological variations are present in terms of intervention duration, project design, and assessment tools rendering the strength of the cumulative evidence weak (Li & Tu, 2024; Rahayu & Putri, 2021). Third, the influence of contextual factors, such as resource availability, teacher expertise and limitations of curriculum, has often been noted but not systematically collated thus making it difficult to determine the conditions under which PBL works best.

Although recent secondary studies and bibliometric reviews have been conducted on the trends in PBL research (Hanafi et al., 2025; Ukobizaba et al., 2025), a systematic review that synthesizes empirical evidence on the co-development of mathematical reasoning and creativity from a wide range of educational context are limited in scope. In addition, limited reviews use a strict PRISMA 2020 framework for their research and focus on the latest empirical evidence. Addressing this gap is important for clarifying the effectiveness of PBL as a whole, identifying important moderating factors, and evidence-based instructional/curricular decisions.

Accordingly, this systematic review has a unique contribution in that it (a) considers mathematical reasoning and creativity within the context of PBL in the same review, (b) synthesizes the current state of empirical evidence across different educational levels and across different global contexts (using PRISMA 2020 guidelines), and (c) identifies the instructional, contextual, and methodological factors that affect reported outcomes.

The main objectives of this research are as follows:

1. To synthesize recent empirical evidence on the effectiveness of PBL in enhancing mathematical reasoning and creativity across educational levels and contexts
2. To identify key instructional, contextual, and assessment-related factors influencing the effectiveness of PBL in mathematics education
3. To examine research trends and methodological gaps that inform future research directions and instructional practice

This research has been conducted in light of the research questions mentioned below.

1. What is the overall impact of PBL on students' mathematical reasoning and creative thinking as reported in peer-reviewed empirical studies?
2. Which PBL designs or integration models (e.g., STEM-integrated PBL, Think–Pair–Share-supported PBL, and modified PBL) are associated with stronger learning outcomes?
3. Which contextual and methodological factors (e.g., educational level, intervention duration, assessment approach) contribute to variation in reported outcomes?
4. What research and practical gaps remain for future large-scale or longitudinal investigations?

Methods and Procedures

This systematic review was carried out following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines in order to ensure transparency, methodological rigor, and replicability. The review process was carried out in four consecutive stages - identification, screening, eligibility, and inclusion. A review protocol was drafted in advance to define the scope of the review, search strategy, inclusion and exclusion criteria, data extraction procedures, and quality appraisal approach. Establishment of this protocol before studies were selected helped to minimize selection bias and increase the reliability of the review. While the procedures were guided by PRISMA 2020 standards, minor modifications were made to account for the methodological diversity that is typical of educational research.

A thorough search of the literature was performed in order to identify relevant empirical studies published between 2016 and 2025. Searches were conducted in established academic databases including Scopus, ERIC and Springer-Link to ensure coverage of high-quality and peer-reviewed literature. In addition, Google Scholar and Research Gate were employed as supplementary search platforms rather than formal databases in order to find additional open-access articles and early view publications that might not have been indexed in the primary databases. In the Google Scholar database, search results were ordered by relevance, and the top 200 records were screened, in line with the practice of systematic reviews. Research Gate was mainly used to obtain full-text versions of already identified studies and to find additional peer-reviewed articles via authors. Manual searches of reference lists of key empirical studies and recent reviews (e.g. Ukobizaba et al., 2025; Hanafi et al., 2025) were also performed to complete the search.

The search strategy was based on fully-bracketed Boolean operators to allow reproducibility. Searches were performed in title, abstract and keywords, if that

functionality is available within the database. The final search string was: (“Project-based learning” OR “PBL” OR “STEM-PBL”) AND (“mathematical reasoning” OR “reasoning ability”) AND (“creativity” OR “creative thinking” OR “innovation”) AND (“mathematics education” OR “mathematics learning” OR “math learning”).

Studies were considered if they satisfied the following criteria: peer-reviewed journal article, published between 2016 and 2025, empirical research design including quantitative, qualitative, mixed-methods, Project-Based Learning or a modified PBL model, mathematics education, measured outcomes related to mathematical reasoning, creativity or both, participants included in the study were from a primary, secondary or tertiary education, the study was published in English. Studies were excluded if non-empirical or solely conceptual studies, if they were STEM education instead of specifically about mathematics, if the source was non-peer reviewed sources such as institutional reports, publication theses, or other sources (e.g., not a peer-reviewed article), but were full texts (no full text was accessible), incomplete, or inaccessible.

The first search produced 412 records. A total of 350 studies were screened for inclusion based on the titles and abstracts after the removal of 62 duplicates. Of these, 290 records were excluded because they were not relevant to PBL, mathematics education or the target outcome variables. The remaining 60 full-text articles were checked for eligibility and after methodological verification and relevance checks, 20 studies met all the inclusion criteria and were included in the final synthesis. The process of selecting the studies is summarized in a PRISMA flow diagram (Figure 1).

In order to reinforce the reliability of review results, a quality appraisal and risk of bias was performed for all included studies. Quantitative and mixed-methods studies were assessed against criteria of clarity of research design, adequacy of sample size, validity/ reliability of measuring instruments, clarity of intervention procedures, and appropriateness of analytical methods. Qualitative studies were evaluated on the following aspects: clarity of research aim, rigor of data collection, transparency of analysis, and credibility of interpretation. Based on these criteria, studies were classified as high, moderate, or low methodological quality. Studies that were judged as lower quality research were also retained but interpreted cautiously when synthesizing the data to avoid overgeneralization.

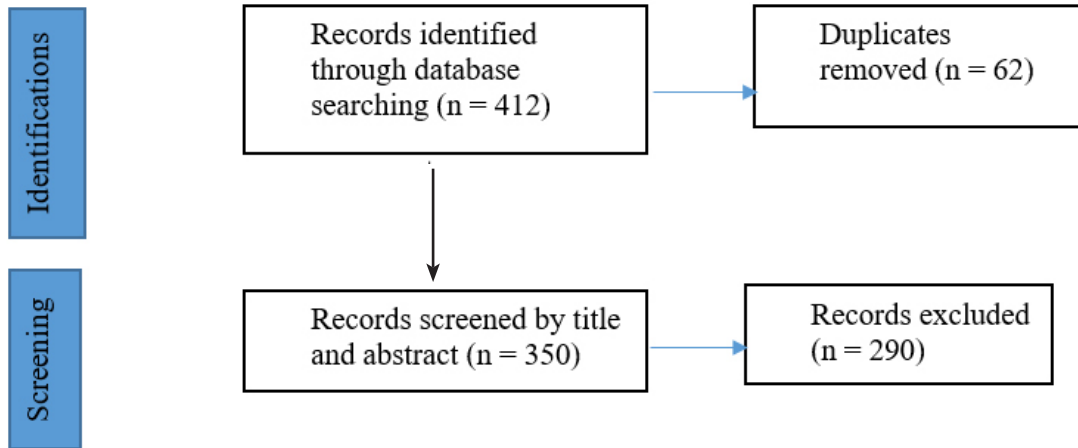
For the included studies, relevant data were systematically extracted and recorded in a comparative matrix addressing the author(s) and year of publication, country and grade, sample characteristics, research design, description of the PBL intervention (e.g., type and duration), measurement approaches for mathematical reasoning and creativity, key findings, and reported limitations. A narrative thematic synthesis was then used to combine findings across studies that used homogeneous designs. The synthesis focused on identifying recurring patterns related to the development of

mathematical reasoning, enhancement of creativity, and effectiveness of integrated or hybrid PBL models and contextual and implementation-related challenges.

The general procedure of the selection was based on the PRISMA 2020 (Figure 1)

Figure 1

PRISMA Flow Diagram



For the 20 included studies, data were systematically extracted and organized into a comparative table (Table 1), and key information such as the author(s) and year of publication, country or region and educational level, sample size and characteristics of participants, research design and methodology, description of the project-based learning (PBL) intervention (type, duration and activities included), methods used to measure mathematical reasoning and creativity, and key findings and reported limitations of each study were included. A narrative thematic synthesis was then carried out to bring together findings across studies with heterogeneous designs. Theme development occurred in an iterative coding process, whereby the key findings and reported outcomes were initially coded inductively to identify recurring concepts in relation to reasoning and creativity, instructional design, and conditions in the context. These initial codes were then refined and grouped into larger themes based on constant comparison between studies based on the review objectives. To contribute to the analytical rigor, results of findings were triangulated across different study designs (quantitative, qualitative and mixed-methods), and educational contexts, so that themes represented convergent evidence rather than single study results. This process led to four main themes, namely: (1) improvement in mathematical reasoning through PBL, (2) fostering creativity and innovative thinking, (3) effectiveness of STEM in and modified PBL models, and (4) problems of context and implementation.

Results

This section presents the results of the systematic review according to the 20 studies that met the inclusion criteria. The various studies included were based in different geographical settings and were carried out in Indonesia, Malaysia, China, the United States, Pakistan, Nigeria, Russia, Rwanda and Hong Kong. A variety of research designs have been used among the reviewed studies: experimental, quasi-experimental, mixed-methods, descriptive, bibliometric, and meta-analytic research designs.

The results are presented in two parts: (a) a descriptive overview of the included studies and (b) a summary of reported outcomes that are related to mathematical reasoning and creativity in the context of PBL.

