

EXPLORING THE LEARNING NEEDS OF GENERATION Z IN TOURISM AND HOSPITALITY HIGHER EDUCATION: A STUDY OF DIGITAL EXPECTATIONS AND INSTITUTIONAL READINESS

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Abstract | This study explores the evolving learning needs of Generation Z postgraduate students in tourism and hospitality higher education across the pre-enrolment, enrolment, and post-graduation phases. As digital natives, Generation Z students demonstrate distinct expectations regarding personalised education, technology integration, and continuous engagement. Despite increasing emphasis on student-centred education, institutional support mechanisms remain fragmented and concentrated primarily at the early stages of the student journey, limiting long-term developmental support. This fragmentation reflects an underlying governance challenge, whereby support is often treated as episodic service delivery rather than as a sustained and coordinated institutional commitment. Drawing on Self-Determination Theory (SDT), inclusive education, and the Digital Readiness Framework, this study reconceptualises student support as an ongoing and digitally integrated institutional commitment. Through qualitative analysis of semi-structured interviews with 25 Generation Z postgraduate students from tourism and hospitality higher education institutions in Thailand, the study identified critical gaps in institutional support systems affecting student engagement, achievement, and retention. Findings underscore the importance of sustained institutional partnerships, tailored digital support, and emotional trust throughout all student lifecycle stages. Based on these findings, the study proposes the lifecycle student support model, a comprehensive framework combining institutional preparation with the recursive, digital-first, and psychological dimensions of Gen Z learner experiences. The model emphasises anticipatory guidance, collaboratively designed hybrid learning environments, and AI-enhanced postgraduate engagement as core components of an inclusive, future-oriented higher education paradigm. This research provides policymakers, institutions, and researchers with actionable insights for redefining tourism and hospitality higher education as a continuous and adaptive partner in student development, fostering leadership preparedness and lifecycle-based institutional responsibility in the digital era.

Keywords | Learning needs, Generation Z, Digital expectations, Institutional readiness, Tourism and hospitality higher education

1. Introduction

In recent decades, higher education institutions (HEIs) have undergone significant transformation due to intensifying global competition, increasing accountability demands, and expanded access expectations (Marginson, 2011; Tinto, 2012). These changes have affected diverse student populations and disrupted traditional educational models, resulting in non-linear and recursive learning trajectories that challenge existing support structures. Consequently, institutions must redefine their roles, shifting from transactional instruction to holistic partnerships that foster inclusive, lifelong learning environments.

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Despite this necessity, institutional support structures continue to prioritise entry-phase interventions, first-year orientation, academic advising, and remediation, often overlooking students' evolving academic, social, and psychological needs (Barnes et al., 2024; Johnson et al., 2022). This compartmentalisation is partly driven by limited administrative coordination and fragmented policy planning (Marginson, 2011), and it reflects outdated assumptions that early challenges diminish after initial integration, potentially undermining long-term retention and satisfaction. Foundational research rejects linear persistence models, demonstrating that continuous engagement across the student lifecycle is essential for sustained success (Tinto, 2012).

The increasing presence of Generation Z, born between 1997 and 2012, as the dominant demographic group in higher education further highlights these deficiencies (Alruthaya et al., 2021). Having grown up in digitally connected environments, Generation Z postgraduate students demonstrate high levels of technological familiarity and expect personalised, engaging learning experiences. They expect timely responses, customisable content, and seamless integration of digital technologies into curricula. Hybrid and AI-enhanced pedagogies have the potential to address these requirements; however, numerous institutions are unable to effectively implement them due to a lack of infrastructure, faculty competencies, and critical digital literacy initiatives (Chardonens, 2025; Wu, 2024). Addressing these deficiencies requires deliberate policy initiatives that prioritise strategic leadership investment and digital governance rather than relying solely on technological advancement (O'Farrell & Weaver, 2024).

The COVID-19 pandemic further exposed and intensified these existing challenges. Higher education institutions swiftly adapted to online and blended formats during the crisis; however, many institutions struggled to maintain comprehensive support for student well-being, engagement, and learning continuity (Johnson et al., 2022). Surveys indicate that Gen Z students adapted swiftly to remote learning; however, they reported a decline in their sense of institutional belonging, mental health support, and social connectedness (Lopes, 2024).

Existing literature primarily examines isolated interventions or individual lifecycle phases, creating a critical gap in understanding how digital expectations and support requirements develop from pre-enrolment to post-graduation (Pasichnyi et al., 2024). In the absence of this longitudinal knowledge, higher education institutions lack the necessary evidence to formulate cohesive support systems that correspond with Generation Z's comprehensive expectations and developmental pathways.

The Self-Determination Theory (SDT) provides a comprehensive framework for analysing the motivational drivers of Generation Z, including autonomy, competence, and relatedness. These drivers are responsible for the persistence and engagement of this demographic (Deci & Ryan, 2000). However, the implementation of SDT in educational institutions needs the incorporation of inclusive education concepts and digital readiness. Digital readiness includes institutional capacity for digital integration, infrastructural scalability, and faculty growth (Giang et al., 2021). Inclusive education ensures that digital innovations are both accessible and culturally pertinent, thereby averting the intensification of equity disparities.

Addressing the intersection of lifecycle fragmentation, Gen Z digital fluency, and institutional inertia, this study seeks to develop a lifecycle student support model that integrates these dimensions. The research will identify critical intervention points and design evidence-based frameworks for policy and leadership reform by systematically exploring the learning needs of Gen Z students across pre-enrolment, enrolment, and post-graduation phases. This approach is crucial for institutional leaders to transition from reactive service delivery to proactive, data-informed governance. Furthermore, a model aims to improve student success metrics, bolster institutional sustainability, and enable higher education institutions to excel in a progressively competitive and digitally influenced educational environment.

