

VOICES OF PERSISTENCE: A QUALITATIVE LENS OF INDIGENOUS LEARNERS' ACADEMIC JOURNEY

JERLYN M. NOA

Central Mindanao Colleges, Kidapawan City, Philippines.

Corresponding email: mendogjerlynoa@gmail.com

ABSTRACT

This qualitative phenomenological study explored the lived experiences of Indigenous learners in sustaining academic persistence within digitally mediated learning environments, with particular attention to technostress and its influence on learners' emotional, cognitive, and motivational processes. Guided by Colaizzi's phenomenological method, the study sought to understand how Indigenous learners experience persistence, how they interpret its meaning within their educational context, and what recommendations they offer to support persistence among their peers and future students. Purposive sampling was employed to select Indigenous learners from elementary to secondary levels, and data were gathered through in-depth individual interviews. Thematic analysis revealed that learners' persistence is shaped by intertwined experiences of anxiety, cognitive overload, physical fatigue, and feelings of inefficacy arising from technological demands and access constraints. Despite these challenges, learners demonstrated persistence through emotional regulation, hope, developing digital competence, and reliance on family and teacher support. Persistence was interpreted not merely as endurance but as a value-driven and relational process grounded in optimism, self-belief, and gradual skill mastery. Learners also recommended strengthening emotional support practices, enhancing digital competence, fostering supportive relationships, promoting manageable learning pace, and cultivating hope as key strategies to sustain academic persistence. The study highlights the importance of culturally responsive, learner-centered approaches in addressing technostress and supporting Indigenous learners' educational engagement. The findings contribute to Indigenous education discourse by foregrounding learners' voices and informing equitable educational practices and future research directions.

Keywords: *Indigenous learners, academic persistence, technostress, phenomenological study, digital learning, educational equity, Kidapawan City Division*

INTRODUCTION

Education was widely acknowledged as a fundamental human right and a key driver of social mobility, yet many Indigenous learners continued to face conditions that weakened their academic persistence and overall educational participation. In the Philippines, Indigenous peoples made up approximately 14 percent of the national population, representing more than 17 million individuals, with many residing in geographically isolated and disadvantaged areas (Santos & Villoria, 2021; Calderon & Lopez, 2021; Abdullah, 2022). Recent studies consistently indicated that Indigenous learners experienced compounded barriers such as poverty, cultural marginalization, linguistic exclusion, and limited access to culturally congruent instruction, all of which threatened their ability to persist academically (Buenaflor, 2023; Rivera & Uy, 2023; Saavedra, 2025). These realities showed that despite existing inclusion policies, Indigenous communities continued to grapple with unequal educational opportunities and systemic conditions that undermined their academic trajectories (Abdelaziz & Santiago, 2022; Mendoza & Caballero, 2021).

Evidence from national and regional assessments further demonstrated that Indigenous learners exhibited lower persistence in schooling, reflected through reduced participation rates, chronic absenteeism, and elevated dropout ratios when compared to non-Indigenous peers. The Philippine Statistics Authority reported literacy gaps between Indigenous and non-Indigenous populations, with average literacy among Indigenous Peoples communities remaining several points lower. Studies conducted across Mindanao and the Cordillera showed that dropout ratios among Indigenous learners often reached 3:1 compared to non-Indigenous students, particularly in remote barangays (Perez & Abad, 2022; Domingo & Ramos, 2022; Andres & Villanueva, 2023). Research attributed these disparities to economic constraints, cultural discrimination, limited parental involvement, and classroom practices that failed to accommodate Indigenous knowledge systems (Calderon & Lopez, 2021; Bongco, 2024; Yap & Cruz, 2023). Despite these indicators, existing literature seldom examined how Indigenous learners themselves interpreted and navigated these academic challenges, leaving a critical gap in understanding their persistence strategies and lived educational journeys.

Academic persistence concerns among Indigenous learners were not exclusive to the Philippines; global studies revealed parallel patterns of educational inequality. In Canada, Indigenous students who left or “stopped out” of higher education described systemic exclusion, disconnection, and identity conflicts that hindered persistence (Christensen, 2021; Wright & Thomas, 2022; Amundsen, 2022). Australian research noted that First Nations learners continued to experience structural and cultural barriers despite reforms, with attendance and retention levels remaining significantly lower than those of non-Indigenous populations (Gunawan et al., 2021; Lowe, 2024; Marshall et al., 2023). In Vietnam and China, Indigenous minority students reported limited institutional support, economic challenges, and curriculum mismatches that affected their ability to

remain in school (Nguyen & Tran, 2023; Zhang & Li, 2024; International Indigenous Diaspora Researchers, 2025). These international findings showed that the Philippine experience aligned with a broader global struggle for equitable Indigenous education and sustained academic engagement.

If conditions affecting Indigenous learners' academic persistence remained unaddressed, these challenges risked reinforcing intergenerational marginalization, weakened cultural continuity, and long-term socio-economic disadvantage. Persistent educational barriers could lead to reduced employment opportunities, continuing cycles of poverty, and diminished participation in national development initiatives (Fournier et al., 2023; Henri et al., 2021; Wilson, 2021). Furthermore, education systems that failed to support Indigenous persistence undermined commitments to inclusive, equitable quality education as outlined in SDG 4 and contradicted long-standing efforts toward decolonizing educational practices (Smith, 2021; Tuhiwai Smith, 2021). Without targeted interventions, the systemic inequities that Indigenous learners faced continued to replicate themselves, leaving Indigenous youth with limited pathways toward academic success and cultural empowerment.

Given these significant concerns, this qualitative study sought to amplify Indigenous learners' voices by exploring how they experienced, interpreted, and navigated academic persistence within their schooling environments. Previous research emphasized the importance of understanding Indigenous learners' aspirations and resilience through their own narratives (Uy & Morales, 2022; Ursua, 2024; Journalism Bangladesh Authors, 2025). By centering their lived stories, this study aimed to reveal the nuanced strategies they used to confront barriers, the motivations that sustained their academic journeys, and the cultural values that shaped their educational aspirations (Abdelaziz & Santiago, 2022; Andres & Villanueva, 2023; Yap & Cruz, 2023). These insights contributed to a deeper understanding of the academic persistence of Indigenous learners and offered valuable implications for culturally responsive teaching, policy enhancement, and community-based educational support.

METHODS

Research Design

This qualitative study adopted a phenomenological design to examine the lived experiences of Indigenous learners as they sustained persistence throughout their academic journeys. Phenomenology was used because the focus of the inquiry centered on understanding how learners interpreted their experiences, formed meanings, and articulated the conditions that strengthened or weakened their educational persistence. As noted in various studies involving Indigenous populations, researchers highlighted the importance of approaches that foregrounded Indigenous voices and allowed participants to narrate their realities in ways that honored their cultural knowledge and personal perspectives

(Abdelaziz & Santiago, 2022; Rivera & Uy, 2023; Saavedra, 2025). This design provided a pathway for capturing detailed stories that demonstrated the depth and complexity of Indigenous persistence.

The selection of a phenomenological design was supported by the nature of the research questions, which sought to understand how Indigenous learners interpreted persistence and what recommendations they offered for supporting future learners. Similar studies exploring Indigenous narratives found that phenomenology allowed participants to speak freely about their struggles, motivations, cultural connections, and academic efforts, which were central to this study (Nguyen & Tran, 2023; Mendoza & Caballero, 2021; Bongco, 2024). By focusing on the essence of lived experience, this design aligned with the goal of showing how Indigenous learners navigated multilayered environments shaped by cultural values, resource constraints, and institutional realities.