The results are organized into two sections: a descriptive overview of the included studies and a thematic synthesis of their findings.

Descriptive Overview of Included Studies

Table 1 provides an overview of the twenty peer-reviewed studies that were included in this review. The studies are a mix of classroom-based empirical studies, mixed-methods studies and secondary studies (bibliometric and meta-analytic reviews). Most of the studies were carried out at the level of secondary education, followed by primary education, tertiary education, and teacher education. Indonesia was the region with the highest number of empirical studies, but other regions were also covered to a less extent.

Table 1

Descriptive Overview of Included Studies

Author(s) & Year	Country / Level	Design	Focus	Main Findings
Ukobizaba et al. (2025)	Rwanda, Secondary	Review	PBL in Math & Science	Reported positive outcomes related to creativity, reasoning, and collaboration
Prayekti (2025)	Indonesia, Middle School	Quasi-experimental	Mathematical reasoning	Reported higher reasoning scores in the PBL group
Hanafi et al. (2025)	Malaysia, Global	Bibliometric review	PBL trends	Identified growth in PBL research, with reasoning and creativity as dominant themes

Marfu'ah et al. (2023)	Indonesia, High School	Experimental	Reasoning ability	Reported improvement in reasoning with PBL and performance assessment
Ndiung & Menggo (2024)	Indonesia, Primary	Experimental	Reasoning and creativity	Reported gains in reasoning and problem-solving skills
Li & Tu (2024)	China, University	Experimental (PBL + TPS)	Creativity	Reported increased creative fluency and flexibility
Kwon & Lee (2025)	South Korea	Meta-analysis	Creativity	Reported a large effect size for STEM-integrated PBL on creativity
Telegina et al. (2019)	Russia, Secondary	Descriptive	PBL practice	Reported improvements in conceptual understanding and reasoning
Nasution et al. (2025)	Indonesia, Secondary	Modified PBL	Creativity	Reported higher creative thinking scores
Ferdiansyah et al. (2025)	Indonesia, Secondary	Experimental	STEM-PBL	Reported gains in creative reasoning and innovation
Rehman et al. (2024)	Pakistan, Secondary	Mixed-methods	21st-century skills	Reported improvements in engagement, collaboration, and reasoning
Johnson (2021)	USA, Special Education	Action research	Applied reasoning	Reported positive outcomes for learners with special needs
Ummah et al. (2019)	Indonesia, Junior High	Quasi-experimental	Creativity	Reported increased creativity and persistence
Rahayu & Putri (2021)	Indonesia, Junior High	Case study	Applied mathematics	Reported improved reasoning and collaboration

Himmi et al. (2025)	Global	Review	PBL practices	Reported positive outcomes with implementation variability
Cahyadi et al. (2024)	Indonesia, University	Evaluation	Creativity and innovation	Reported innovation gains with strong scaffolding
Wati & Wutsqa (2024)	Indonesia, Secondary	Comparative	Reasoning and self-regulation	Reported comparable reasoning outcomes across instructional models
Bicer et al. (2025)	USA, Pre-service teachers	Mixed-methods	STEM-PBL	Reported enhanced mathematical creativity
Han et al. (2016)	USA, Secondary	Experimental	Critical reasoning	Reported improved reasoning and critical thinking
Ji & Wong (2025)	Hong Kong, Primary	Experimental	Computational thinking	Reported gains in creativity

Across the included studies, outcomes relating to mathematical reasoning were often measured using achievement tests or other assessments of reasoning or performance-based tasks. The majority of empirical studies indicated that students exposed to PBL post-intervention reasoning scores were higher than in comparison or control groups.

Outcomes associated with mathematical creativity were measured using creativity tests, rubric-based assessment of student products, or measures such as fluency, flexibility and originality. Several studies reported increased levels of creativity-related scores and/or enhanced creative performance as a result of PBL interventions, especially in studies involving either STEM-oriented or modified PBL designs.

Studies in which integrated or hybrid PBL models were implemented, including STEM-integrated PBL, Think-Pair-Share-supported PBL, and computational thinking-oriented PBL, often had positive results in both measures of reasoning and creativity. A meta-analytic study found a large aggregated effect size for outcomes of creativity related to STEM integrated PBL interventions.

Despite these reported outcomes, there were also a number of studies which reported on methodological limitations, such as brief intervention durations, small sample sizes and variability in assessment instruments. The geographical distribution of studies showed a strong focus of studies done in the context of Southeast Asia, with lesser studies from other regions.

Discussion

This section is used to interpret the findings of the systematic review and discuss the implications of the findings in terms of the theory, pedagogy, and research. Across the 20 peer-reviewed studies the evidence supports mathematical reasoning and creativity improvements for PBL, especially if it is implemented using authentic tasks, collaborative learning and proper instructional scaffolding. The summation of findings resulted in 5 interrelated themes supporting understanding of how and under what conditions PBL supports these learning outcomes.

Enhancement of Mathematical Reasoning

The reviewed studies indicate that PBL facilitates the development of mathematical reasoning by drawing upon the learners in higher-order problem-solving processes, which call for justification, explanation, and reflection. Empirical evidence, derived from experimental and quasi-experimental studies, has shown that students who have been exposed to PBL evidence enhanced analytical reasoning and argumentation capabilities as compared to students who have been taught using conventional instructional strategies (Prayekti, 2025; Marfu'ah et al., 2023). Contextualized project tasks, which include real-life or community-based problems, do seem to support connections between conceptual understanding and procedural knowledge (Rahayu & Putri, 2021; Ndiung & Menggo, 2024). These results are consistent with the knowledge construction theory of constructivism, which stresses inquiry, interaction, and reflection as the key elements in the learning process. However, there is also evidence that the gains in reasoning require the proper scaffolding and learner self-regulation as unguided projects may focus on completing the task rather than conceptual reasoning (Wati & Wutsqa, 2024).

Promotion of Creativity and Innovative Thinking

Creativity, one of the competencies of twenty-first century education, is always reported as one positive result of PBL implementation. A meta-analytic conducted study reported a high effect of STEM-integrated PBL on creativity ($ES = 3.88$), suggesting the potential strength of interdisciplinary project designs for the facilitation of creative thinking. Further empirical research has found enhancements in creative fluency, flexibility, and originality in the collaborative and design-based project work (Li & Tu, 2024; Nasution et al., 2025). Project tasks which entail manipulative construction or interdisciplinary product design are also linked to greater persistence and divergent thinking (Ummah et al., 2019; Ferdiansyah et al., 2025). Collectively, these findings suggest that creativity in PBL contexts is supported by learner autonomy, authenticity

of tasks, and opportunities for reflection, although an appropriate balance between structure and exploration is essential (Cahyadi et al., 2024).

Integration of STEM and Hybrid PBL Models

The synthesis leads us to the fact that the results of PBL are often supported by an integration with other complementary pedagogies such as STEM integration or computational thinking, or even well-structured peer interaction (such as Think-Pair-Share). Studies that employ hybrid models are reporting improvements in the accuracy of reasoning and creativity in products from interdisciplinary problem solving and peer-assisted reflection (Bicer et al., 2025; Han et al., 2016; Ji & Wong, 2025). There has also been evidence indicating that supports the deeper reflective reasoning, and the interdisciplinary integration supports the flexible application of mathematical knowledge (Li & Tu, 2024; Kwon & Lee, 2025). The reason is that these representational patterns are consistent with cognitive load and knowledge transfer perspectives that really emphasize the value of multiple representations and contextualized learning. Nevertheless as the hybrid PBL models are successfully implemented, they appear to necessitate advanced teacher expertise, carefully planned pedagogy, and continuous professional development (Himmi et al., 2025).

Mediators, Moderators, and Pedagogical Mechanisms

The effectiveness of PBL is mediated by a number of instructional and learner-related factors. Teacher scaffolding is revealed to be an important mediator to support the development of reasoning with guided inquiry and structured feedback (Prayekti, 2025). Creativity-related outcomes are influenced by learner autonomy and motivation, which allows them to engage in flexible exploration and be original in the problem-solving process (Li & Tu, 2024; Nasution et al., 2025). Longer intervention intervals and regular formative feedback have added strength to the evident learning increases while performance-based assessment in response to project goals seems to promote cognitive and creative growth (Marfu'tah et al., 2023; Ferdiansyah et al., 2025). Overall, the evidence seems to indicate that the effectiveness of PBL is dependent on an interaction of cognitive, motivational and contextual factors, rather than any particular instructional component.

Contextual Challenges and Implementation Issues

Despite generally positive findings, the review demonstrates the existence of a number of difficulties that affect the consistency and generalization of findings from PBL: Variability in terms of teacher preparation, resources availability and assessment practices add to uneven implementation especially in resource constrained settings (Ukobizaba et al., 2025; Himmi et al., 2025). Weak scaffolding, and/or poorly specified

assessment rubrics have been found to limit creative development (Cahyadi et al., 2024) and such infrastructures as short intervention times reduce the reliability of observed improvements in reasoning (Wati & Wutsqa, 2024). In addition, special educational needs learners require specific support to be able to benefit from PBL approaches (Johnson, 2021). The aggregation of studies in the Southeast Asian contexts further limits the cross-cultural generalization and hence wide geographical representation is needed (Hanafi et al., 2025). Collectively these limitations suggest the importance of research designs that are more comprehensive (large scale and longitudinal) and standardized in nature of assessment.