Ultimately, rectifying these deficiencies will enhance student learning and engagement while also influencing strategic policy frameworks that direct digital transformation, inclusive leadership, and long-term institutional resilience in higher education. This study thus not only advances theoretical understanding but also informs institutional policy strategies for sustained digital transformation.

2. Theoretical framework

2.1 Rethinking Student Needs in the Era of Digital Natives

As higher education continues to evolve through digital transformation, understanding students' distinctive learning needs has become crucial for institutional success and leadership decision-making. However, many institutions continue to rely on conventional student support models centred on early transition phases, such as orientation and academic counselling, which often fail to address the complex and evolving needs of contemporary learners (Tinto, 2012; Leese, 2010). This issue is particularly salient with Generation Z, the first cohort to grow up in a fully digital environment whose learning expectations fundamentally diverge from those of previous generations (Schwieger & Ladwig, 2018; Hernández-de-Menéndez et al., 2020).

Generation Z's learning behaviour reflects three interrelated dimensions: flexibility and autonomy through hybrid learning, AI-enabled personalisation, and critical digital literacy supporting self-regulated learning. These dimensions interact dynamically across the student lifecycle and require institutional responses that balance technological integration with cognitive and socio-emotional development (Alruthaya et al., 2021; Chardonens, 2025). Hybrid and blended learning models, when effectively implemented, meet Gen Z's preference for autonomy and social connection by allowing both independent exploration and collaborative engagement. As Schwieger and Ladwig (2018) emphasise, Gen Z thrives in environments that provide instant access to knowledge and continuous opportunities for interaction.

Despite increasing awareness of these preferences, numerous higher education institutions remain inadequately equipped to address them. Research indicates that the implementation of immersive technologies, including virtual reality (VR) and augmented

reality (AR), is uneven owing to infrastructural deficiencies, inadequate digital strategies, and insufficient faculty training (Nisiforou & Kosmas, 2024). However, the assumption that digital natives inherently possess advanced digital competence is misleading. While Gen Z students are proficient in using digital tools, they often lack higher-order digital literacy, the ability to evaluate, synthesise, and apply information critically for learning (Wu, 2024; Aimoldina & Smagulova, 2024). Addressing this gap requires institutions not only to integrate technology but also to embed digital literacy as a foundational academic competency.

The COVID-19 pandemic expedited digital transition and revealed the vulnerabilities of current educational methods. Institutions swiftly transitioned to online formats; nonetheless, numerous entities struggled to maintain student involvement, well-being, and connectivity (Johnson et al., 2022; Lopes, 2024). This experience highlighted that technological adoption alone is insufficient without parallel development of inclusive pedagogical strategies and leadership vision. As O'Farrell and Weaver (2024) observe, digital transformation demands a redefinition of institutional purpose from content delivery to the co-creation of learning experiences that foster adaptability, belonging, and continuous growth.

Therefore, meeting Generation Z's educational needs requires more than technological advancement; it calls for an institutional paradigm shift. Institutions must rethink student engagement and support as integral components of their digital leadership and policy strategies. Effective adaptation involves designing learning ecosystems that incorporate AI-driven personalisation, hybrid flexibility, and structured digital literacy development while preserving the human dimensions of mentorship and community. Only through such holistic approaches can higher education institutions enhance learning outcomes, strengthen student satisfaction, and ensure institutional sustainability in the digital era (Bagdi & Bulsara, 2023; Chardonens, 2025).

2.2 Toward a Lifecycle Continuum of Student Support

Conventional student support strategies in higher education have primarily focused on early transition phases, including pre-enrolment guidance and first-year orientation. While these interventions focus on immediate adaptation needs, they neglect the evolving

nature of students' academic, emotional, and social development throughout their educational journeys. This fragmentation stems from the outdated assumption that students' support needs decline once academic integration is achieved (Tinto, 2012; Strayhorn, 2015). However, contemporary evidence suggests that engagement and persistence depend on continuous institutional responsiveness across all stages of the student lifecycle (Johnson et al., 2022).

Self-Determination Theory (SDT) offers a compelling framework for rethinking student support as a lifelong process. By emphasising the fulfilment of autonomy, competence, and relatedness, SDT explains how intrinsic motivation drives sustained engagement (Deci & Ryan, 2012; Salikhova et al., 2020). Institutions that consistently design systems to nurture these psychological needs, rather than providing episodic support, are more likely to achieve stronger outcomes in retention, well-being, and student satisfaction. This strategy aligns with the shift from transactional to developmental paradigms in higher education, wherein institutional leadership cultivates support ecosystems that encompass both professional and personal advancement beyond academic instruction.

SDT is enhanced by student development theory, which acknowledges that academic performance is inextricably linked to emotional and social domains. Hines (2017) proposes that external stressors, such as financial insecurity or social isolation, can undermine engagement by conceptualising six interconnected areas of student life: living, learning, working, playing, connecting, and participating. Therefore, institutions are required to develop comprehensive frameworks that incorporate academic advising, mentoring, financial assistance, and mental health support into a cohesive continuum that corresponds to each stage of the student journey (Lopes, 2024).

In the digital era, this continuum increasingly depends on technologically enhanced and personalised systems. Generation Z students, as digital natives, expect real-time feedback, adaptive learning platforms, and personalised support facilitated by AI (Alruthaya et al., 2021). However, while such technologies can enhance autonomy and engagement, uncritical reliance on AI may inadvertently reduce opportunities for reflection, self-regulation, and human connection (Wu, 2024). Institutional leaders must thus ensure that technological adoption complements, rather than replaces, human mentorship.