The study design prioritized in-depth engagement with learners to gather rich, descriptive data that could not be captured through quantitative approaches. Researchers examining Indigenous education emphasized that qualitative methods provided the flexibility needed to explore cultural nuances and themes that emerged naturally during conversations (Andres & Villanueva, 2023; Perez & Abad, 2022). This design was particularly suitable for understanding how learners attributed meaning to persistence as part of their identity, aspirations, and community responsibilities. Through flexible and open-ended encounters, the study ensured that participants' voices remained central to the interpretation of findings.

Furthermore, a phenomenological design allowed for an exploration of persistence as a lived and evolving process rather than a fixed attribute. Many works involving Indigenous learners revealed that persistence was shaped by shifting emotions, relationships, experiences with discrimination, and changing academic environments (Buenafior, 2023; Abdullah, 2022; Wright & Thomas, 2022). This dynamic nature of persistence required a design that could accommodate complex and interwoven narratives reflecting participants' daily realities, challenges, and triumphs. The phenomenological approach created a space for capturing these fluctuations.

The design also aligned with calls from Indigenous scholars to use methodologies that respected Indigenous perspectives, encouraged storytelling, and validated cultural identity. Smith (2021) and Tuhiwai Smith (2021) emphasized that qualitative designs grounded in conversation and reflection better honored Indigenous worldviews. The phenomenological structure used in this study aligned with this position because it valued participant knowledge as the primary source of understanding. This approach supported ethical and respectful engagement with Indigenous communities.

In essence, the phenomenological design strengthened the study's capacity to uncover the meanings, interpretations, and recommendations expressed by Indigenous learners. Similar approaches used in studies across the Philippines, Vietnam, Canada, Australia, and China showed that phenomenology was

effective for capturing the voices of marginalized groups who possessed rich but underrepresented educational experiences (Zhang & Li, 2024; Christensen, 2021; Lowe, 2024). By using this design, the present study offered a rigorous and culturally grounded basis for understanding Indigenous persistence within the context of education.

Participants

The research participants for this qualitative inquiry consisted of Indigenous learners enrolled in basic education schools within the Kidapawan City Division. These participants were selected because they possessed firsthand experiences that addressed the study's central questions on persistence, interpretation of educational realities, and recommendations for strengthening Indigenous learners' academic engagement. Similar qualitative works involving Indigenous communities emphasized the importance of selecting participants who had deep, meaningful interactions with schooling systems, cultural contexts, and community expectations (Rivera & Uy, 2023; Mendoza & Caballero, 2021; Perez & Abad, 2022). These learners provided essential insights into how Indigenous youth sustained their educational journeys.

Participants were chosen through purposive sampling to ensure that those included had direct lived experiences relevant to the study aims. Previous research stressed that purposive sampling was valuable when studying Indigenous populations because it allowed researchers to select individuals who could best articulate cultural, emotional, and academic experiences that shaped persistence (Abdelaziz & Santiago, 2022; Domingo & Ramos, 2022; Abdullah, 2022). The participants in this study represented diverse Indigenous backgrounds present in the district, ensuring that the collected narratives reflected a broad spectrum of communal and cultural influences.

Inclusion Criteria

1. Indigenous learners who were officially enrolled in basic education programs within the Kidapawan City Division.
2. Learners who self-identified as members of an Indigenous community and whose identity was recognized by their school or community leaders.
3. Learners who had been continuously enrolled for at least two school years to ensure that they had meaningful experiences related to academic persistence.

Exclusion Criteria

1. Learners who did not belong to Indigenous communities or who could not verify Indigenous affiliation through self-identification or community validation.
2. Learners who had recently transferred into the district and therefore did not have adequate experience with local schooling conditions.
3. Learners who could not participate in interviews or discussions due to severe communication limitations or unavailable parental consent.

Data Collection Tools

The data collection process began by securing approval from the Schools Division Office and local school administrators to conduct the research within the division. Once permission was granted, coordination with school heads and teachers allowed the researcher to identify potential participants who met the inclusion criteria. Studies involving Indigenous learners emphasized the importance of respectful engagement with school officials and community members to ensure trust and transparency in the research process (Abdelaziz & Santiago, 2022; Rivera & Uy, 2023; Saavedra, 2025). This preparatory stage ensured that participants, parents, and community representatives understood the study's purpose and procedures.

After securing permission, the researcher conducted an orientation session with the participants and their parents or guardians to explain the goals of the study, the voluntary nature of participation, and the confidentiality measures that would be implemented. Similar approaches used in qualitative studies involving Indigenous communities demonstrated that orientation sessions reassured participants and allowed them to ask questions before committing to the study (Domingo & Ramos, 2022; Mendoza & Caballero, 2021). Informed consent forms were then distributed and collected before any data gathering activities took place.

Data were collected primarily through in-depth, semi-structured interviews that allowed participants to narrate their lived experiences, interpretations of persistence, and recommended supports for future Indigenous learners. This method allowed participants to describe their realities in their own words and fostered rich, detailed storytelling, which had been shown to be effective for Indigenous-focused qualitative work (Perez & Abad, 2022; Buenafior, 2023; Wright & Thomas, 2022). Each interview was conducted in a private and culturally respectful setting within the school or community.

To further deepen understanding, the researcher also conducted follow-up dialogues or clarifying conversations when needed. These served to refine narrative details or validate the meanings conveyed by participants. Similar methods used by Nguyen and Tran (2023) and Andres and Villanueva (2023) showed that follow-up engagements helped ensure accuracy and authenticity in capturing Indigenous learners' voices.

All interviews were audio-recorded with permission and later transcribed verbatim. Transcriptions allowed the researcher to examine patterns and themes in participants' stories systematically. This process reflected what many qualitative researchers recommended when working with Indigenous communities, emphasizing the need for careful representation of participants' words (Abdelaziz & Santiago, 2022; Christensen, 2021; Saavedra, 2025). Field notes were also documented to capture nonverbal cues, contextual details, and reflective insights.

Finally, the collected data were organized, thematically coded, and prepared for analysis. This ensured that the voices of Indigenous learners remained the central foundation of the study's interpretations and conclusions. Scholars such

as Rivera and Uy (2023), Mendoza and Caballero (2021), and Yap and Cruz (2023) stressed that proper documentation and careful thematic coding honored participants' narratives and preserved cultural integrity. The data collection procedure allowed for respectful, culturally grounded, and academically rigorous engagement with Indigenous learners.

Procedures

Before any data collection activities were undertaken, the researcher first secured the necessary institutional approvals. This process began with the submission of the full research proposal to the Dean of the Graduate School of the researcher's academic institution. Once the Dean reviewed and endorsed the proposal, it was forwarded to the Ethics Review Committee of the same institution for ethical clearance. The Ethics Review Committee played a critical role in ensuring that the study adhered to accepted ethical standards for research involving human participants, specifically in terms of protecting their rights, privacy, and overall well-being. Only after approval and ethical clearance were obtained was the researcher allowed to proceed to the field.

Following institutional approval, the researcher coordinated with the Schools Division Office and the concerned school heads in the division. This stage involved presenting the study objectives, scope, and intended procedures to school administrators to establish trust and ensure alignment with school policies. Scholars emphasized the importance of clear communication with institutions when conducting research among Indigenous learners to promote transparency and respect for local protocols (Abdelaziz & Santiago, 2022; Rivera & Uy, 2023). Through collaborative planning, the researcher ensured that school leaders understood the ethical safeguards and logistical needs of the study.

Once authorization from the Schools Division and school heads was obtained, the researcher initiated community engagement by informing parents, guardians, and Indigenous community representatives about the nature of the research. Consistent with practices recommended in Indigenous-centered studies, community engagement built rapport and fostered a respectful research environment (Saavedra, 2025; Domingo & Ramos, 2022). Through meetings with parents and leaders, the researcher explained the purpose of the study, clarified expectations, and provided avenues for community members to raise concerns or seek clarification. This stage ensured that participants and their families understood the voluntary nature of participation.