Overall, the results are consistent with the theories of constructivism and experiential learning that show that inquiry-based projects can include the cognitive and affective aspects of learning mathematics. From a pedagogical point of view PBL should be integrated into curricula in the form of carefully designed projects, continuous formative assessments and long-term professional development for teachers. At the policy level, the support of competency-based and creativity-oriented curriculum require institutional support in terms of resources, teacher training and interdisciplinary collaboration. Future research focuses more on multi-site longitudinal research, better measurement of reasoning and creativity, as well as more attention to educational contexts that are underrepresented, e.g. research on digital and hybrid learning environments. Together, these findings make PBL an interesting pedagogical approach to encourage both analytical reasoning and creative competence in mathematics education.

Conclusion

This is a systematic review of the empirical evidence from 20 peer-reviewed studies that used PBL to explore the effectiveness of this approach in mathematics education in relation to the enhancement of mathematical reasoning and creativity. Following the methodology of the PRISMA 2020 framework, the findings of the review were combined regardless of the different research designs, educational levels and geographical contexts. The reviewed evidence suggests that the PBL approach is consistently linked to improvements in both mathematical reasoning and creativity, especially if learning activities are authentic, inquiry-based and supported by structured collaboration and scaffolding.

Four important conclusions can be drawn from this review. First, PBL supports the development of mathematical reasoning because it engages learners in complex and real-world tasks that require the explanation, justification, logical structuring of ideas. Second, PBL promotes mathematical creativity through the encouragement of multiple ways of solving a problem, originality, and flexible thinking, proving that

creativity and mathematical rigor are not opposite dimensions of learning but can be complementary. Third, interdisciplinary and hybrid models of PBL (especially when combined with STEM models), tend to produce better results by transferring and applying knowledge of mathematical concepts. Fourth, the quality of implementation has a strong impact on the effectiveness of PBL, such as the scaffolding of teachers, the design of projects, the activities of formative assessment, and the support of the institution.

Despite these positive findings, there are a number of limitations of this review that should be acknowledged. The included studies were quite heterogeneous in terms of the duration of the interventions, sample size, and evaluation instruments which limits direct comparability and generalizability of results. In addition, a lot of the empirical evidence is concentrated in specific regional contexts, in this case Southeast Asia, with less studies in other parts of the world. Finally, inconsistencies at the level of operationalization and measurement of mathematical reasoning and creativity across studies limit the power of cumulative conclusions.

Based on the reviewed evidence, several practical implications emerge. For teachers, PBL should be integrated as an ongoing instructional strategy rather than a standalone activity, and projects should be designed to incorporate analytical reasoning and creative problem-solving. Curriculum developers and educational institutions should encourage the use of PBL combined with STEM through adequate time, resources, and interdisciplinary collaboration. At the policy level, recognizing that creativity and complex problem-solving are vital learning outcomes, along with investing in teacher professional development, is essential for the effective implementation of PBL.

Future research should address the identified limitations, such as conducting longitudinal studies and multi-site studies, creating more standardised instruments for assessing mathematical reasoning and creativity, and studying the implementation of PBL in underrepresented and digital-mediated learning environments. Overall, this systematic review adds to the literature in terms of clarifying how and under what circumstances PBL supports the joint development of mathematical reasoning and creativity providing evidence-based guidance for researchers, educators, and policy makers.

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Ascribed Rites of Passage among the Tharu Communities of Western Nepal

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Abstract

This research aims to explore intercultural influences effect on the rites of passage in the Tharu communities of western Nepal. The study highlights on the complex relationship between traditional practices and contemporary changes on the rites of passage. Based on the ethnographic design, data were collected through *Baatchit* (conversational interviews) with eight social elites, comprising four elders aged over 70 and four Tharu teachers from higher education, as well as field observations with self-reflection. By applying modernization theory and Bhabha's hybridization theory, the data were analyzed and interpreted through thematic as well as narrative analysis techniques centered on the rites of passage related to birth, marriage, and death. The findings of the study focused on a strong commitment to preserve cultural heritage, even within shifting lifestyles. However, the formal education of Nepal, the western social media shifting profession play a crucial role in influencing local practices, resulting in a hybridization of traditions. The study highlights the necessity of adapting traditional rites by incorporating modern elements to ensure their relevance for future generations.

Keywords: Interculture, Tharus, modernization theory, hybridity theory

Introduction

Rites of passage indicate the foundational practices regarding critical life transitions, including birth, marriage, and death (Gennep, 2022). It is also known as ceremonial responses developed by the society, i.e. changes in a person's life like social status (Gennep, 1960). Thus, shifting life spans from conception to birth,



reaching adulthood with entering married life, death or changes in individual's status. Tharu communities of Western Nepal practice those customs which are firmly rooted in agricultural and communal traditions. Such customs are the symbols of social unity and cultural identity. Traditionally, these rituals are characterized by symbolic performances, spiritual invocation, and social reinforcement, reflecting values of kinship and moral order. Rituals are an essential part of human nature, serving to unite us, give meaning, and help us understand our identity (Xygalatas, 2022). However, globalization, migration, and the pervasive influence of Western media have catalyzed changes in these rituals. The Tharus are one of the oldest ethnic groups (Ashokakirti, 2008; Chaudhary, 2012; McDonough, 1997; Sapkota, 2014). Indigenous groups such as the Tharus are fighting for equal respect and the rights of indigenous peoples as outlined in international human rights agreements, including ILO Convention No. 169 and the UN Declaration on the Rights of Indigenous Peoples (Limbu, 2017).

Indigenous populations are believed to represent about 35 percent of the nation's 30 million inhabitants (Subba et al., 2014). Among them are the Tharus, the second largest group, i.e. 6.6 percent. Nepal has room for more than 125 caste/ethnic groups (Central Bureau of Statistics, 2012). Nepal's National Population and Housing Census of 2021 identified 142 distinct castes and ethnic groups (National Statistics Office, 2021). This represents an increase from the previous census conducted in 2011. Specifically, 125 of these castes and ethnicities were already known and recorded in the 2011 census. However, the 2021 census discovered an additional 17 castes or ethnic groups that had not been previously documented. This new data reflects a more diverse and complex ethnic landscape in Nepal than was previously recognized. Out of these groups of people, the Government of Nepal has classified 59 Adibasi/Janajati into five groups, and the Tharus are kept under one of the marginalized categories.

The Tharus, an indigenous community residing in Nepal's Terai region, possess a deep-rooted history of rituals that highlight their communal identity. The birth rituals such as Thasaura puja, chhathi, and murbhwoj (mundan), have substantial spiritual meaning. The ceremonies regarding marriage of Tharus are unique traditions which include various rituals and communal celebrations.

As Inglehart and Welzel (2005) emphasized that modernization theory focused on Cultural changes with new traditions and new social norms due to economic advancement and education. In addition to this, Joshi (2025) claims that the modernization influences the social and ritual aspects in Nepal, and traditional customs are changed due to advancement in higher education. In this context, Guneratne (2002) demonstrates how Tharu rituals have evolved through interactions with the modern state and educational systems. Additionally, Yankuzo (2014) argued that globalization includes transformation in the lifestyles through introducing communities to external practices whereas influence of Western media is related with modernity.

The concept of cultural hybridization is the interplay between the Tharu traditions and the modernity. It is not only the copying new traditions rather it is a process of combining local and global influences on the traditions (Bhabha, 2004). The earlier research studies on the Tharus have exclusion of the Tharus on socio-politics. Very few studies have illustrated the distinct interactions between intercultural influences and rites of passage through a hybridization approach. Due to various phenomena such as education, mass media, employment and cross-cultural interaction of the individuals causes to changes in social norms. These influences challenge traditional practices and encourage adaptive strategies that balance preservation with modernization. This study examines how Western culture has influenced the Tharu rites of passage in western Nepal, focusing on the interplay between cultural continuity, adaptation, and hybridization.

Literature Review

The tribes in India have come into contact with advanced cultural groups. They have come into direct contact with missionaries, administrative officers, contractors and their agents, *Jamadars* due to which diffusion of culture has taken place in tribal areas (Majumdar, 1947). Furthermore, the contacts between primitive tribes and civilization may stem from several factors, including the presence of mines and minerals in tribal areas, the emigration of tribal people, the establishment of a network of communications, the work of missionaries, administrative officers, and war (Majumdar, 1947).

Examining cultural change requires consideration of three levels of reality: the influence of the dominant culture, the essence of Indigenous life that the dominant culture aims to affect, and the occurrence of independent change driven by the interaction between the two cultures. The typical phenomena of change, the adoption or rejection, the transformation of certain institutions and the growth of new ones, are ruled out by the concept of a well-integrated community or culture (Malinowski, 1961). Moreover, the social structure, lifestyles, religion and beliefs of the people are highly influenced by the conquests of foreign powers and cultural movements. Along with this modernity and tradition are inseparable from specific tradition and modernity and modernization include some process of westernization (Gusfield, 1967).