In tourism and hospitality higher education, student learning experiences are strongly influenced by the applied and industry-oriented nature of these disciplines. Unlike purely theoretical fields, tourism and hospitality programmes require students to integrate academic knowledge with practical experience, industry engagement, professional skills development, and employability preparation (Dale & Robinson, 2001; Lashley, 2008). Experiential learning and industry collaboration are therefore essential components of hospitality education, as they bridge classroom learning and professional practice (Kolb, 1984). Consequently, institutional support in this context extends beyond academic learning to encompass networking opportunities, professional development, and sustained relationships among students, institutions, and industry stakeholders.

Frameworks such as S²ONA (Gilbert et al., 2010) and Hines' multidomain model (2017) offer practical guidance for creating inclusive and participatory support systems spanning the student lifecycle. These frameworks emphasise shared responsibility, where students are treated as active partners in co-designing their learning environments. Such participatory engagement fosters belonging, accountability, and agency qualities that sustain persistence long after graduation.

Finally, the development of critical digital literacy must be embedded throughout the academic experience. Although Generation Z students demonstrate technological familiarity, many lack advanced digital literacy skills required for critical evaluation and self-regulated learning (Wu, 2024; Aimoldina & Smagulova, 2024). Embedding digital literacy as a core competency ensures that students can navigate complex information ecosystems, fostering independent learning and resilience across academic and professional contexts.

In conclusion, realigning student support to a lifecycle continuum requires a transformation in institutional culture and leadership goals. Institutions should not regard student support as an isolated service; rather, they must develop integrated, flexible systems that align with the evolving academic, emotional, and digital needs of students. This transformation enhances involvement and equity while fortifying institutional resilience and accountability in the swiftly evolving higher education environment.

2.3 Inclusive and Participatory Education in a Digital Context

The rapid integration of digital technologies into higher education has fundamentally altered the concept of inclusion and participation. Inclusionary education is no longer limited to physical accessibility or disability accommodation; it must now encompass digital inclusion, ensuring that all students, irrespective of their socioeconomic background, digital competency, or cultural identity, can participate in technology-enhanced learning environments in a meaningful manner (Gilbert et al., 2010; OECD, 2023). Inclusive digital practices are indispensable for Generation Z, whose academic and social lives are intricately connected to digital ecosystems, to ensure sustained engagement and equitable participation.

In this context, inclusive education requires higher education institutions (HEIs) to move beyond the mere provision of technology toward designing pedagogical ecosystems that promote critical thinking, collaboration, and social interaction. While AI-driven systems and hybrid models can enhance personalisation and flexibility, they must be implemented in ways that foster reflective, human-centred learning rather than passive consumption (Aimoldina & Smagulova, 2024; Wu, 2024). Institutions need to ensure that technological integration enhances the interpersonal dimensions of teaching, mentorship, and community development, which are essential for student motivation and sense of belonging (Deci & Ryan, 2012).

Participatory frameworks represent a critical dimension of digital inclusion. Models such as S²ONA (Gilbert et al., 2010) and Hines (2017) multidomain approach emphasise the value of treating students as co-creators rather than passive recipients of education. This participatory ethos aligns with Generation Z's preference for autonomy and collaboration, positioning students as partners in shaping their learning environments and institutional policies (Strayhorn, 2015). Institutions foster a culture of shared ownership that reinforces both individual and collective empowerment by incorporating authentic student voice in curriculum design, decision-making, and digital governance.

At the policy level, inclusive and participatory education necessitates institutional digital leadership, an intentional strategy that aligns technological investments with goals for equity and inclusion (O'Farrell & Weaver, 2024). Leadership commitment is required to ensure equitable infrastructure, professional development for faculty, and mechanisms

for continuous feedback from students. Without such leadership, digital transformation risks deepening existing inequities, as students with limited access to devices, stable internet, or digital literacy skills remain marginalised (OECD, 2023).

Moreover, developing critical digital literacy is central to inclusive education in the 21st century. Although Generation Z exhibits technological fluency, this capability frequently conceals deficiencies in analytical and evaluative skills (Wu, 2024). Embedding critical digital literacy into curricula equips students to question algorithmic bias, misinformation, and surveillance practices that increasingly shape online learning environments (Bagdi & Bulsara, 2023). In the process, institutions cultivate civic agency and academic competence, enabling graduates to competently navigate the ethical and social aspects of digital life.

In conclusion, inclusive and participatory education in the digital era extends beyond access; it encompasses the creation of equitable, human-centred learning ecosystems that empower students to co-design their educational experiences. For higher education leaders, this transformation entails embedding inclusion and participation within institutional strategy, faculty development, and digital governance. By ensuring that technological innovation fosters social justice and intellectual development, higher education institutions can maintain relevance and validity in a rapidly shifting educational environment.

2.4 Theoretical Integration and Research Framework

This study integrates three interrelated frameworks—Self-Determination Theory (SDT), Inclusive Education, and the Digital Readiness Framework—to provide a multidimensional perspective on Generation Z students’ learning needs in tourism and hospitality higher education (Figure 1). These frameworks collectively connect students’ psychological motivations, inclusive learning experiences, and institutional digital capabilities, providing a foundation for understanding how higher education institutions can develop responsive support systems throughout the student lifecycle.