After community engagement, recruitment of participants began using purposive sampling. Only students who met the inclusion criteria were invited to participate. Letters and consent forms were distributed to parents or guardians of potential participants, and assent was gathered from the learners themselves. Ethical approaches to recruitment were emphasized in several studies involving Indigenous learners, where meaningful participation required careful explanation of the research context and a clear affirmation that participation was voluntary

(Perez & Abad, 2022; Mendoza & Caballero, 2021). Only upon receiving signed consent and assent did the researcher schedule data-gathering activities.

The researcher then arranged interview and focus group schedules in consultation with school personnel to avoid disruption of academic routines. Interviews and discussions were conducted in settings that provided comfort and privacy to ensure that participants could share their stories freely. Previous studies demonstrated that Indigenous learners provided richer and more authentic narratives when data collection took place in spaces that honored cultural sensitivity and minimized discomfort (Buenafior, 2023; Abdullah, 2022). The researcher remained attentive to participants' comfort levels and adapted the timing, location, and flow of conversations accordingly.

After completing all interviews and focus group discussions, the researcher reviewed field notes, organized audio files, and began the transcription process. Transcriptions were checked for accuracy and clarity to preserve participants' intended meanings. Only after all data were properly compiled, verified, and anonymized did analysis begin. This careful and systematic procedure aligned with qualitative standards for conducting culturally grounded and ethically sound research with Indigenous communities.

Data Analysis

The collected qualitative data were analyzed using Colaizzi's phenomenological method of data analysis. The process began with familiarization with the transcripts through repeated reading to gain a comprehensive understanding of the participants' narratives. Significant statements relevant to the research questions were identified and extracted, after which meanings were formulated from these statements. The formulated meanings were then organized into clusters of themes, which represented the common patterns found in teachers' experiences of classroom management. These themes were integrated into an exhaustive description of the phenomenon to capture the essence of the participants' experiences. Finally, the findings were validated through member checking to ensure that the interpretations accurately reflected the teachers' perspectives and lived experiences.

RESULTS AND DISCUSSION

Presented the outcomes of the qualitative phenomenological inquiry that examined the lived experiences of Indigenous learners in sustaining academic persistence within their educational journeys. It focused on organizing and presenting the data obtained from in-depth interviews and focus group discussions in a systematic and coherent manner. Guided by the phenomenological approach, the chapter aimed to surface the meanings, interpretations, and insights expressed by the learners through their narratives, providing a structured foundation for the presentation of findings and the ensuing discussion within the context of Indigenous education and academic persistence.

Lived Experiences of Indigenous Learners in Sustaining Persistence Throughout Their Academic Journey

Table 1 presents a thematic synthesis of the lived experiences of Indigenous learners as they sustain academic persistence amid technostress and digital learning demands. The table highlights how persistence is not a passive trait but an active, effortful process shaped by anxiety, cognitive overload, physical fatigue, diminished self-belief, and resilience. Five major themes emerge: *Technostress as a Source of Persistent Anxiety*, *Cognitive and Emotional Overload from Digital Learning Demands*, *Fatigue and Physical Strain as Consequences of Technology Use*, *Feelings of Inefficacy and Diminished Self-Belief*, and *Persistence and Hope Amid Technological Struggles*. Collectively, these themes illustrate that Indigenous learners' persistence is forged within conditions of structural inequity, digital scarcity, and emotional labor, yet sustained through determination, adaptive coping, and emerging hope.

Technostress as a Source of Persistent Anxiety

The theme *Technostress as a Source of Persistent Anxiety* captures how Indigenous learners' academic persistence unfolds within an environment of constant emotional tension. Anxiety emerges as a chronic condition rooted in fear of making mistakes, being judged by teachers or peers, missing academic requirements, or failing due to uncontrollable technological disruptions. Rather than isolated emotional reactions, these anxieties form a persistent background to learning, shaping how learners approach tasks, participate in classes, and evaluate their own academic worth. Persistence, in this context, does not signify the absence of fear but the continuation of effort despite sustained apprehension and uncertainty.

Learners' narratives vividly convey this lived anxiety:

"I feel scared every time I click something because I think I might press the wrong button and fail" (ID11.1.3).

"I worry that my teacher will think I did not submit my work when my gadget suddenly stops working" (ID11.1.4).

"I feel nervous during online exams because my heart beats fast when the internet is slow" (ID11.1.1).

"I panic when notifications come late because I think I already missed something important" (ID11.1.4).

"I am afraid to join discussions online because I might make mistakes and everyone will notice" (ID11.1.2).

These statements reflect not momentary stress but a deeply internalized fear that accompanies learners throughout their academic engagement. As such, the implications of this theme are significant for educational equity and learner support. Persistent anxiety undermines learners' sense of psychological safety, which is foundational for meaningful engagement and sustained persistence. When Indigenous learners must constantly manage fear alongside academic demands, their cognitive resources are diverted from learning toward emotional regulation. This condition risks normalizing distress as part of schooling and may contribute to disengagement, avoidance behaviors, or silent withdrawal. Addressing persistence, therefore, requires interventions that reduce anxiety at its source by ensuring clearer instructions, compassionate assessment practices, and culturally responsive digital support systems.

This interpretation gains strong support from existing literature. Abdelaziz and Santiago (2022) found that Indigenous learners in rural Philippine schools experience chronic anxiety linked to fear of failure and technological inadequacy. Similarly, Buenaflor (2023) reported that technostress heightened emotional vulnerability among Indigenous high school students during the new normal of education. This theme also corroborates the findings of Calderon and Lopez (2021), who emphasized that persistent academic anxiety among Indigenous learners is deeply connected to systemic exclusion and inadequate learning infrastructures.

Cognitive and Emotional Overload from Digital Learning Demands

Cognitive and Emotional Overload from Digital Learning Demands reflects how Indigenous learners persist despite overwhelming mental demands imposed by digital education. Learners describe confusion, overthinking, mental fog, and difficulty concentrating when faced with unclear instructions, multitasking requirements, repetitive digital tasks, and prolonged screen exposure. Persistence here involves continuing to engage even when cognitive capacity feels stretched beyond manageable limits, revealing the hidden mental labor required to remain academically active.

This overload is evident in learners' first-person accounts. "I feel confused when the instructions are too many and I do not know where to start" (IDI1.2.1). "I overthink every step when using gadgets because I am afraid I might do it wrong" (IDI1.2.2). "I cannot concentrate when the tasks are too many and everything feels rushed" (IDI1.2.3). "I feel mental fog after staring at the screen for a long time, but I still try to finish my work" (IDI1.2.4). "I feel pressured when lessons drag on online and I start to lose focus" (IDI1.2.5). These statements illustrate how persistence requires sustained cognitive effort under mentally taxing conditions.

This theme highlighted the risk of cognitive exhaustion becoming normalized among Indigenous learners. When digital learning environments fail to account for learners' contexts, language proficiency, or access limitations, they unintentionally demand excessive mental processing. Over time, this can diminish

intrinsic motivation and impair deeper learning. Educational systems must therefore recalibrate digital pedagogy to prioritize clarity, pacing, and cognitive accessibility, particularly for learners navigating multiple structural disadvantages.

This theme aligns closely with prior research as Abdullah (2022) reported that Indigenous learners in Cotabato experienced cognitive overload due to complex academic demands and limited instructional scaffolding. Mendoza and Caballero (2021) similarly found that Indigenous students' persistence often involved enduring mental strain caused by poorly adapted teaching modalities. These findings are congruent with Gunawan et al. (2021), who demonstrated that educational inequality amplifies cognitive burden among Indigenous learners compared to non-Indigenous populations.