Guneratne (1994) investigated the Tharu class and found out that the Tharu groups were increasingly mixing with each other as the forests were cleared and communication networks were set up. At the same time, they kept on being social and moral communities, different from each other. The elites started to see themselves as new sub-units of social reproduction. They formed marital bonds with peers from other groups, uniting through shared education and adaptation to Nepalese culture. Consequently, their material culture and consumption patterns began to differ from those of poorer local communities. In other words, modernization made the upper echelons of Tharu society more similar to one another.

In addition, modernization includes a positivist spirit, communication, the spread of literacy, media exposure, economic participation (per capita income), political participation (voting), social mobility, and seeing personal prospects in terms of achievement rather than heritage, rationalization of ends (goals of society should be rational), and it is used in the sense of good (Srinivas, 1969). Likewise, the transformative situation of the global economic aspects deeply influenced the indigenous people. And the interconnection of indigenous people with socio-economic and political conditions at the global level can be observed (Clifford, 2013). Similarly, Internal colonization occurs among Indigenous peoples due to the colonization by the state in which they reside, and communities sharing a common ethnicity, language, history, and culture are considered nations (Maaker, 2018).

Hybridity means ‘in-between space’ in which opposing cultures come together and clash. Thus, this concept may suggest a new position for the postcolonial subjects. Bhabha tries to understand the feelings of people who are in-between hybrids and identify their relationship with society in the postcolonial period (Bhabha, 2004). Aoyagi et al. (2020) argued that neo-ethnic fashion empowered its enactors to play with global/local and colonialist binaries. Neo-ethnic fashion is derived by combining theories on fashion, body, and cultural empowerment with ethnographic observations and interviews.

The new ethno-episteme raises the issue of ethnic nations with reference to the impact of the global market. Along with this, third-world natives adopt business-mindedness and how they managed to modernize themselves. Natives of third world are capitalized on their symbolic and material cultures as well as their identities (Aoyagi et al., 2020).

Ismail (2021) Traditions function as symbolic tools that help maintain identity boundaries while also adapting to changing socio-economic conditions. Although modernization brings about disruptive changes, the ability to symbolically reinterpret—often supported by digital media and education—allows traditions to remain strong and serve as valuable cultural resources. Further, Sokk (2024) illustrates the impact of modernization on indigenous culture and the way of cultural continuity by the community in the context of external socio-economic influences. The traditional languages are challenged by the modernization; however, it enhance the preservation of core values of the traditions. Additionally, the study focused on the impact of migrant people from hilly region on Tharus culture within modernization and urbanization. As a result, the significant changes can be seen in the rites of passage such as birth, marriage and various festivals.

Based on the above literatures, the cultural transformation on various aspect of Tharu culture reflects their identity. However, there remains a need for more focused research on the influence of intercultural factors such as Western culture, Eastern

culture, and mainstream culture, on the rites of passage among the Western Tharus of Nepal. Modernization theory and Bhabha's hybridization theory provide a useful lens for analyzing the process of change observed in rites such as birth, marriage, and death.

Methods and Procedures

Methodologically, the study employed an ethnographic research design. I selected two rural Palikas of the Kailali district of the Far Western Province of Nepal as the research site for this study. Two Palikas were selected - Janaki Rural Municipality (JRM), 52.94% Tharu population (Janaki Rural Municipality, 2077 B.S.), and Kailari Rural Municipality (KRM), 87.50% Tharu population (Kailari Rural Municipality, 2074 B.S.) out of the respective Rural Municipalities. I employed two tools for the qualitative data collection. The research tools include Baatchit guidelines and field observation form. Eight social elites were selected through purposive sampling. Among them, four informants were over 70 years old social elites and represented traditional knowledge, while four were Tharu teachers engaged in higher educational institutions. Using qualitative approaches, I began my research work with respectful and prolonged dialogues with social elites as well as elderly people who have extensive knowledge of Tharu community and their culture.

At first, I developed a knowledge base through document study and policy documents and made an overall plan before the field visit. Then I made a preliminary visit to the research site for informed consent and to make a detailed plan for *Baatchit*. The informants were informed about the issue and purpose of the Baatchit prior. The oral consent for participating in the Baatchit was assured before entering into the real talking. Finally, I was involved in observation to obtain information on rituals. Information collected through Baatchit, observation, and field notes was revisited for multiple rounds. I followed the thematic analysis approach and narrative analysis. At first, I coded materials using a coding framework based on the research questions and data document. Once all the data were coded, themes were identified and refined. Then, I constructed the themes. The thematic analysis was guided by theoretical frameworks of modernization and hybridization. For ethical issues, the participants have been pseudo-named

Results and Discussion

The thematic result of the data have been presented, discussed, and interpreted under three themes.

Interplay of Continuity and Modernization

I found that the Tharu community shows the multifaceted relationship with resilience and adaptability. In the Tharu community, the economic transformations are notable although they have much more commitment to safeguarding cultural heritage. Selected Elders frequently noted that important ceremonies, such as Thasaura pujana, Chhathi, Murbhwoj (mundan), and marriage customs, are still conducted, although with some practical adjustments. These rituals are preserved for their spiritual significance, social recognition, and to strengthen community identity..

Regarding the Birthday ceremony, the elder woman (E2) noted that the mid-wife takes care of the child, and the mother stays in a separate room i.e. 'Saunri room'. Further, she opines that if anybody touches the sauri room or mother within 10 days, then he/she must be purified by the sunpani (gold water). This indigenous birth rituals are influenced by the modernity like health worker's voice and spicy Thasaura pujana (God's offering). The health worker clearly directs the newborn to the mother, showing the baby in sunlight before ten days, too. This event is the case of hybridization. The E1 further added that many Tharu now for hospital births, combining modern medical care with some traditional post-natal practices. The reason behind forgetting traditional cultures, is the imitation of people's culture by imitation of that is the leading cause of changing and forgetting our culture. Similarly, Elder (E4) shared her experience about the "Happy Birthday" celebration with costly gifts and food, and my grandchildren celebrated my birthday with Tharu foods. This clearly shows that tradition is shifting to modernity, not the old but the new.

I had the opportunity to attend a wedding ceremony at my relative's home. I observed that bathaniya (Tharu unmarried young girls) wore lehenga mixing Dang, Banke, and Bardiya and kailali style of lehenga; however, no one could identify which place the lehenga belonged to. Similarly, the dress up of the bride and bridegroom couldn't be identified as they belong to Tharu. I stayed there with my family, so I heard modern music, and the youth enjoyed the music. Meanwhile, the bride's mother stopped the music so they could follow the rituals like Mangar (a song). The participants in that song were only the old generation. One of the youths shouted who stopped the music? They had no patience. After that, my family went to a party with a modernized party system, but some typical Tharu food items can be seen, and hospitality was Tharu essence. The outlook of the decoration looked modern. These are some observations that reflect the real scenario of the marriage of the Tharu community. It indicates that Tharus are not totally detached from their rituals nor totally attached to them. This contradiction in the marriage system shows what I call Indigenous hybridity.

Regarding this marriage system, elder (E5), a 97-year-old woman, based on her own experiences, distinctly said that the role of Barghars in the marriage system is drastically changed, i.e., the secondary role. The senior family members arranged

the whole marriage ceremony. She added that the duration of the marriage was lengthy in the past. However, they follow the rituals and marriage style as the mainstream culture. The views of the E5 prove that the marriage system is hybridized. Neither people follow the modern and western nor typical; Today's Tharus have generated their Marriage procedure. As E3 shared her voice in this way:

Gaun bharik akke din sange baraat jainaa, sange bitya pathaina fagun me huina. Akkedin kalek tab bhoj 8/9din huye. Akke din, akke jewnaas baithanaa... Ab to jabbe paitainthain tabbe. Ekghachi atraajun baraat aaith to laike cholo... Ab to apnahi mann parake jaaitain chahe jaisin rahe oine jaanai.daai babanke wastaa nai ho... Aajhkaal uhe “dhammk dhammak waalaa” baja tab to darjiwaalaa baajaa rahe. Darjiwa aye dhol bojai, sahnaai, timki, dhol tintho rahe. (*Batchit* with E3)

The English Translation of the above verbatim is: In the past, the marriage ceremony was arranged for a village on the same day, in the same month. Same 'Jewnass' (a separate place for the bride's group to stay during marriage at the bridegroom's home). It may be a son's or daughter's marriage, but the marriage was up to 8/9 days. Today, the music is modernized by DJ (Dhammak dhammak wala) instead of three musical tools sahnaai, Timki, and drum (dhol) by the Darjiwa (Tailor). The E3 excerpt reflects that the marriage system is westernizing and modernizing, too. Some couples follow love marriage, shortened ceremony durations, and incorporation of non-Tharu wedding elements.