The integration of these perspectives conceptualises higher education as an ecosystem combining human-centred support with digital innovation. Specifically, these perspectives contribute complementary dimensions to the framework: SDT explains

students' psychological needs for autonomy, competence, and relatedness; Inclusive Education highlights equitable and supportive learning environments; and the Digital Readiness Framework emphasises institutional capability to utilise digital technologies for personalised and connected learning experiences.

These theoretical perspectives also provide a lens through which the empirical themes identified in this study can be interpreted. Specifically, the themes of services and support and management and support reflect the principles of Inclusive Education and Digital Readiness through accessible, responsive, and technology-supported institutional services. Quality education and curriculum, as well as network development and opportunities, are closely associated with Self-Determination Theory, particularly through the development of competence and relatedness via meaningful learning and collaborative experiences. Career opportunities and institutional relations further demonstrate the importance of sustained institutional engagement beyond graduation, reflecting the integration of psychological, social, and digital dimensions across the student lifecycle.

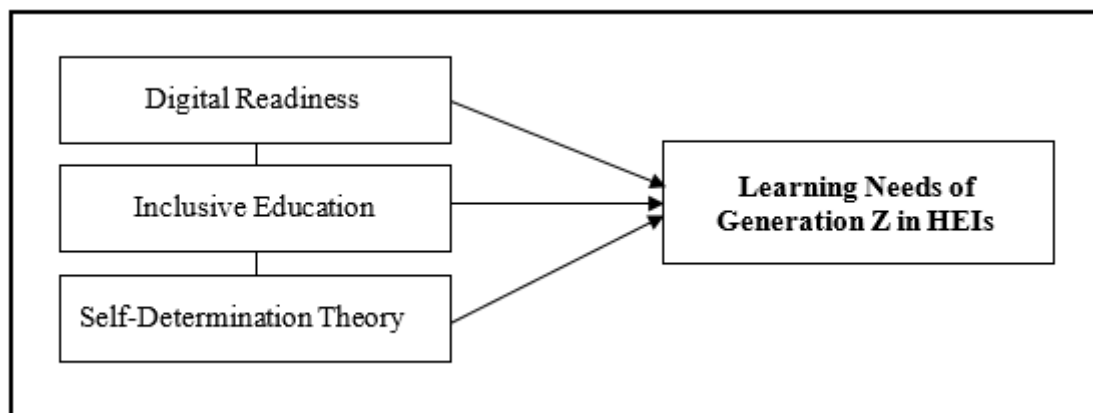


Figure 1. Research Framework

Source: The author.

3. Methodology

This study employed a qualitative research design grounded in a theoretical framework integrating Self-Determination Theory, Inclusive Education, and the Digital Readiness Framework to explore how Generation Z's learning needs evolve throughout the academic lifecycle in Thai higher education. The qualitative approach was considered

appropriate because it enables an in-depth understanding of complex and context-dependent educational experiences from participants' perspectives (Creswell & Poth, 2016). Qualitative content analysis was conducted to identify recurring patterns, relationships, and emerging themes within the data, providing a systematic yet flexible interpretive approach (Elo & Kyngäs, 2008).

A purposive sampling technique was utilised to recruit 25 participants from tourism and hospitality higher education institutions in Thailand, including 17 master's students and 8 doctoral students (Table 1). Participants were selected based on the following predefined inclusion criteria: (1) they were Generation Z students born between 1997 and 2012; (2) they were enrolled in postgraduate programmes related to tourism and hospitality management; and (3) they had experienced technology-supported learning environments during their studies. The participants represented diverse academic levels and institutional contexts, providing a broad range of perspectives on digital expectations and institutional support. Data collection continued until data saturation was reached, whereby subsequent interviews no longer generated substantially new codes, categories, or themes.

Ethical approval for this study was obtained from the Ethics Committee in Human Research, National Institute of Development Administration (NIDA), Thailand (COA No. 2024/0215). The study was conducted in accordance with internationally recognised ethical principles for human research, including the Declaration of Helsinki, the CIOMS Guidelines, and the Belmont Report.

Data were collected through semi-structured interviews conducted from January to March 2025, with each interview lasting approximately 25 to 40 minutes depending on participant engagement. The interview protocol consisted of four guiding questions designed to elicit participants' perspectives on their motives, learning needs, and perceptions of institutional support:

- i. What institutional support is required before enrolment?
- ii. What learning resources, guidance, and engagement are required during study?
- iii. What continued institutional support is expected after graduation?
- iv. What are the students' highest expectations from their higher education experience overall?

These questions were structured to align with the student lifecycle framework: pre-enrolment, enrolment, and post-graduation, while reflecting the motivational, inclusive, and digital dimensions emphasised in the theoretical model.

All interviews were conducted in Thai, audio-recorded after obtaining participants' written informed consent, transcribed verbatim, and translated into English for analysis and reporting purposes. Prior to data collection, ethical approval was obtained from the relevant institutional ethics committee, and all participants were informed about the research objectives, confidentiality procedures, voluntary participation, and their right to withdraw at any stage. To ensure translation accuracy, the translated transcripts were reviewed against the original Thai transcripts, and discrepancies in interpretation were resolved before the coding process.

Data were analysed inductively following Braun and Clarke's (2006) six-phase thematic analysis framework: familiarisation, coding, theme generation, review, definition, and reporting. The coding process involved systematically identifying meaningful statements, developing initial codes, and refining themes through repeated comparison with the original transcripts. To enhance analytical credibility, the researcher's academic advisor reviewed the coding interpretations and emerging themes. Feedback regarding the interpretation of codes and themes was discussed and incorporated to ensure that the final themes accurately represented participants' experiences. Given the single-researcher design of this study, formal intercoder reliability testing (e.g., calculation of Cohen's kappa across independent coders) and participant member checking were not conducted. To partially mitigate this limitation, analytical rigour was instead supported through continuous engagement with the transcripts, an audit trail documenting coding decisions, and periodic review of the coding scheme and emerging themes by the researcher's academic advisor, whose feedback was incorporated to refine the final thematic structure. Detailed descriptions of participants and research contexts were provided to enhance transferability.