Fatigue and Physical Strain as Consequences of Technology Use

This theme foregrounds the embodied dimension of persistence by revealing how Indigenous learners continue their academic journey despite physical exhaustion. Learners describe eye strain, headaches, sleepiness, migraines, and bodily fatigue resulting from prolonged screen use and repetitive digital tasks. Persistence, therefore, is not merely psychological endurance but also physical tolerance of discomfort that accompanies sustained digital engagement.

Learners articulate this embodied fatigue clearly:

“I feel tired even if I do not move because I am always looking at the screen” (ID11.3.1).

“My eyes hurt and my head aches after doing online activities for a long time” (ID11.3.3).

“I feel sleepy during online classes, but I still try to listen” (ID11.3.2). “I feel weak when I have too many online tasks in one day” (ID11.3.4).

“My body feels exhausted even though I am just sitting while studying online” (ID11.3.5).

These results demonstrated how persistence often occurs at the expense of physical well-being. This theme also calls attention to the health costs of digital persistence. Persistent physical strain can negatively affect learners' long-term health, attention, and emotional stability. Without appropriate breaks, ergonomic considerations, and balanced learning modalities, Indigenous learners may associate education with bodily depletion rather than empowerment. Schools must therefore adopt holistic approaches that integrate physical well-being into academic persistence frameworks.

This theme is strongly supported by the literature. Buenaflor (2023) documented physical exhaustion and health complaints among Indigenous learners adapting to digital education. Bongco (2024) similarly found that Indigenous college students experienced chronic fatigue linked to sustained technology use. These findings corroborate the study of Zhang and Li (2024), which revealed that Indigenous students across contexts experience physical strain as an overlooked barrier to persistence.

Feelings of Inefficacy and Diminished Self-Belief

This theme captures how technostress erodes learners' confidence and sense of competence, yet persistence continues despite feelings of inadequacy. Learners narrate moments of self-doubt, perceived incompetence, and comparison with peers, especially when technological problems disrupt performance. Persistence in this context involves continuing despite questioning one's own ability.

Learners' voices reveal this struggle:

"I feel that I am not good at using gadgets, so I feel small" (ID11.4.1).

"I feel like I cannot finish my tasks when the internet is slow" (ID11.4.4).

"Sometimes I stop trying because I think I cannot do it" (ID11.4.2).

"I lose confidence when my files disappear and all my effort is gone" (ID11.4.3).

"I feel less capable when my classmates are faster than me" (ID11.4.5). These statements show how inefficacy coexists with persistence.

The implications of this theme underscore the importance of nurturing self-efficacy among Indigenous learners. Persistent feelings of incompetence can undermine long-term academic aspirations and increase dropout risk. Educational interventions must therefore emphasize mastery, affirmation, and culturally responsive encouragement rather than deficit-based comparisons.

This result is supported by Rivera and Uy (2023), who found that Indigenous learners' persistence often occurs alongside fragile self-belief. Andres and Villanueva (2023) similarly noted that Indigenous youth continue pursuing education despite internalized doubts. These findings are congruent with Santos and Villoria (2021), who identified diminished self-efficacy as a consequence of systemic exclusion.

Persistence and Hope Amid Technological Struggles

The final theme emphasizes resilience as the core of persistence. Despite anxiety, overload, fatigue, and inefficacy, Indigenous learners articulate hope, optimism, and determination. Persistence is understood as trying again, believing in improvement, and finding meaning in small successes.

Learners express this resilience powerfully:

"I try again even if it is hard because I want to learn" (ID11.5.4).

"I feel proud when I get good results after struggling" (ID11.5.2). "I believe that I will improve my studies"

(ID11.5.1).

"I remind myself that my struggles will be worth it" (ID11.5.3).

“I keep going because I know I can learn slowly” (ID11.5.5). These statements reflect hope as an active force sustaining persistence.

This theme highlighted the strength-based capacities of Indigenous learners. Persistence is not imposed but internally cultivated through hope, belief, and culturally grounded coping. Educational systems should therefore recognize and amplify these strengths rather than framing Indigenous learners solely through deficit narratives.

This theme is strongly supported by Amundsen (2022), who documented perseverance among Indigenous students despite systemic barriers. Yap and Cruz (2023) similarly found that hope and cultural identity sustain academic persistence. These findings align with Wilson (2021), who emphasized resilience as a relational and culturally embedded process in Indigenous research.

Table 1. Thematic Analysis on the Lived Experiences of Indigenous Learners in Sustaining Persistence Throughout Their Academic Journey

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Emotional and psychological challenges encountered in digital learning	Anxiety, fear of mistakes, panic, nervousness	“I panic when I click the wrong button.” (ID13) ; “I am scared my teacher will think I failed.” (ID17)	Technostress as a Source of Persistent Anxiety	Indigenous learners experience persistence within a context of continuous anxiety caused by fear of errors, evaluation, and technological uncertainty.
Mental strain from academic digital demands	Overthinking, confusion, mental fog, difficulty concentrating	“I tend to overthink when using gadgets.” (ID13) ; “I have a hard time thinking clearly.” (ID14)	Cognitive and Emotional Overload from Digital Learning Demands	Persistence requires learners to function despite overwhelming cognitive demands that strain attention, clarity, and confidence.
Physical consequences of prolonged technology use	Eye strain, headaches, sleepiness, exhaustion	“I feel tired even if I don’t move.” (ID112) ; “My	Fatigue and Physical Strain as Consequences	Learners persist while experiencing embodied

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Experiences of self-doubt linked to technology	Inefficacy, loss of confidence, giving up	eyes feel tired from using gadgets." (IDI2)	of Technology Use	fatigue, showing that academic continuation often occurs despite physical depletion.
		"I feel that I am not good at gadgets." (IDI1) ; "Sometimes I stop trying and tell myself I can't do it." (IDI2)	Feelings of Inefficacy and Diminished Self-Belief	Persistence is threatened by recurring self-doubt, yet learners remain engaged even when confidence is weakened.
Continuation despite adversity	Trying again, endurance, resilience	"I try again even if it is hard." (IDI5) ; "I try again when I fail." (IDI4)	Persistence and Hope Amid Technological Struggles	Indigenous learners' lived experiences show persistence as repeated effort despite emotional, cognitive, and physical strain.

Indigenous Learners' Interpretations of the Meaning of Persistence Within Their Educational Context

Table 2 presents an in-depth thematic interpretation of how Indigenous learners *construct meaning* around academic persistence within their educational context. Unlike experiential descriptions that emphasize what learners go through, this table captures how learners *understand, frame, and rationalize* persistence as part of their identity, values, and everyday survival in school. The themes that emerged reflect persistence as a multidimensional construct encompassing personal endurance, emotional regulation, hope and optimism, competence development, and relational support. Collectively, these themes illustrate that Indigenous learners do not perceive persistence as an abstract motivational concept imposed by schools, but as a lived, culturally grounded, and morally anchored practice shaped by adversity, relationality, and

aspiration. Persistence, therefore, is interpreted as both an internal discipline and a socially sustained commitment to continue learning despite structural, technological, and emotional constraints.

Persistence as Personal Endurance

Persistence as personal endurance reflects Indigenous learners' interpretation of perseverance as the sustained capacity to continue academic engagement despite recurring hardship, uncertainty, and slow progress. Learners frame persistence not as effortless motivation but as a deliberate act of endurance that requires tolerating discomfort, frustration, and repeated failure. These meaning underscores persistence as an ethical commitment to self-improvement and educational continuity, rather than a guarantee of immediate success. For Indigenous learners, endurance is embedded in daily routines of trying again, showing up despite fear or fatigue, and accepting that learning often unfolds gradually under difficult conditions.

This interpretation is powerfully articulated in learners' first-person accounts:

"I keep going even when I feel tired because stopping will not help me reach my goal" (IDI2.1.1).

"I continue doing my schoolwork even if I do not understand it right away, because learning takes time" (IDI2.1.4).

"I try my best every day even when it feels very hard because I know giving up will make things worse" (IDI2.1.2).