One of the elite's (E4) voices said, “Hamre harohiya rahi, harohiyai Rahab” (we were plowmen, and we will remain plowmen). He proudly said “I plowed the field with a traditional plow from the past. However, the plow was replaced, and I applied a tractor with the adoption of modern farming techniques.” He accepted that his life became more manageable and became a well-equipped farmer. He sold more crops than before and was happier than in the past. Similarly, another elite E3 added that animistic beliefs and worship of nature deities and ancestors are becoming less of a priority. He showed himself an example like this, “I am a pure follower of Hindu God Ram (Bhagat in Tharu); I believe in Guruwas and herbal medicines as well as modern health care. Both the systems are valuable for me.” He gave another example of adopting Christianity by his close childhood friend but retaining some traditional practices like food and hospitality traditions. These observations notified that the Tharus livelihood became, as Bhabha (2004) said, a hybridization of two good things together

In this context, the elder E2 shared his experiences while doing *Batchit*, Nowadays, the people participated in the marriage ceremony among Tharu community performed the activities like singing maangar (especially marriage song) for the cultural shake only. The singers feel inferiority due to dominance

of modern musical songs like DJ songs. Similarly, other rituals of categorizing the various traditional works on the management of marriage ceremony like cooking, managing woods and green leaves, meat etc. has been changing to the contractors of all the managerial aspects of the marriage ceremony (personal translation).

Tharu people in getting married are evolving from community, based, mutual, help, labor and folk, song performances to more commercialized, DJ, driven events. Such a transformation has been interpreted by the modernization theory as a change from the traditional forms to the modern ones. At the same time, Bhabha's concept of hybridity offers an explanation for the fact that both forms still coexist in a combined, "in, between" space. The singers feelings of inferiority reveal a shift in values whereby "modern" media (DJ, film songs) are perceived as higher status than local folk forms, thus suggesting that native skills are culturally depreciated under the glamour of urban, mass, mediated culture. For Bhabha, the wedding becomes a hybrid "third space" where DJ music and contractors organize the sound and management, but *maangar* is still sung "for the sake of culture," thus the event is mixing global/modern styles with Tharu ritual elements, not replacing them.

However, Structural factors like education and urbanization have led to the younger generations, including those in Nepal, finding different ways to carry out the rituals. Changes in clothing, music, and the increasing use of formal institutional venues (banquet halls, hotels, party palaces, churches) during festivals and weddings are among the most noticeable signs of Western or global cultural influence in Tharu community. In this context, Teacher A said while batchit as follows:

Giving birth in hospitals instead of at home, organizing formally staged wedding receptions, and making photography and videography central to lifecycle rituals are some of the practices that have become increasingly common worldwide as a result of the globalization as well as medicalization and commodification of birth and marriage (personal translation).

The aforementioned quotes that these developments may be seen as a younger generation of Tharus youth who are adopting Western, style or globally circulating status symbols modern fashion, decorated reception spaces, and curated media images to demonstrate their modernity and their cultural alignment with imagined global standards. As Onta (2001) indicated that the spread of information has hastened the blending of cultures, as both urban and rural communities embrace practices, styles, and values highlighted in the media.

Cultural Hybridization in Ritual Practice

The interaction between traditional customs and modern influences is best understood through hybridization theory, where local and global elements blend to form

novel practices. Hybridization occurs when traditional and Western elements coexist within a single ritual event. The findings highlight several instances of this: marriages often feature priest-led Hindu rituals followed by Western-style receptions, and initiation ceremonies integrate traditional prayers with modern educational activities. The teacher C emphasized that “the names of the Tharu students in the school can be seen as Hinduized or westernized names. The birthday celebration among Tharu students can be seen as usual as foreigners wearing modern dresses and music.”

Tomlinson (1999) illustrates that globalization and culture are deeply intertwined, each shaping and redefining the other. Likewise, modernization theory suggests that social changes will be those in which a society moves away from kin- and belief-based organization toward rational, bureaucratic, expert-led institutions such as formal health services and hospitals. Examples of changes in social behavior in line with this theory are: switching from home delivery to hospital delivery, from family-managed placenta burial to standardized placenta pits, and from ritual fire to medically supervised thermal care. The teacher B focused on

The “modern” methods of risk, hygiene, and safety management are gaining ground as a consequence of the increased literacy, health education, and the growth of formal quality services, which often come to the rescue of home, based familiar rituals by branding them as backward or unsafe, while at the same time, legitimizing the biomedical procedures as the signs of progress and development.

Bhabha (2004) defines hybridity as the blending of cultures that produces “in, between” or “third,” spaces where new hybrid forms emerge instead of clearly delineated “broadly traditional” or “modern” identities. The third space for birth practices, collocates hospital delivery and placenta, pit disposal with domestic purification rites, indigenous principles of naming, and continuing ideas of ritual pollution and protection to produce a hybrid regime of childbirth. The fact that the mother is only prohibited from touching the deities but is otherwise free to perform all the usual household tasks indicates that the negotiation between the previously very strict purity rules and the new understandings of women’s agency, health, and equality is ongoing. This situation is a perfect example of hybrid subjectivities.

Modernization theory sees this change as the breakdown of the kin-based, ritual authority that was the mother’s home and the maternal uncle was the main ritual performer, and the rise of urban, individualized, consumer-oriented, and service sector practices, such as hotel celebrations, flexible participation of the uncle, and the use of purchased gifts. On the other hand, the old way of mundan at the maiti by sacrificing domestic animals, drinking local liquor, and feasting with a wide kin network is a more traditional setting where the extended family, subsistence resources, and local ritual specialists determine the social life and status. The teacher D noted that

Tharus use the invitation cards for both the mundan ceremony and marriage ceremony instead of the haldi (turmeric). However, they just rub the turmeric on the invitation card for good symbol. In the death funeral, Tharus have been using the modern way i.e. cards also called 'kahawot' for inviting the relatives and their own clan for the last day of funeral.

When the occasion takes place where the maternal uncle is available, it indicates increasing mobility, participation in wage labor, and time constraints, as the ritual now adjusts to the work schedule, migration, and urban living instead of requiring everyone to go back to the village. On 2nd January 2022, my own elder mother's death funeral day, one of the family members asked me what the name of the pit was for burying the dead body. Then I was shocked and asked seniors and older people about that pit made for dead bodies. One of them said 'Garya'. I feel that another language also pressures me. Elder (E4) expressed that some of the Tharus now practice cremation (following the Hindu culture) and shorten funeral periods due to economic as well as other causes. I noted that very few core changes in funeral activities in Tharu communities. The Tharus adopted other religions like Christianity, and devotees of Other Hindu Gods were hybridized, but most of them were slightly influenced by the different cultures. Regarding this issue, Elder as well as Guruwa (The Tharu priest) showed that he was a devotee of the Hindu God Rama. He shared the funeral, attending his community (Bhagat group). Although he engaged in everyday routine work as Tharu, he behaved differently in any marriage or death funeral per his or their Guru's directions. He shortly shared that the dead body was buried according to the Hindu Dasnaami group, which is different from the Tharu. He never offers the 'chhanki' (holy liquid of alcohol). This overview illustrates how the Tharu culture has evolved over time while preserving elements of their traditional customs. I believe that the level of hybridity can differ greatly between urban and rural Tharu communities as well as among various Tharu subgroups.

Generational Negotiation of Identity

I found that there is the notable difference in generational adaptation process. Elders focus on maintaining rituals, valuing symbolic consistency more than convenience. In contrast, elders claimed that the Tharu youths prioritize practicality, aesthetics, and social visibility, reflecting their educational exposure.

It was the evening of Paush 14th when I was in conversation with elders, and a Tharu youth expressed concern about tomorrow. He notified me of the reason behind the tension, i.e., the Celebration of Paush 15 (a feast of far western non-Tharu People). I felt it was a phenomenon of cultural assimilation. Regarding the feast celebration process, Elder noted the youth's voice, "they shared money among Tharu friends only to prepare the Tharu food, especially 'dhikri'(steamed food on rice floor) and

pork with achar (pickle), etc.” He further added their other demands like remixing DJ music to his friend’s demand and the craze of modern songs. Such a craze towards other cultures in which celebration shows the Tharu flavor as a hybridization of Bhaba (2004). Further, he shared the causes behind the celebration of the festivals are “dekha sikhi” (seeing and learning) of others and values to the other.

Negotiation between different generations creates important cultural practices that help traditions survive. Cultural identity is shaped as a flexible and strategic collection instead of a static core; individuals in local contexts can utilize, reinterpret, or push back against global symbols to create new significances (Appadurai, 1996). The Elder people expressed their expression on careful about the Their culture. Further, the elders claimed that younger people see it as necessary to keep the culture relevant. The interaction between Tharus and the other cultural people leads to mixed forms that maintain cultural identity of Tharus while also accepting modern ideas. This interaction between generations creates an evolving ritual landscape that is crucial for the culture’s continued existence. The elder members are critical on any alterations; younger individuals view them as essential for the culture’s relevance. In the end, the influence of the modernization differing perspectives produces hybrid forms that sustain the culture as the community moves forward with contemporary life.

Conclusion

I concluded that the Western, Eastern and other culture influences on the Tharu rites of passage which leads to transformation of the rites of passage rather than a decline in tradition. Ghimire (2019) describes that the social change occurs due to globalization but the actual changes do not occur within tradition and culture. The rites of passages remain crucial to Tharu identity, due to education, mass media, and lifestyles of others. As a result, the rites of passage regarding birth, marriage and death have been adapted and hybridized rather than disappearing. The findings show that modernization involves specific practices like giving birth in hospitals, using invitation cards, hiring event planners, and including photography, videography, and DJs at important life events. These practices reflect larger ideas about influence of modernization, which includes literacy, growth of institutions, and market integration. However, significant changes in the rites of passage—like Thasaura puja, Chhathi, maangar songs, Tharu foods, and burial customs—still play a key role in shaping social memory and moral values, indicating that some traditions remain even with these changes. Additionally, Generational differences play an important role in these negotiations which causes hybridization. Elder informants focused on completing rites of passage with new social norms rather than deteriorating them. This reflects a broader trend on changing social traditions which is influenced by education and mass media.