Table 1. Participant Information

Code name	Age	Gender	Level of study
M1	28	Male	Master's degree
M2	26	Male	Master's degree
M3	26	Female	Master's degree
M4	25	Female	Master's degree
M5	23	Female	Master's degree
M6	26	Male	Master's degree
M7	27	Female	Master's degree
M8	28	Female	Master's degree
M9	27	Female	Master's degree
M10	26	Male	Master's degree
M11	26	Male	Master's degree
M12	25	Female	Master's degree
M13	23	Male	Master's degree
M14	25	Male	Master's degree
M15	24	Female	Master's degree
M16	25	Female	Master's degree
M17	24	Female	Master's degree
D18	24	Female	Doctoral degree
D19	27	Female	Doctoral degree
D20	28	Female	Doctoral degree
D21	27	Female	Doctoral degree
D22	28	Male	Doctoral degree
D23	26	Female	Doctoral degree
D24	27	Female	Doctoral degree
D25	25	Female	Doctoral degree

Source: The author.

4. Results

4.1 The Evolution of Generation Z's Needs Across the Academic Lifecycle

Analysis of interviews with 25 master's and doctoral students indicates that Generation Z's academic and psychosocial needs vary across the pre-enrolment, enrolment, and post-graduation phases. Six interconnected themes emerged: services and support, quality education and curriculum, network development and opportunities, management and support, career opportunities, and institutional relations. These themes demonstrate that student needs are cumulative and recursive rather than static or confined to specific phases.

Table 2. Summary of Participants' Learning Needs Across the Student Lifecycle

Code Interview No.	Pre-Enrollment Needs	During Enrollment Needs	Post-Graduation Needs
M1	Close assistance from staff	Modern education	Friendliness and good relationships
M2	Staff fully prepared to assist	Teaching methods of lecturers	-
M3	-	Unique experiences outside the classroom	-
M4	Clear and easy-to-understand instruction	Site visits	Social gatherings
M5	Knowledge sharing	Site visits	Joint activities
M6	Full access to content	Knowledge	Opportunities
M7	Staff care	Academic planning consultation	Connection across different cohorts
M8	-	Increase class duration per subject	Networking meetings
M9	Study duration and tuition fees	Memorable experiences	Opportunity to become a lecturer
M10	Assistance and quick access to information	Knowledge & Connection	Keep connection between alumni
M11	Information service on education	-	-
M12	-	Equality and consistency	Knowledge sharing from graduates
M13	-	Connections	Career guidelines
M14	Coordination between student services and students	Future planning guidance	Meetings and various opportunities
M15	-	Tolerance in handling personal issues	-
M16	Communication and documentation	Case study analysis for students	Pride
M17	Support from staff	Knowledge and experience in various fields	Professional network
D18	Internal coordination within departments	Research collaboration experience	Referrals to organizations needing graduates
D19	Staff always anticipate what students require	Attention to student needs	Connection
D20	Information search system	-	-
D21	Clear information	Guidance and counseling	Professional networking
D22	Staff attentiveness	Graduation information	Academic network
D23	-	Off-campus education	-
D24	-	Statistical software knowledge	-
D25	Staff assistance with complete information	Research knowledge and skills	Student network and collaboration

Source: The author.

Table 3. Illustrative Coding Process and Theme Development

Illustrative Data Extract	Initial Coding	Category	Theme
“Close assistance from staff and supportive management throughout the learning journey” (M1)	Need for accessible institutional support	Student support services	Services and support
“Staff provide good assistance and complete information” (DG25)	Availability of information and staff assistance	Institutional guidance and services	Services and support
“Modern education that can be applied to various situations in society” (M1)	Need for modern and relevant education	Curriculum improvement and relevance	Quality education and curriculum
“Academic knowledge, industry knowledge, integration skills, and research skills” (DG25)	Development of academic and professional competencies	Knowledge and skill enhancement	Quality education and curriculum
“Having opportunities to participate in research activities” (D18)	Research experience opportunities	Academic and professional development	Network development and opportunities
“Student networks and collaboration with the faculty” (DG25)	Networking and institutional collaboration	External and internal engagement	Network development and opportunities
“Attention to student requirements” (D19)	Responsiveness to student needs	Student-centred management	Management and support
“Listen carefully to students’ opinions and concerns” (D19)	Active communication and responsiveness	Institutional responsiveness	Management and support
“Recommend organisations that require graduates with relevant qualifications” (D18)	Employment guidance and career connection	Career preparation and support	Career opportunities
“PhD degree and future professional connections” (D19)	Long-term academic and career development	Future career pathways	Career opportunities
“Friendliness and good relationships” (M1)	Sense of belonging and institutional relationship	Long-term institutional connection	Institutional relations
“Connection after graduation” (D19)	Maintaining alumni relationships	Alumni engagement	Institutional relations

Source: The author.

4.2 Pre-Enrolment: Building Digital Trust and Early Connection

In the pre-enrolment phase, Generation Z postgraduate students seek transparent guidance, proactive support, and authentic engagement with institutional representatives. Codes such as “close assistance from staff” (M1), “staff fully prepared to assist” (M2), “staff care” (M7), and “information search system” (D20) collectively highlight the role of human-centred digital support in building institutional trust. One participant highlighted the importance of receiving close assistance from university staff, stating that:

“Close support from staff helps students feel more confident and prepared before entering the programme” (M1).