"I endure the challenges because I want to finish my studies and help my family someday" (IDI2.1.4).

"I do not give up easily because I believe effort is important even when progress is slow" (IDI2.1.5).

These narratives reveal persistence as a quiet, continuous struggle grounded in responsibility, aspiration, and self-respect. This theme is profound for educational practice and policy. Interpreting persistence as endurance reveals that Indigenous learners often compensate for systemic inadequacies through personal sacrifice. While this endurance enables learners to remain in school, it also risks normalizing excessive hardship and placing the burden of success entirely on learners. Schools that fail to recognize this dynamic may unintentionally valorize endurance while neglecting structural reform. Educational systems must therefore shift from expecting endurance to actively reducing the conditions that make endurance necessary, such as unclear instruction, digital inequity, and culturally mismatched pedagogy.

This interpretation gains strong support from the literature such as of Amundsen's (2022) findings which documented that Indigenous learners frequently conceptualize persistence as enduring hardship rather than overcoming it, particularly in marginalized educational contexts. Similarly, Andres

and Villanueva (2023) found that Indigenous youth frame perseverance as a moral obligation tied to family expectations and future aspirations. This theme also corroborates Abdullah's (2022) findings, which revealed that Indigenous learners in Cotabato relied heavily on endurance as a coping mechanism in the absence of adequate institutional support. Together, these studies affirm that persistence as endurance is a common interpretive frame among Indigenous learners navigating inequitable educational landscapes.

Persistence as Emotional Regulation

Persistence as emotional regulation highlights Indigenous learners' understanding that continuing in school requires active management of fear, anxiety, frustration, and discouragement. Learners interpret persistence as the ability to regulate emotional responses so that stress does not overwhelm cognitive functioning or lead to withdrawal. Rather than suppressing emotions, learners describe persistence as recognizing emotional distress and consciously calming themselves in order to proceed with academic tasks. This interpretation reflects persistence as an emotionally intelligent practice rooted in self-awareness and coping.

Learners' narratives clearly demonstrate this meaning:

"I calm myself first when I feel stressed so I can think properly and continue my work" (IDI2.2.5). "I pray when I feel very anxious because it helps me control my emotions and not panic" (IDI2.2.2).

"I try to stay calm when technology problems happen so I do not lose confidence" (IDI2.2.3).

"I breathe deeply when I feel nervous because it helps me focus again" (IDI2.2.4).

"I manage my emotions so stress will not stop me from learning" (IDI2.2.1).

These statements illustrate that emotional regulation is not incidental but central to learners' ability to persist and it emphasized the emotional labor embedded in Indigenous learners' persistence. When learners must constantly self-regulate without formal psychosocial support, emotional exhaustion may accumulate over time. While emotional regulation demonstrates resilience, it also highlights gaps in school-based mental health and guidance systems. Schools must recognize emotional regulation not merely as an individual skill but as a shared responsibility that requires supportive environments, culturally sensitive counseling, and compassionate teaching practices.

This theme is strongly supported by existing studies by Rivera and Uy (2023) which found that emotional regulation was a key strategy enabling Indigenous learners to persist amid adversity. Buenaflor (2023) similarly reported that learners relied on internal emotional management during the shift to digital learning, often in the absence of institutional support. This interpretation aligns with Wilson's (2021)

assertion that emotional balance and relational harmony are central to Indigenous epistemologies, reinforcing the idea that persistence is deeply intertwined with emotional well-being.

Persistence as Hope and Optimism

Persistence as hope and optimism reflects Indigenous learners' belief that continued effort will eventually lead to improvement, understanding, and opportunity. Learners interpret persistence as maintaining a forward-looking orientation even when present circumstances are discouraging. Hope functions as a psychological anchor that sustains motivation and buffers against despair. This theme underscores persistence as an act of faith in one's capacity to grow and in education as a pathway to a better future.

Learners articulated this hopeful meaning in their narratives:

"I believe that I will learn better in the future even if it is hard now" (IDI2.3.1).

"I stay positive because I know I can improve little by little" (IDI2.3.4).

"I feel happy when I solve problems because it gives me hope that I am learning" (IDI2.3.5).

"I think my struggles will be worth it someday" (IDI2.3.4). "I remind myself that learning takes time and that helps me continue" (IDI2.3.5).

These statements reflect optimism as a sustaining force rather than naïve expectation.

The implications of this theme suggest that hope is a critical protective factor against disengagement and dropout. When learners retain optimism, they are more likely to persevere despite repeated setbacks. However, hope should not be exploited as a substitute for systemic support. Educational institutions must nurture hope by providing visible pathways to success, affirming learners' progress, and aligning instruction with learners' contexts and aspirations.

This theme is well supported by the literature from Yap and Cruz (2023) which found that hope and cultural identity significantly shaped Indigenous learners' persistence in Mindanao. Domingo and Ramos (2022) reported that Indigenous learners' aspirations were sustained by optimism about future opportunities. This interpretation is congruent with Nguyen and Tran (2023), who demonstrated that hope plays a central role in sustaining educational aspirations among Indigenous minority students in marginalized settings.

Persistence as Growing Competence

Persistence as growing competence reflects learners' interpretation that continuing in education allows them to gradually build skills, particularly digital competence, which in turn reduces fear and increases confidence. Learners understand persistence not merely as enduring difficulty but as staying long enough to gain mastery and control over academic tools and tasks. Competence transforms persistence from survival into empowerment.

Learners expressed this clearly:

“I feel more confident when I already know how to use gadgets” (IDI2.4.1).

“Watching tutorials helps me understand what to do and makes me less scared” (IDI2.4.2).

“I feel better when I practice using technology because I learn from mistakes” (IDI2.4.3).

“Learning step by step helps me continue without panic” (IDI2.4.4).

“I can manage tasks better when I understand how they work” (IDI2.4.5).

These statements show competence as both an outcome and a motivator of persistence.

The implications of this theme emphasize the transformative potential of skill-building interventions. As learners develop competence, technostress decreases, self-efficacy improves, and persistence becomes less burdensome. Schools must therefore prioritize structured skill development, especially for learners facing digital inequity, rather than assuming baseline competence.

This interpretation is supported by Mendoza and Caballero (2021), who emphasized that competence development is essential for Indigenous learners' persistence in higher education. Wright and Thomas (2022) similarly found that skill mastery increased confidence and reduced attrition among Indigenous students. This theme also aligns with Lowe (2024), who argued that transforming schooling practices to prioritize competence-building is crucial for equity in Indigenous education.

Persistence as Supported Effort

Persistence as supported effort highlights learners' interpretation that continuing in school is a relational process sustained through guidance from parents, teachers, and trusted adults. Learners view help-seeking not as weakness but as a necessary and legitimate component of persistence. Support provides reassurance, clarification, and emotional security that enable learners to continue despite difficulties.

Learners' narratives reflect this relational understanding:

“I ask my parents for help when I do not understand because they support me” (IDI2.5.1).

“I ask my teacher when tasks are confusing so I can continue” (IDI2.5.2).

“Having someone guide me helps me not give up easily” (IDI2.5.3).

“I feel stronger when I know someone supports me” (IDI2.5.4).

“Support helps me continue learning even when it is hard” (IDI2.5.5). These statements underscore persistence as a shared endeavor.

The theme stressed the importance of strengthening relational support structures around Indigenous learners. Persistence flourishes in environments where learners feel valued, guided, and understood. Schools must therefore foster inclusive cultures that normalize help-seeking, engage families, and promote relational accountability.

This interpretation is supported by Santos and Villoria (2021), who emphasized access and inclusion as determinants of Indigenous learners' persistence. Saavedra (2025) found that family involvement plays a crucial role in sustaining Indigenous learners' educational engagement. This theme is also congruent with Tuhiwai Smith (2021), who emphasized relational accountability as central to Indigenous education and research.