The interaction between generations leads to compromises that respect tradition while adapting to new challenges.

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Determining the Sample in Qualitative Research

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Abstract

This paper focuses on the considerations in determining the number of participants for qualitative research because of the lack of clear guidelines in this area. The study has employed a semi-systematic literature review that is embedded with the researcher's experience. The study has concluded that the purpose of the research, methodological choices, theoretical framework and analytical strategy, data saturation, researcher's knowledge and experience, and institutional and supervisor's requirements need to be considered while choosing the participants in qualitative research. In addition, the focus has been to explore in-depth information from small number of participants. Generally, participants in qualitative research can be added or removed during the research process rather than the prior determination. This paper suggests that the researchers are autonomous to select the participants in qualitative research and they can choose from a single to twenty samples that can be varied upon the depth of the information required and the nature of the inquiry. While conducting the narrative inquiry, one to twenty or more participants can be selected with justification.

Keywords: Participants, narrative inquiry, purposive sampling, experience, identity

Introduction

The sample size determination is one of the major concerns of researchers for many years, particularly in carrying out qualitative research in social sciences. Many scholars have paid attention to the issues of deciding the sufficient sample size in qualitative studies (Barkhuizen, 2014; Blaikie, 2018; Morse, 2000; Wimpenny & Savin-Baden, 2013). Particularly, positivist researchers have been criticising the lack of generalisation in qualitative studies since it employs a small sample.

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The intent of qualitative research in social sciences is an in-depth exploration of the phenomenon (Hong & Cross Francis, 2020), rather than representing the study population (Boddy, 2016; Moser & Korstjens, 2018; Nakkeeran, 2016). However, the adequate sample size in qualitative research is debatable, and that makes the researcher confusing particularly to novice ones (Barkhuizen, 2014; Mason, 2010). Therefore, discourses on ‘examining the sufficient sample size in qualitative research’ are still relevant (Young & Casey, 2019) that invite a systematic exploration.

The dominance of the positivist approach nowadays is gradually decreasing since many of the graduate students have been motivated as they have been carrying out their research by employing qualitative research. However, in doing the academic study, both the master’s degree students as well as PhD scholars, have been facing the problem of determining the proper sample size for their qualitative studies. Generally, samples in qualitative research are called the ‘participants’ or ‘informants’ rather than respondents (Nakkeeran, 2016; Padgett, 2013). Hence, the debate of sample size turns into determining ‘the number of participants’ (Barkhuizen, 2014) for the qualitative research. I have also faced a similar problem and remained in a dilemma to determine the participants for my doctoral study at Graduate School of Education (GSE), Tribhuvan University (TU), Nepal as Barkhuizen (2018) confirmed that determining the number of participants is one of the dilemmas of qualitative research. There are multiple designs such as ethnography, grounded theory, case studies, narrative inquiry, phenomenology, and action research (Padgett, 2013). In addition, Padgett (2013) suggests that sampling varies upon these qualitative research designs as narrative inquiry, phenomenology, and case study use small samples. On the other hand, ethnography and grounded theory permit comparatively large samples. Fundamentally, “qualitative research is used to build theories, in which scholars embrace bias by considering human interactions between researchers and their participants” (Crick, 2021, p. 6). However, the epistemological base of qualitative research is the co-construction of knowledge from the researcher and the participants through in-depth exploration from small number of samples.

I am also a teacher educator at TU and I have supervised the master’s degree theses. Most of the students under my supervision have carried out qualitative research and faced the problem of determining a sufficient number of participants for their study. They used to ask me about the appropriate number of participants for their qualitative research. Likewise, I have been carrying out a narrative inquiry for my PhD study having six participants. During the proposal development, I was confused about the sufficient sample for my study.

However, narrative inquiry utilises a small number of participants in comparison to the other qualitative inquiry approaches. This confusion led me to reflect on my proposal for deciding the number of participants. As a qualitative researcher, I have

been motivated towards the discourse on the number of participants. In this way, the motivation for writing this article has two folds: first, my confusion about the sufficient samples for my study and the fear of being questioned or rejected by the GSE doctoral research committee. Second, my PhD supervisor advised me to pay attention to the justification of the small number of participants. As a result, I have included the justification section to select a small number of participants in my PhD proposal. Similar to my experience, Mason (2010) concluded that PhD researchers have been facing a problem of determining the participants in designing their qualitative research projects.

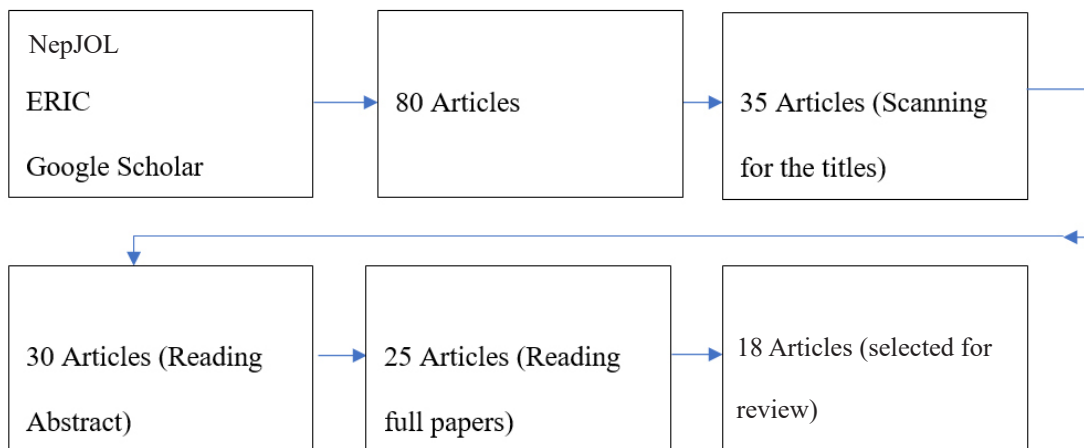
Sampling and sample size debate in qualitative research is one of the major components that is not emphasised enough in literature (Robinson, 2014). There is no rule of thumb or straightforward guidelines for determining the number of participants in qualitative studies (Patton, 2015), rather several factors affect in deciding the samples. For instance, in her foundational work, Morse (2000) identified the factors as the scope of the study; the nature of the topic; quality of data; study design, and the use of shadowed data (p. 4). Like the master's degree students, the concerns of the number of participants for qualitative studies are equally confusing for the PhD researchers too (Gentles et al., 2015). I have also spent a couple of weeks deciding the number of participants for my doctoral study. Similarly, number of participants is related to the researcher's identity since the construction of academic identity is a common phenomenon of the PhD scholars (Inouye & McAlpine, 2019). I wanted to make my identity as a narrative inquirer in my doctoral research. For example, in studying the sample size issues of PhD research, Mason (2010) found that "constituting sufficient sample size is frustrating for the PhD researchers" (p. 4). I have also experienced similar kinds of challenges earlier in the process of my proposal development. For instance, I was nervous about possible questions from the research committee on the number of participants in my doctoral research during the proposal defense.

Sampling strategies and the number of participants play roles in maintaining the research rigour of any scholarship. This paper contributes by offering the considerations to determine sample sizes for qualitative inquiry so that the paper will be helpful to the novice researchers particularly for the master's degree and doctoral students of education and social sciences. Additionally, this study briefly mentions about the researcher's identity considering the number of participants in qualitative inquiry that is lacking in literature. Therefore, this paper focused to explore and offer some guidelines in deciding the number of participants in qualitative research. More specifically, the paper aimed to answer the three research questions: (1) How could the sample of the qualitative research be determined? (2) What is the rationale behind utilising the small samples in qualitative research? and (3) What is the optimal sample size in qualitative research?

Methodology: Semi-systematic Review

This paper is based on my experience to determine the participant numbers for my PhD study. In addition, I have embedded my experience with existing literature. In qualitative research, the researcher himself or herself is both a tool and a participant. Therefore, the researcher's positionality and reflection influence the study (Berger, 2013; Tracy, 2020). Searching literature itself could be a methodology rather than just a review (Snyder, 2019). I have reviewed journal articles, books, and PhD dissertations in this study. For the review, this study adopted the semi-systematic literature review. This approach focuses on fulfilling the gaps that the existing literature has created (Snyder, 2019) to determine the number of the participants in qualitative inquiry.

I have searched the articles in different databases related to determining the number of participants in qualitative research. For instance, I have visited three databases namely the google scholar, Educational Resource Information Centre (ERIC), and Nepal Journals Online (NepJOL) for literature search. For the search, I have used keywords such as, 'sample size in qualitative research', 'qualitative sample size', 'number of participants', and 'qualitative sampling'. Besides the database search, I have also selected the books, PhD dissertations, and other relevant articles from free search. The articles selection process for the review is as follows:



I have employed the inclusion and exclusion criteria adopted by Wimpenny and Savin-Baden (2013) for determining the related papers on qualitative sample size. I have narrowed down the article through inclusion and exclusion criteria as shown in Table 1.