Another participant emphasised the importance of accessible information systems, noting that:

“An effective information search system helps students obtain necessary information before making decisions” (D20).

Students value transparent admission processes, accessible tuition information, and digital platforms that provide seamless access to relevant information. Doctoral participants, in particular, emphasised the need for platforms or systems that provide research guidance and department-level support. These findings suggest that establishing digital trust early contributes to positive student–institution relationships, emphasising the importance of early engagement in building long-term trust.

4.3 Enrolment: Co-Constructing Learning and Digital Belonging

During the enrolment phase, demand for quality, personalised learning and meaningful peer interaction becomes particularly evident. Students highly value hybrid learning environments integrating online and face-to-face interaction, AI-enabled real-time feedback, and opportunities to apply classroom knowledge in real-world settings through site visits (M4, M5), “collaborative projects” (D23), and professional workshops. The desire for “academic planning consultation” (M7), “increased class duration” (M8), and “case study analysis via AI” (M16) reflects Generation Z’s preference for practical and adaptive learning experiences.

One participant emphasised the importance of practical learning experiences, stating that:

“Learning activities connected with real situations, such as site visits and professional experiences, help students understand and apply knowledge more effectively” (M4).

Another participant highlighted the value of collaborative learning, noting that:

“Working with others through group projects creates opportunities to exchange ideas and develop new perspectives” (D23).

Furthermore, social and emotional needs remain essential components of the learning experience. References including “offline and online connection platforms” (M13),

“equality and consistency” (M12), and “tolerance in handling personal issues” (M15) underscore the importance of inclusive and emotionally supportive environments, aligning with the fundamental principles of Self-Determination Theory: autonomy, competence, and relatedness. Opportunities for peer collaboration and participatory culture are essential for the development of emotional safety and digital belonging.

A participant also highlighted the importance of maintaining connections through both digital and physical spaces, explaining that:

“Students need platforms where they can communicate and build relationships with classmates and the institution” (M13).

Another participant stressed the importance of fairness and understanding, indicating that:

“Equal treatment and consideration of individual circumstances make students feel supported during their studies” (M12).

4.4 Post-Graduation: Continuous Connection and Digital Professional Support

The need for institutional support extends beyond graduation. Participants, especially students approaching graduation, expressed the need for ongoing career referrals, networking, mentorship, and opportunities for professional development such as “career guidelines” (M13), “lecturer opportunity” (M9), and “professional networking platforms” (D21/D25).

One participant highlighted the importance of continued career support after completing the programme, stating that:

“Career guidance and information about future opportunities would help graduates prepare for their professional pathways” (M13).

Another participant emphasised the value of continued academic and professional opportunities, noting that:

“Support from lecturers can provide opportunities for future development” (M9).

The development of institutional pride (M16) and a strong emotional bond with the institution demonstrates that positive early experiences can foster enduring student and alumni engagement. A participant also expressed the importance of maintaining professional connections through institutional platforms, explaining that

“Professional networking opportunities allow graduates to continue connecting with the university and other professionals” (D21).

This finding challenges the assumption that institutional responsibility ends at graduation and aligns with contemporary research on tourism and hospitality higher education policy.

4.5 Cross-Phase Themes: Toward an Integrated Model of Support

The results confirm that Generation Z's intellectual, emotional, and professional needs are intricately linked across all stages of life. The impact of unmet requirements in one phase, such as a lack of clarity before enrolment, often cascades into another, affecting engagement, learning outcomes, and career progression. The necessity for digital trust, inclusion, and continuous peer interaction is consistent throughout all stages, advocating for a comprehensive, adaptive support model instead of disjointed, phase-restricted treatments. This research robustly substantiates the argument for a lifecycle-based support approach.

4.6 The Lifecycle Support Model for Generation Z

Thematic integration of student responses across three stages led to the formulation of a holistic lifecycle model as presented in Figure 2.

Figure 2 integrates these actual findings into a conceptual lifecycle support model. This model demonstrates how essential requirements for digital trust and explicit institutional support in pre-enrolment facilitate active, personalised involvement and a sense of belonging during enrolment. Consequently, these encounters cultivate enduring professional relationships and contribute to identity building in the post-graduation period. In contrast to conventional linear models, this cyclical, interconnected framework proposes support as a continuous process that extends throughout the academic and professional journey.

The lifecycle support model for Generation Z (Figure 2) synthesises empirical data into a cohesive conceptual framework that delineates students' shifting requirements across the pre-enrolment and post-graduation phases. Each circle represents one phase of

the tourism and hospitality higher education journey and contains the principal categories identified through thematic analysis: services and support; quality education and curriculum; network development and opportunities; management and support; career opportunities; and institutional relations, reflecting how students' needs overlap and transform throughout their academic lifecycle.

During the pre-enrolment phase, services and support and management and support are the building blocks of trust and readiness. Students emphasised the importance of clear admissions systems, approachable staff, and accessible digital channels for early guidance. These features shape initial perceptions of institutional reliability and establish emotional readiness for transition. It can be observed that these needs extend into the enrolment phase, where institutional responsiveness and accessibility evolve into a stronger expectation for commitment to academic excellence and integrity.