Table 2. Table Analysis on Indigenous Learners' Interpretations of the Meaning of Persistence Within Their Educational Context

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Personal understanding of persistence	Endurance, not giving up, continuous effort	"Trying my best is the best solution." (IDI4) ; "I believe I will learn soon." (IDI5)	Persistence as Personal Endurance	Learners interpret persistence as sustained effort even when success is uncertain or delayed.
Emotional regulation as part of persistence	Calmness, prayer, emotional control	"I pray when I feel exhausted." (IDI1) ; "Staying calm allows me to act effectively." (IDI3)	Persistence as Emotional Regulation	Persistence is understood as managing emotions to prevent anxiety from turning into disengagement.
Meaning of persistence amid failure	Hope, optimism, belief in improvement	"I feel proud because I learn something new." (IDI4) ; "I remind myself that I can learn." (IDI10)	Persistence as Hope and Optimism	Learners define persistence as maintaining hope and belief in self-growth despite repeated difficulties.

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Skill development and confidence	Digital competence, mastery, control	“Knowing how to use gadgets helps me feel confident.” (ID12) ; “Watching tutorials helps me feel more in control.” (ID13)	Persistence as Growing Competence	Persistence is interpreted as learning skills that gradually reduce fear and increase self-efficacy.
Social and spiritual grounding	Support-seeking, faith-based coping	“I ask help from my parents and teacher.” (ID17) ; “Prayer helps me calm down.” (ID11)	Persistence as Supported Effort	Learners view persistence as a shared and supported process rather than an individual struggle alone.

Indigenous Learners' Recommendations to Support Academic Persistence Among Peers or Future Students

Table 3 synthesizes Indigenous learners' recommendations for strengthening academic persistence among their peers and future students, drawing directly from their lived experiences of struggle, adaptation, and perseverance within technologically mediated and often inequitable learning environments. Unlike Tables 1 and 2, which focus on experiences and meanings, this table foregrounds learners' *forward-looking insights* and *collective wisdom*. The themes emphasize practical, humane, and culturally grounded strategies that learners believe can sustain persistence more effectively. Five major themes emerged: *Strengthening Emotional Regulation Practices*, *Enhancing Digital Competence to Build Persistence*, *Strengthening Support Systems*, *Promoting Healthy Learning Pacing*, and *Cultivating Hope and Self-Belief*. Collectively, these recommendations reveal that Indigenous learners advocate for an education system that attends not only to academic demands but also to emotional well-being, relational support, equity in access, and the nurturing of positive learner identities.

Strengthening Emotional Regulation Practices

The theme *Strengthening Emotional Regulation Practices* reflects Indigenous learners' recognition that emotional stability is foundational to academic persistence. Based on their experiences, learners recommend that peers and future students be supported in learning how to manage stress, fear, panic, and frustration that arise from academic pressure and technostress. Emotional regulation is viewed not as an innate trait but as a skill that can be learned, practiced, and strengthened over time. Learners emphasize that being able to calm oneself enables clearer thinking, better decision-making, and sustained engagement with learning tasks.

Learners articulated these recommendations through deeply personal reflections:

"I calm myself first before continuing my work because when I panic, I cannot think properly" (IDI3.1.1).

"I pray when I feel stressed because it helps me control my emotions and continue studying" (IDI3.1.2).

"I breathe deeply when I feel nervous so I do not give up easily" (IDI3.1.3).

"Staying calm helps me finish my schoolwork even when it is hard" (IDI3.1.4).

"Managing my emotions helps me keep going even when technology problems happen" (IDI3.1.5).

These statements show that emotional regulation is perceived as a practical and necessary strategy for persistence rather than an abstract psychological concept. This theme suggested that schools must move beyond purely academic interventions and intentionally integrate emotional regulation support into daily teaching and learning processes. Indigenous learners' recommendations indicate that when emotional distress is left unaddressed, it can escalate into disengagement or withdrawal. Conversely, when learners are equipped with strategies to manage emotions, they are better able to cope with stressors and remain committed to their education. Educational institutions should therefore embed culturally responsive emotional support mechanisms, such as mindfulness practices, values-based reflection, guidance counseling, and faith- or culture-affirming spaces, to reduce emotional burden and promote persistence.

This theme is strongly supported by existing literature as Rivera and Uy (2023) found that emotional regulation was a critical resilience strategy among Indigenous learners facing academic adversity. Buenafior (2023) similarly reported that Indigenous students relied heavily on emotional self-management during the transition to digitally mediated learning. This recommendation aligns with Wilson's (2021) assertion that emotional balance and relational harmony are

central to Indigenous ways of knowing, reinforcing the need to recognize emotional regulation as an integral component of persistence.

Enhancing Digital Competence to Build Persistence

This theme emphasizes learners' recommendation that academic persistence can be strengthened by deliberately enhancing digital competence. Indigenous learners recognize that many persistence-related struggles stem from unfamiliarity with digital tools, fear of making mistakes, and limited access to guided learning. They recommend structured training, demonstrations, and practice opportunities that allow learners to gradually build confidence and mastery. Digital competence is viewed as empowering, as it reduces anxiety and enables learners to focus on learning rather than troubleshooting.

Learners expressed this recommendation clearly in their narratives;

"I learn better when someone shows me step by step how to use the gadget" (IDI3.2.1).

"Watching tutorials helps me understand what to do and makes me less scared" (IDI3.2.2).

"Practicing helps me feel confident using technology" (IDI3.2.3).

"Knowing how the apps work makes me believe I can finish my tasks" (IDI3.2.4).

"Skills help me feel in control and continue learning" (IDI3.2.5).

These statements highlight digital competence as both a practical tool and a psychological buffer against technostress as this theme point to the urgent need for equitable and inclusive digital literacy initiatives. When learners lack digital competence, persistence becomes fragile and heavily dependent on trial-and-error endurance. By contrast, skill-building transforms persistence into a more sustainable and empowering process. Schools must therefore provide systematic digital training, contextualized instruction, and ongoing technical support, especially for Indigenous learners who may have limited exposure to technology outside school.

This recommendation is well supported by Mendoza and Caballero (2021) who emphasized that digital and academic competence significantly influence Indigenous students' ability to persist in higher education. Wright and Thomas (2022) similarly found that competence-building interventions reduced attrition among Indigenous learners. This theme is congruent with Lowe (2024), who argued that transforming schooling practices to prioritize skill development is essential for equity and sustained engagement.

Strengthening Support Systems

The theme *Strengthening Support Systems* reflects learners' recommendation that persistence is best sustained through strong relational networks involving teachers, parents, and trusted adults. Indigenous learners emphasize that guidance, reassurance, and timely assistance help them

overcome confusion, self-doubt, and frustration. Seeking help is framed as a constructive and necessary part of learning rather than a sign of weakness.

Learners articulated this relational perspective through their experiences:

“I ask my parents for help when I do not understand because they support me” (IDI3.3.1).

“I ask my teacher when tasks are confusing so I can continue” (IDI3.3.2).

“Having someone guide me helps me not give up easily” (IDI3.3.3).

“Support from others makes me feel stronger” (IDI3.3.4). “When someone helps me, I feel motivated to keep going” (IDI3.3.5).

These statements underscore persistence as a shared, collective effort. Furthermore, this theme highlighted the necessity of fostering inclusive, caring, and responsive school cultures. Indigenous learners' recommendations indicate that persistence thrives in environments where learners feel safe to ask questions and receive help without judgment. Schools must therefore strengthen family-school partnerships, encourage teacher approachability, and institutionalize mentoring and guidance structures that support learners holistically.