Table 1*Inclusion and Exclusion Criteria for Article Review*

Criteria	Inclusion	Exclusion
Date	2000 to 2021	Before 2000
Topic	Qualitative sampling	Not directly related to the sample size in qualitative research
Location	National and international literature	Sources that are not in the English language
Publication	Peer-reviewed journals Education-related and from other disciplines	Gray literature (reports, conference proceedings, articles in non-peer-reviewed journals)

Source: Wimpenny and Savin-Baden (2013, p. 315)

First, I visited Nepal Journals Online (NepJOL), which is currently a popular database of journals published from Nepal. Nevertheless, after reading the titles of articles (n=54) obtained from NepJOL, I concluded the articles were not relevant to this study. Hence, all the articles obtained from NepJOL were excluded from the study. Second, I found a few of the relevant articles while visiting Google Scholar and ERIC and employed the inclusion and exclusion criteria mentioned in Table 1. Finally, I experienced that the papers obtained from the databases were not adequate for the study and then searched for the more relevant resources besides the above-mentioned databases such as the ProQuest database. Then, I found a few more relevant resources such as PhD dissertations, books, and articles related to methodology (n=21). I read the abstract first and listed the relevant resources and finalised the additional resources (n=21) for this paper. Finally, the total number of resources (n=38) were selected.

Many scholarly works have offered narrative inquiry as a suitable methodological approach to study experiences (Butina, 2015; Caine et al., 2013; Clandinin, 2006). Additionally, the narrative inquiry could be “a unique methodological consideration” (Karpa, 2021) in capturing the lived experiences and reflecting the self. I have employed the narrative inquiry approach to relate the story of my experiences.

Findings and Discussion

The findings have been discussed on three themes: determining the sample size in qualitative research; small samples in qualitative research, and optimal sample size in qualitative research.

Determining the Sample Size in Qualitative Research

Determining the participants in qualitative research is problematic since various scholars have conceived it in their way. Deciding the participants remain under the sampling plan. The sampling plan refers to ‘who, what, where, how, and when to choose sources for data collection (Tracy, 2020). Various sampling strategies are applicable in qualitative research, and purposive sampling is the mostly applicable and relevant sampling technique for all kinds of qualitative research designs. Purposive sampling provides the researcher an in-depth understanding of the study phenomenon (Patton, 2015, p. 463), rather than generalising from one’s study. Moreover, Tracy (2020) highlights the importance of purposive sampling that “good qualitative researchers, at the very least, engage in purposeful sampling, which means that they purposefully choose data that fit the parameters of the project’s research questions, goals, and purposes” (p.82). In the same vein, I had adopted purposive sampling in my PhD study because purposive sampling allows me to select the rich-information participants that generally cannot be obtained from other participants. In addition, I had developed the inclusion and exclusion criteria for participant selection for my PhD research.

The intent of selecting a sample is to collect data from the participants. To collect the data, a specific method is required after deciding the sampling procedure and the number of participants for the study. The interview is the major and widely used data collection method (Robinson, 2014) for almost all qualitative research. The sampling plan decides “how many interviews are needed to ensure that the finding will contribute rich data” (Moser & Korstjens, 2018, p. 10). However, several factors have agreed on issues such as the purpose and research questions and nature of the study (Mason, 2010; Patton, 2015); nature and scope of the study (Morse, 2000); data type and collection method (Mason, 2010; Nakkeeran, 2016); data saturation (Boddy, 2016; Guest et al., 2006; Hennink & Kaiser, 2021; Mason, 2010; Young & Casey, 2019); budget and timeline (Tracy, 2020); theoretical bases and theoretical framework (Butina, 2015; Francis et al., 2010); analytical strategy (Morse, 2015) and the availability of the participants and one’s research knowledge (Barkhuizen, 2018) have contributed in deciding the number of participants in the qualitative study. Therefore, the literature informs that there is lack of specific prescriptions in deciding the number of participants. For instance, above mentioned scholars offered different perspectives in the determination of the sample for qualitative study. Regarding my ongoing doctoral research, I chose small sample since my research methodology is narrative inquiry.

I have been carrying out my PhD research on the identity of teachers in a contextual setting of different schools. I intend to explore the phenomena through an in-depth study. The qualitative inquiry focuses on multiple realities which is subjective. The knowledge construction is a collaborative enterprise between the researcher and

the participants. The qualitative inquiry follows an inductive process “where concrete, context-specific evidence are collected, then patterns and commonalities are identified to build abstract ideas and the theories” (Hong & Cross Francis, 2020, p. 2). Similarly, qualitative research explores the phenomena through inductive reasoning that utilises the thick description in data analysis. This informs me to explore the phenomena of teacher identity. For instance, inductive reasoning seeks patterns from the data to answer the research questions (Blaikie, 2018), whereas thick descriptions provide detailed context that “someone who did not observe or experience the phenomenon can make meaning of the behavior, statement, or object” (Hong & Cross Francis, 2020, p. 6). In the same way, small sample size allows me for the thick description which is not easily possible from the larger samples. Morse (2015) revisited her previous work (Morse, 2000) and offered the analytical strategy as the major factor in contributing to the number of participants. She further offered developing categories and themes in data analysis, determining the samples that researchers ask themselves whether they need further data from the participants, or they reach the stage of data saturation. Similarly, the concept of data saturation has been highlighted by other scholars. For instance, Guest et al. (2006) suggest that data saturation guide researchers decide the sample size based on the data obtained from the participants. Moreover, Hennink and Kaiser (2021) stress that purposive sampling and data saturation determine sample size. The concept of data saturation allows researcher to add more participants in their study.

Consulting the relevant literature, I tried to find if there is a straightforward way to determine the number of samples for my study. Nonetheless, I found there is no such way for deciding the number of participants in qualitative inquiry (Butina, 2015; Patton, 2015). Rather several factors need to be considered to constitute the number of participants for someone’s study. Institutional policy and structure are one of the major factors that are also related to the researcher’s identity (Inouye & McAlpine, 2019). For instance, GSE policies on carrying out PhD research also determined my identity as a researcher. There is not enough autonomy so I cannot go beyond the GSE guidelines. In my doctoral research, I have to capture the lived experiences of primary teachers and the small number of participants allows the in-depth exploration (Clandinin, 2006). From this kind of flexibility of taking small samples, I am developing my identity as a qualitative researcher with a small number of participants.

Small Samples in Qualitative Research

Qualitative research focuses on the in-depth exploration of the study phenomenon rather than the coverage in the breath. The purpose of the qualitative methods is not to generalise the findings to the larger population. Therefore, qualitative inquiry is value-laden and does not focus on the objective finding that lacks neutrality (Padgett, 2013). That’s why small samples are the best suited for my PhD research. A

small sample allows the researcher to be focused on the in-depth understanding in a particular social and cultural context which generally is not possible through studying the larger samples. Since the knowledge is co-constructed through the researcher and the participants, the qualitative research adopts the constructivist approach. Instead of using the larger samples “in constructivist or in-depth qualitative research, a single example can be highly instructive” (Boddy, 2016). In the same vein, I employed a small number of participants through purposive sampling, i.e. six primary teachers from the public schools (community schools) of Kaski district for my PhD research. Employing a small number of participants, I am recognised as a ‘certain kind of a qualitative researcher’ (Gee, 2000). That is why selecting only six participants for my PhD research fundamentally proves to be implacable. Similarly, as Gee (2000) notified there exists multiple identities even within an individual. These identities are both personal and professional. For example, I play various roles in different places just like teacher educator, teacher trainer, researcher at my working institution; PhD scholar at graduate school; father at home; member of the community in my society, etc. Additionally, I am writing research articles during my PhD research that labels my academic identity as a doctoral researcher.

The number of participants in qualitative research depends on the problem under study. For instance, a single participant could be sufficient to get insight into the problem in some particular context and cases. Due to these kinds of small samples, qualitative research is criticised by positivists as biased and lacking rigour (Crick, 2021). Larger samples do not allow an in-depth exploration of the study phenomenon in the qualitative study. That is why I have chosen a small sample for my PhD. The relationship between the researcher and the participants is an important aspect of the qualitative inquiry. Only a small number of participants allows the researcher to build such a relationship which is almost impossible from the larger samples. Generally, researchers spend a substantial amount of time in the field for their research to build a close relationship with the participants. The staying field of qualitative researchers remained to continue until they reached the stage of data saturation, particularly in grounded theory (Hennink & Kaiser, 2021) and ethnography. Data saturation is the stage that the participants repeat the same data they shared earlier with the researcher. When data saturation occurs, new data comes to stop from the same participants even doing the next series of interviews with them again and again. In addition, qualitative data, such as in ethnography are context-specific that a researcher explores from the particular cultural context as an insider (i.e., emic perspective). Emic perspective demands the inductive approach of doing research and data analysis. Tracy (2020) calls the emic perspective a “bottom-top or little big approach” (Tracy, 2020, p. 26). I have been collecting data by continuously engaging in the field in my PhD which is only possible from a small sample.