During the enrolment phase, students' priorities expand towards quality education and curriculum, as well as network development and opportunities. They expect a learning environment that combines cognitive challenge with collaborative participation, as seen through project-based learning, workshops, and peer interaction. Institutional management and support remain central, ensuring fairness, inclusivity, and wellbeing. The needs carried from Pre-Enrolment particularly institutional commitment and reliable support, are transformed here into expectations for transparency, academic credibility, and consistent engagement. It is clear that the quality of education at this point strengthens the relational trust that was built before entry.

During the post-graduation phase, emphasis transitions to career opportunities and institutional relations. Students expect mentorship, alumni networking, and ongoing institutional engagement that bolster their professional identity. The requirements from the enrolment phase, including network growth and quality learning experiences, seamlessly transition into this phase, where collaboration evolves into career connections and academic belonging, which fosters long-term loyalty. The connection between the student and the institution endures beyond graduation, illustrating the cyclical essence of educational involvement.

The intersecting zones between these circles demonstrate that student needs are cumulative and overlapping rather than sequential. For example, management and support originating in pre-enrolment persist through enrolment and continue to shape

institutional relationships after graduation. Similarly, network development begins within academic collaboration and matures into professional networks in post-study life. These intersections confirm that Generation Z's educational experience operates as a continuous system of trust, participation, and identity construction.

Ultimately, the model portrays tourism and hospitality higher education as a reciprocal relationship between institutions and students. Effective policy should thus integrate services, curriculum quality, network development, and relationship management within a singular institutional framework. This lifecycle-orientated viewpoint reconceptualises student assistance as a sustainable ecosystem that fosters success, belonging, and professional development across each phase of academic experience.

Crucially, the model aligns with contemporary theoretical frameworks: Digital Readiness ensures ecosystem-wide technological capacity and adaptive learning platforms, Inclusive Education delivers flexible and equitable access for all student profiles, and Self-Determination Theory foregrounds the enduring need for autonomy, competence, and relatedness (Deci & Ryan, 2000; Giang et al., 2021; Gilbert et al., 2010). Figure 2 visually encapsulates this approach, serving not only as a guide for institutional policy but also as an actionable blueprint for developing sustainable, student-centred ecosystems.

The six themes identified through the thematic analysis were subsequently integrated into the proposed lifecycle student support model (Figure 2). The model illustrates how Generation Z students' learning needs identified across the pre-enrolment, enrolment, and post-graduation stages can be transformed into institutional support mechanisms.

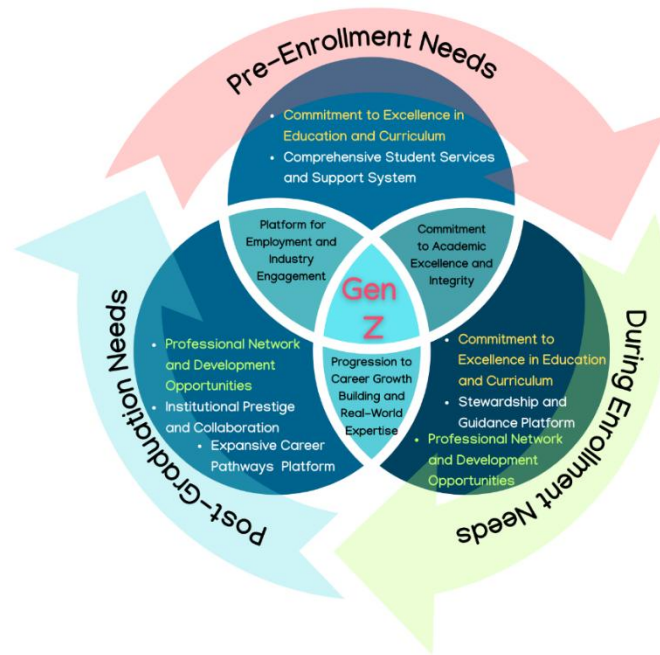


Figure 2. The Lifecycle Support Model for Generation Z

5. Discussion

This study aimed to explore the learning needs of Generation Z postgraduate students across the pre-enrolment, enrolment, and post-graduation phases in tourism and hospitality higher education and to propose a lifecycle student support model tailored to their digital, emotional, and academic needs. The findings contribute to existing research by highlighting the recursive and interrelated nature of student needs throughout the academic lifecycle.

This study challenges traditional phase-based models of student support by demonstrating that Generation Z postgraduate students' needs are not confined to isolated academic stages but evolve throughout a continuous lifecycle. The findings extend previous research by showing that institutional support should move beyond episodic interventions and encompass sustained engagement throughout the student lifecycle.

5.1 From Fragmented to Continuous Support: Rethinking Phase-Based Needs

Historically, student support in tourism and hospitality higher education has been structured around linear, phase-based models that treat the student journey as a series of distinct stages: pre-enrolment, enrolment, and post-graduation (Tinto, 2012). While such models offer administrative clarity, they fail to capture the complexity of student experiences, particularly for Generation Z, whose academic, emotional, and professional needs unfold across digital, emotionally driven, and identity-forming terrains that resist fixed temporal boundaries.

The results of this study highlight the interdependence of student demands across these phases. For instance, anxiety or disengagement frequently manifests during enrolment as a result of unmet emotional or informational needs that were present prior to enrolling, such as a lack of transparency or ambiguous guidance. Likewise, the need for ongoing mentorship and career guidance after graduation challenges the conventional view that institutional responsibility ends once a student completes their studies (Weerts & Ronca, 2007). The research indicates that institutions should relinquish phase-based fragmentation and embrace continuous, relational models that meet these shifting needs. This finding suggests important implications for institutional policy development, necessitating leaders to eliminate administrative barriers and integrate lifetime planning into the fundamental institutional strategy.