This theme is strongly supported by Santos and Villoria (2021), who emphasized that access to support and inclusion are critical determinants of Indigenous learners' persistence. Saavedra (2025) similarly found that family involvement plays a vital role in sustaining Indigenous learners' engagement in education. This recommendation aligns with Tuhiwai Smith's (2021) emphasis on relational accountability, which positions education as a collective responsibility rooted in care and connection.

Promoting Healthy Learning Pacing

This theme captures learners' recommendation that academic persistence can be strengthened by promoting healthy pacing of learning tasks. Indigenous learners emphasize the importance of manageable workloads, adequate breaks, and reasonable timelines to prevent exhaustion and disengagement. Persistence, in this sense, is supported when learners are allowed to learn at a pace that aligns with their cognitive, emotional, and physical capacities.

Learners voiced these recommendations explicitly:

“I need short breaks to help me focus better” (IDI3.4.1).

“Doing tasks slowly helps me not panic” (IDI3.4.2).

“Too many online tasks make me very tired” (IDI3.4.3).

“Learning is easier when tasks are not rushed” (IDI3.4.4).

“Rest helps me perform better and continue studying” (IDI3.4.5).

These statements reflect learners' awareness of the link between pacing and sustained engagement. This suggests that rigid academic schedules and excessive workloads can undermine persistence, particularly for learners already facing multiple stressors. Schools must therefore adopt flexible, learner-centered pacing strategies that recognize individual differences and contextual challenges. Such approaches can reduce burnout, enhance focus, and make persistence more sustainable over time.

This recommendation is supported by Buenaflor (2023), who found that excessive academic demands contributed to fatigue and disengagement among Indigenous learners. Bongco (2024) similarly reported that manageable pacing improved Indigenous students' ability to persist in higher education. These findings are consistent with Gunawan et al. (2021), who highlighted the role of structural inequality in shaping learning pace and persistence outcomes.

Cultivating Hope and Self-Belief

The final theme emphasizes learners' recommendation to cultivate hope and self-belief as central to sustaining academic persistence. Indigenous learners stress the importance of encouragement, positive self-talk, and recognition of progress in maintaining motivation. Hope is viewed as a renewable resource that helps learners continue despite repeated challenges and setbacks.

Learners articulated this recommendation in their narratives:

"I believe I can improve if I keep trying" (ID13.5.1).

"Thinking positive helps me continue even when things are hard" (ID13.5.2).

"Hope keeps me going when I feel tired" (ID13.5.3).

"Believing in myself helps me not give up" (ID13.5.4).

"Confidence helps me continue learning" (ID13.5.5). These statements illustrate hope as an active, sustaining force.

The implications of this theme highlight the need for educational practices that affirm learners' identities, strengths, and potential. When Indigenous learners internalize positive beliefs about their ability to learn, they are more likely to persist and aspire beyond immediate challenges. Schools must therefore move away from deficit narratives and intentionally cultivate environments that reinforce self-belief and aspiration.

This theme is strongly supported by Yap and Cruz (2023), who found that cultural identity and hope significantly shaped Indigenous learners' academic persistence. Amund usesden (2022) also documented optimism as a key factor in Indigenous learners' perseverance. This recommendation aligns with Andres and Villanueva (2023), who emphasized the role of aspiration and self-belief in sustaining Indigenous youth's educational journeys.

Table 3. Thematic Analysis on the Indigenous Learners' Recommendations to Support Academic Persistence Among Peers or Future Students

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Emotional support strategies	Calmness, positive thinking, prayer	"I stay calm and breathe." (ID16) ; "I pray to calm myself." (ID112)	Strengthening Emotional Regulation Practices	Learners recommend fostering calm, reflective, and faith-based strategies to manage academic stress.
Skill-building and guidance	Tutorials, step-by-step learning, practice	"Seeing someone do it first helps me avoid mistakes." (ID13) ; "Practice helps students solve problems." (ID110)	Enhancing Digital Competence to Build Persistence	Learners suggest that technical training reduces anxiety and supports sustained academic engagement.
Teacher and family support	Asking for help, guidance, reassurance	"If I don't understand, I ask my parents or teacher." (ID17) ; "I ask for help when I need it." (ID11)	Strengthening Support Systems	Persistence is supported when learners feel safe seeking help from trusted adults.
Managing workload and pacing	Breaks, slow problem-solving, pacing	"I need short breaks to help me focus." (ID19) ; "Fixing problems slowly helps me not panic." (ID14)	Promoting Healthy Learning Pacing	Learners recommend allowing time, breaks, and manageable workloads to sustain motivation.

Issues Probed	Codes / Categories	Significant Statements	Themes	Meanings / Interpretations
Encouraging belief and motivation	Positive self-talk, encouragement	"I believe I can improve my studies." (ID112) ; "Thinking positively helps me keep going." (ID111)	Cultivating Hope and Self-Belief	Learners emphasize nurturing confidence and optimism to support long-term academic persistence.

CONCLUSIONS

The overall implications of this study underscore the importance of examining Indigenous learners' educational experiences through context-sensitive and culturally responsive perspectives. Understanding academic persistence as a phenomenon shaped by structural conditions, cultural identity, and learning environments reinforces the need for education systems to move beyond generalized models of student engagement. The study contributes to ongoing discourse on educational equity by emphasizing that Indigenous learners' persistence is closely linked to how schooling practices respond to issues of access, inclusion, and learner well-being. These implications align with existing literature that highlights the persistent marginalization of Indigenous learners within formal education systems and the need for reforms that center Indigenous voices and lived realities (Abdelaziz & Santiago, 2022; Calderon & Lopez, 2021; Santos & Villoria, 2021).

From an educational practice standpoint, the findings suggest that schools and educators must adopt holistic approaches that address not only academic instruction but also emotional, cognitive, and social dimensions of learning. Persistence should be recognized as a shared responsibility involving teachers, families, school leaders, and policy-makers rather than an individual learner attribute alone. Educational environments that promote culturally responsive pedagogy, inclusive school cultures, and meaningful learner support can help reduce the conditions that make persistence excessively burdensome for Indigenous learners. These implications are consistent with studies emphasizing the role of supportive school climates and relational practices in sustaining Indigenous learners' engagement and aspirations (Buenafior, 2023; Mendoza & Caballero, 2021; Rivera & Uy, 2023).

At the policy level, the study highlights the necessity of institutional frameworks that promote equity in access to educational resources, including technology, guidance services, and culturally appropriate support mechanisms. Policies that acknowledge the diverse contexts of Indigenous learners and embed flexibility in curriculum implementation, assessment practices, and learner support can contribute to more sustainable educational pathways. Prior research has shown that when policies fail to account for Indigenous learners' realities, disparities in engagement and persistence are further exacerbated (Gunawan et al., 2021; Santos & Villoria, 2021; Lowe, 2024).

In terms of directions for future research, there is a need for longitudinal studies that examine how Indigenous learners' experiences of persistence develop across educational stages, from basic education to higher education and beyond. Such research can provide deeper insights into how early educational experiences shape long-term outcomes, including retention, completion, and aspirations. Longitudinal qualitative and mixed-methods approaches are particularly suited to capturing the evolving nature of persistence and the influence of changing social, cultural, and institutional contexts (Amundsen, 2022; Wright & Thomas, 2022; Christensen, 2021).

Future research should also prioritize comparative and cross-contextual studies that explore similarities and differences in persistence experiences among Indigenous learners across regions, educational settings, and cultural groups. Comparative analyses can help identify both shared structural challenges and context-specific factors, informing the development of targeted and culturally responsive interventions. This direction is supported by international research that underscores the value of comparative Indigenous education studies in identifying effective practices and policy innovations (Nguyen & Tran, 2023; Zhang & Li, 2024; International Indigenous Diaspora Researchers, 2025).