The larger samples do not support the in-depth understanding. Moreover, the larger sample size leads towards the superficial data. Most qualitative researchers collect the data by using open-ended interviews. For instance, Robinson (2014) states that an interview “typically seeks a sample size that is sufficiently small for individual cases to have a locatable voice within the study, and for an intensive analysis of each case to be conducted” (p. 29). Likewise, as Robinson (2014) suggested, the interview is the major data collection method in my PhD.

Researchers’ needs and judgment play a major role in constituting how many samples are required in a particular study. The research purpose guides the researcher to take such a decision of participants’ determination. Sample in qualitative inquiry is emergent since flexibility is the major concern of qualitative research. Therefore, participants can be added or removed as per the study needs and the level of sufficient data collection. Regarding the emergent nature of sample size, Patton (2015) notes that “the size and composition of the sample can be adjusted based on what is learned as field work is conducted and the inquiry deepens” and that “the emergent nature of qualitative inquiry applies especially powerfully to sample size. The sample can grow, or if saturation is achieved sooner than expected, the size can be reduced” (p. 474). Considering these kinds of suggestions, a small sample allows me to be flexible to add or remove the participants based on the sufficiency of the collected data. Qualitative researchers like me who are carrying out their academic research at their graduate school adopt small samples whereas the large-scale funded qualitative researches have been employing a large number of participants.

Optimal Sample Size in Qualitative Research

I have discussed the considerations to decide the adequate number of participants for qualitative inquiry in the above sections. Therefore, this section focuses on the adequate number of participants in different qualitative studies, including the PhD thesis. Finding the acceptable number of participants in qualitative inquiry is an ongoing debate (Mason, 2010) in social science research practices that lack a straightforward answer. It’s not easy to decide the optimal number of participants for qualitative research (Barkhuizen, 2014). PhD scholars often faced similar problems of participants’ decisions in their doctoral study. I had a similar issue that ‘how many participants is adequate for me? at the beginning of my doctoral study designing stage as Mason (2010) indicated. The issue of the number of participants in one’s PhD is also a matter of one’s academic identity (Inouye & McAlpine, 2019). One of the main reasons for this confusion is lacking the clear guidelines and criteria for selecting the optimal samples in qualitative research. There exist several pieces of literature that have discussed the issue of the number of participants for qualitative inquiry. While the number of participants in inquiry is one of the considerations for researcher identity and evaluating the research output, number of participants remains the issue of qualitative inquiry.

The number of participants could be an important factor in evaluating the

output which opens the possibility for future publications based on the study findings. So, my identity as a qualitative researcher has been assimilated to the sample size. For instance, Mason (2010) examined the sample size in 560 PhD qualitative theses based on the interview as only the source for data collection. This study reported that the average sample size was 31, the median sample was 28, and the largest was 95. However, the smallest sample size was only one on life history (narrative) research. He also found that “the most common sample sizes were 20 and 30 (followed by 40, 10 and 25)” (Mason, 2010, p. 10). Moreover, Mason (2010) reported that there is no logical (or theory-driven) reason in selecting the sample of the multiple of 10. The sample size used in qualitative inquiry is varied rather than uniform. For instance, I looked at the sample size of a recent PhD thesis from the reputed universities of the world that were using a varied number of participants. For example, Barkhuizen carried out his doctoral research having a single participant as a sample in his narrative inquiry (Barkhuizen, 1988 as cited in Barkhuizen, 2018). Furthermore, Barkhuizen (2018) argued that “a single participant was appropriate in this case since I aimed to gain an in-depth, intensive understanding of the teacher’s interactional patterns” (p. 120). Similarly, I have examined several recent PhD theses employing qualitative inquiry constituting a small number of participants that were below 10. Both the qualitative research studies carried out for acquiring an academic degree and other academic purposes have extensively employed a small number of participants. There exists diversity in using the number of participants in qualitative inquiry. Here are some of the examples of different qualitative approaches having participants ranging from three to ten. For example, three-participants narrative inquiry (Wise, 2020); four participants-narrative inquiry (Bentley, 2021); five participants-narrative inquiry (Gao, 2021); seven samples-narrative inquiry (Bryant, 2021); eight participants-narrative inquiry (Tiffany-Kinder, 2020); 10 participants-narrative inquiry (Crawford, 2021; Magalhaes, 2019). Moreover, I have found many studies besides the PhD research were also carried out with a single sample such as Barkhuizen (2021); Zhang (2020); Huang (2021).

Research design is another important contributing factor in selecting the sample for qualitative inquiry. In his study, Mason (2010) found the different number of participants in the various qualitative research designs. Based on the findings from Mason (2010) and other researchers indicate that the number of participants varies in different qualitative research designs are as follows:

Ethnography: Moser and Korstjens (2018) 25- 50 interviews

Grounded theory: Morse (2015) 30-50 participants; Morse (2000), and Moser and Korstjens (2018) 20-30 interview; Gentles et al. (2015); (Morse, 2015) at least 25 interviews;

Case studies: Barkhuizen (2014) 1- 135 cases; Gentles et al. (2015) 4-10 cases; Mason (2010) 1-95 cases

Narrative inquiry: Mason (2010) 1-62 (life history)

Phenomenology: Gentles et al. (2015) 10- 30 interview; Morse (2000) 6-10 participants; Moser and Korstjens (2018) fewer than 10 interview

Qualitative research (general): fifteen is the smallest acceptable sample size (Bertaux, 1981 as cited in Guest et al., 2006, p. 61)

Action research: Mason (2010) 3-67

The above-mentioned scholars have offered a different number of participants in qualitative research. However, researchers do not need to be rigid and structured to follow hard and fast rules in deciding the number of participants in their study. Moreover, qualitative research does not recommend using a particular number of samples rather it is generally varied on the type of data to be collected.

The above discourse on the number of participants for qualitative research has multiple applications for qualitative researchers in general and PhD scholars and master degree students in general. For instance, this paper has discussed the considerations for determining the number of participants along with the justification for qualitative inquiry. Likewise, Hennink and Kaiser (2021) also stress the rational justification in deciding the sample size for qualitative inquiry “rather than responding to the concerns of a more dominant positivist paradigm and their numerical expectations” (p. 8). Moreover, the paper focused on an adequate number of participants for qualitative research. Fundamentally, the number of participants for qualitative research varies upon the methodological choices and the nature of the study problem. Despite all the variations in deciding the appropriate number of participants, there is a common consensus that the qualitative inquiry employs a small sample. I have employed a narrative inquiry as a methodological approach to study the phenomenon of teacher identity in my PhD. This approach demands making sense by capturing teachers’ lived experiences through their stories. By the nature of the study problem, the small samples helped me to understand the identity of teachers that is generally not practicable through the large samples. That is why I have chosen only six participants as optimal samples in my ongoing PhD research.

Conclusion

The paper focused on the considerations for determining the number of participants and the justification of a smaller sample for qualitative research. Determining the adequate number of participants in qualitative inquiry is an ongoing debate that created a dilemma. Several contributing factors decide the participants in one’s qualitative inquiry. The purpose and research questions are the major factors to decide the participants. While the qualitative inquiry is a flexible methodological approach, there are no strict rules about participants number that need to be selected prior. However, the focus of the qualitative research should be on fulfilling the research aim rather than representing the large samples.

The purpose of qualitative inquiry is to unravel the phenomenon in-depth rather than the generalisation of the findings. Similarly, data saturation, time and budget available, methodological choices, theoretical framework and analytical strategy, researcher's knowledge are other major concerns. Besides, institutional and supervisor requirements are to be considered while taking decisions about the number of participants. However, the researcher's knowledge, research design, and methodological design are the concerns that need to be considered while determining the participants in one's qualitative inquiry.

I reflected on myself to decide the participants that are adequate to answer the research questions. As I am employing narrative inquiry as a methodological approach to explore teacher identity, I decided to select six primary teachers for my study.

The qualitative inquiry believes in subjective and multiple realities as its ontological stance and co-construction of knowledge. Concerning this focus, small samples through purposive sampling allow the researcher for an in-depth understanding from the rich-information participants and thick descriptions. The small samples allow the researchers to build a closer relationship with the participants since they have to spend a long time in the field and explore the phenomena in-depth. A larger sample selected from the probabilistic sampling method does not ensure finding the desired participants and also leads towards the superficial data.

The number of participants is guided by different methodological approaches of qualitative inquiry. For instance, phenomenology, narrative inquiry, and case study accept small samples, i.e., from a single case to 20, whereas ethnography, grounded theory, and generic qualitative research utilise larger samples. In this way, it could be 10-50 or more participants depending upon the nature of the study and the information to be collected. Compared to the individual academic research, large-scale qualitative research utilises a larger number of participants, i.e. up to 100- 300. Rather participants in qualitative research can be added or reduced based on the information sought and the stage of data saturation. In the above section, I have presented examples of a few studies having a varied number of participants. Therefore, I suggest including from a single to 20 participants for the qualitative research whichever is suitable in a particular study.

This study implies determining the participants for qualitative research. More importantly, the paper offers useful guidelines to novice researchers who are in the developing stage of their academic research project for acquiring an academic degree. Finally, I argue for providing autonomy to the individual researchers to determine the number of participants with justification in carrying out their research project at the graduate school. This study is limited to the selected available papers and other resources and focused on the participants for qualitative only. Therefore, I recommend a similar and more comprehensive study in the future covering the number of participants and sampling strategy for different qualitative research designs.

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