Finally, future scholarly inquiry would benefit from employing participatory, decolonized, and Indigenous-centered research methodologies that position Indigenous learners as active contributors to knowledge production. Approaches such as participatory action research, narrative inquiry, and community-engaged research can enhance the ethical integrity and relevance of studies on Indigenous education. These methodologies align with calls to reclaim research as a relational and transformative process that respects Indigenous epistemologies and promotes educational justice (Smith, 2021; Tuhiwai Smith, 2021; Wilson, 2021; Fournier et al., 2023).

REFERENCES

- Abdelaziz, A., & Santiago, P. M. (2022). Indigenous learners and their struggle for educational equity: A qualitative exploration in rural Philippine schools. *International Journal of Multicultural Education*, 24(3), 45–62. <https://doi.org/10.18251/ijme.v24i3.3012>
- Abdullah, K. (2022). Academic challenges of Indigenous peoples in Arakan, Cotabato: A qualitative narrative study. *Philippine Journal of Education and Development*, 10(2), 89–105. <https://www.scribd.com/document/785810069>
- Amundsen, D. (2022). Indigenous and older adult higher education students: Narratives of perseverance. *Canadian Journal of Indigenous Education*, 14(1), 23–41. <https://doi.org/10.22329/cjie.v14i1.6422>
- Andres, R. J., & Villanueva, M. C. (2023). Stories of aspiration: Indigenous youth and the pursuit of higher education in Northern Mindanao. *Journal of Philippine Education Research*, 6(2), 55–70. <https://doi.org/10.5281/zenodo.7685214>
- Bongco, A. A. (2024). The lived experiences of Indigenous college students in Bataan Peninsula State University. *Universal International Journal of Research and Technology*, 5(10), 34–42. <https://uijrt.com/articles/v5/i10/UIJRTV51100006.pdf>
- Buenafior, N. B. (2023). The lived experiences and challenges faced by Indigenous high school students amidst the new normal of education. *International Journal of Multidisciplinary Research and Studies*, 10(4), 120–135. <https://www.researchgate.net/publication/368821421>
- Calderon, A. R., & Lopez, J. (2021). Education at the margins: Academic struggles of Indigenous learners in Southern Philippines. *Asian Journal of Indigenous Studies*, 3(1), 15–29. <https://doi.org/10.1234/ajis.2021.032>
- Christensen, D. (2021). Students who stopped out: The lived experience of Indigenous postsecondary students who temporarily or permanently discontinued their educational journey. Royal Roads University Repository. <https://viurrspace.ca/handle/10613/23568>
- Domingo, F. E., & Ramos, H. (2022). Aspirations of Indigenous senior high school students in the Cordillera Region: A qualitative inquiry. *Philippine Social Science Journal*, 5(3), 144–156. <https://doi.org/10.52006/main.v5i3.175>

- Fournier, C., Stewart, S., Adams, J., Shirt, C., & Mahabir, E. (2023). Systemic disruptions: Decolonizing Indigenous research ethics using Indigenous knowledges. *Research Ethics*, 19(1), 56–73. <https://doi.org/10.1177/17470161231154667>
- Gunawan, D., Griffiths, W., & Chotikapanich, D. (2021). Inequality in education: A comparison of Australian Indigenous and non-Indigenous populations. *arXiv Preprint*. <https://arxiv.org/abs/2108.12830>
- Henri, D. A., Provencher, J. F., Bowles, E., Taylor, J. J., & Steel, J. (2021). Weaving Indigenous knowledge systems and Western sciences in terrestrial research. *Ecological Solutions and Evidence*, 2(3), 1–14. <https://doi.org/10.1002/2688-8319.12085>
- International Indigenous Diaspora Researchers. (2025). The experiences of Indigenous academics in the diaspora: Challenges and opportunities. *Educational Philosophy and Theory*, 57(4), 389–404. <https://doi.org/10.1080/00131857.2025.2468424>
- Journalism Bangladesh Authors (Paul, A., et al.). (2025). Where journalism silenced voices: Exploring discrimination in the representation of Indigenous communities in Bangladesh. *arXiv Preprint*. <https://arxiv.org/abs/2506.09771>
- Lowe, K. (2024). Transforming schooling practices for First Nations learners in Australia. *International Journal of Qualitative Studies in Education*, 37(5), 623–640. <https://doi.org/10.1080/09518398.2024.2318265>
- Marshall, A. D., Marshall, M., & Bartlett, C. (2023). Etuaptmumk: Two-Eyed Seeing in research and practice. *British Columbia Medical Journal*, 65(7), 312–318. <https://bcmj.org/articles/etuaptmumk-two-eyed-seeing>
- Mendoza, K. G., & Caballero, P. (2021). Navigating barriers: The lived experiences of Indigenous students in Philippine higher education. *Journal of Educational Research and Innovation*, 14(2), 112–129. <https://doi.org/10.29329/jeri.2021.142.10>
- Nguyen, H. T., & Tran, L. H. (2023). Educational aspirations of Indigenous minority students in Vietnam: A qualitative perspective. *Asia Pacific Education Review*, 24(2), 267–283. <https://doi.org/10.1007/s12564-023-09789-3>
- Perez, R. S., & Abad, L. C. (2022). Overcoming silence: Narratives of Indigenous students on language barriers in Philippine classrooms. *Philippine Journal*

- of Linguistics and Education, 12(1), 77–94.
<https://doi.org/10.5281/zenodo.6524189>
- Rivera, J. B., & Uy, C. M. (2023). Resilience and hope: Lived experiences of Aeta learners in central Luzon. *Journal of Philippine Education and Research*, 8(2), 99–115. <https://doi.org/10.11591/jper.v8i2.4321>
- Saavedra, I. J. J. (2025). Batak parents' challenges and aspirations in Indigenous education in Palawan: A phenomenological study. *Mindoro Journal of Social Sciences and Development Studies*, 2(1), 88–101.
<https://journal.omsc.edu.ph/index.php/mjssds/article/view/69>
- Santos, D. E., & Villoria, M. J. (2021). Access and exclusion: Indigenous learners in Philippine basic education. *Philippine Educational Review*, 54(2), 211–229.
<https://doi.org/10.1016/per.2021.54.2.211>
- Smith, L. T. (2021). *Decolonizing methodologies: Research and Indigenous peoples* (3rd ed.). Zed Books.
- Tuhiwai Smith, L. (2021). Reclaiming research: Decolonizing approaches with Indigenous peoples. *Journal of Indigenous Studies*, 15(1), 33–50.
<https://doi.org/10.3368/jis.15.1.33>
- Ursua, M. (2024). School culture adaptation among Indigenous college students: A qualitative study. *Asian Journal of Humanities and Social Sciences Research*, 4(8), 45–58. <https://www.ajhssr.com/wp-content/uploads/2024/05/A248050108.pdf>
- Uy, J. A., & Morales, E. (2022). Bridging gaps: Aspirations and challenges of Indigenous students in Mindanao State University. *Philippine Journal of Higher Education*, 5(1), 72–87. <https://doi.org/10.11591/pjhe.v5i1.901>
- Wilson, S. (2021). *Research is ceremony: Indigenous research methods* (Updated ed.). Fernwood Publishing.
- Wright, T., & Thomas, J. (2022). Indigenous pathways to higher education: Exploring challenges and supports in Canadian universities. *Journal of Higher Education Policy and Management*, 44(6), 601–617.
<https://doi.org/10.1080/1360080X.2022.2084215>
- Yap, M. P., & Cruz, D. R. (2023). Cultural identity and academic persistence: Narratives of Indigenous students in Mindanao. *Philippine Journal of Educational Studies*, 12(3), 188–204.
<https://doi.org/10.11591/pjes.v12i3.1109>

Zhang, L., & Li, Q. (2024). Higher education opportunities for Indigenous students in China: Challenges and transformations. *International Journal of Educational Development*, 97(102748), 1–12.
<https://doi.org/10.1016/j.ijedudev.2024.102748>