5.2 Digital Expectations and the Need to Rethink Linear Models

Generation Z postgraduate students, as digital natives, expect flexible, adaptive, and real-time support systems that respond to their evolving needs. Conventional phase-based models, which categorise student support into fixed stages, do not align with the expectations of students who live in a world characterised by seamless digital interaction and personal engagement (Chardonnnens, 2025; Vinh, 2020). For these students, education is considered an ongoing, non-linear journey, where learning, identity formation, and career development occur simultaneously and asynchronously.

The limitations of linear models are especially apparent in the digital domain. Support services that are initiated solely at specific phases, such as orientation or career services,

do not adequately address the immediate and evolving needs of Generation Z postgraduate students (Manik, 2015; Wu, 2024). The research indicates that these students want institutions to foresee their requirements and deliver tailored, ongoing assistance throughout their academic experience. The disparity between student expectations and institutional responses necessitates a transition from fragmented support to a cohesive, real-time, adaptive strategy that promotes student autonomy, trust, and participation.

5.3 Institutional Alignment: From Policy to Practice

Notwithstanding the increasing implementation of policies focused on inclusivity, digital transformation, and student-centredness in tourism and hospitality higher education, these pledges sometimes lack alignment with actual service delivery and daily practices. The study's findings underscore the necessity of synchronising institutional frameworks, policies, and services to provide ongoing support for students throughout their academic endeavours. The comprehensive, cohesive support that Generation Z postgraduate students anticipate is not provided by institutional support structures that are fragmented, with student services being dispersed among various offices such as admissions, academic affairs, and alumni relations (Marginson, 2011; Hines, 2017).

Institutions must reconfigure their support models to eliminate fragmentation and ensure continuous, integrated support. This strategic reconfiguration, referred to as integrated student support governance, requires institutional leaders and policymakers to dedicate common resources and enable cross-functional teams. This entails the implementation of collaborative digital platforms that facilitate real-time engagement monitoring, mentorship frameworks, and interdepartmental governance structures for lifecycle planning. The successful execution relies on institutional leaders' capacity to promote policy coherence and accountability among previously isolated departments, ensuring that data transparency underpins proactive support interventions. Moreover, staff development must correspond with these changes, guaranteeing that teachers and support personnel have the requisite abilities to meet the changing academic, emotional, and professional demands of students (Salikhova et al., 2020).

These findings also suggest that fragmented student support systems are not merely operational shortcomings but reflect deeper leadership and governance limitations within tourism and hospitality higher education institutions. When institutional responsibility is segmented across admissions, academic affairs, and alumni units, leadership coherence is weakened, resulting in episodic rather than sustained student engagement. From a policy perspective, the lifecycle student support model highlights the necessity for senior leadership to reconceptualise student support as a continuous institutional mandate embedded within governance structures rather than a peripheral service function.

At the policy level, the proposed model challenges existing tourism and hospitality higher education accountability frameworks that prioritise graduation and completion metrics while overlooking longitudinal student engagement and post-graduation outcomes. Policymakers and regulatory bodies may consider integrating lifecycle-based indicators into quality assurance and performance evaluation systems. Such a shift would encourage institutions to invest in digital infrastructures, leadership coordination, and cross-unit governance mechanisms that sustain student development beyond enrolment periods.

5.4 A Paradigm Shift in Institutional Responsibility

Tourism and hospitality higher education institutions must transition from managing enrolment cycles to cultivating long-lasting partnerships with students (Snijders et al., 2020). This transition contests the conventional perception of institutions as just service providers, emphasising enrolment management and degree issuance, and advocates for a redefinition of institutions as enduring educational collaborators, assisting students in personal, intellectual, and professional transitions (Cheng, 2001). The research emphasises that institutional accountability must persist beyond graduation, encompassing lifelong mentoring, career guidance, and alumni networking (Browne & Foss, 2023; Weerts & Ronca, 2007). This new paradigm represents a bold policy choice: shifting from compliance-based governance to a culture of holistic human development, as visualised in Figure 3.

Whereas Figure 2 conceptualises the Lifecycle Support Model from the perspective of student experience, Figure 3 translates these findings into an institutional and policy

framework. It demonstrates how universities can operationalise relational continuity through a governance model that redefines responsibility, partnership, and sustainability (Snijders et al., 2020). Figure 3, A Paradigm Shift in Institutional Responsibility, visualises this new model, which emphasises relational continuity throughout the entire student lifecycle. This approach underscores the need for institutions to establish a robust, adaptive ecosystem that integrates academic, emotional, and professional development, ensuring that students and alumni remain continuously engaged and supported (Weerts & Ronca, 2007).

The paradigm visualises the transformation from the traditional mode of tourism and hospitality higher education governance toward a relational, student-centred paradigm. The left side of the figure depicts the conventional institutional model, in which universities function through compartmentalised structures and outcome-driven processes. In this framework, education is often treated as a commodified transaction, characterised by standardised metrics, fragmented interventions, and isolated operational silos that limit institutional agility and student connection (Cheng, 2001). Responsibility is primarily understood in terms of accountability and compliance, where success is measured by efficiency and output rather than developmental continuity.

The right side of the figure illustrates the emerging paradigm grounded in relational continuity and shared co-agency between students and institutions (Snijders et al., 2020). This model reframes responsibility from control to collaboration: standardised metrics evolve into holistic human development, and transactional delivery gives way to transformative relationship-building. Institutional accountability is replaced by empowered student co-agency, positioning students as active partners in shaping their educational experience. Furthermore, the shift from fragmented interventions to sustained, lifecycle engagement reflects the importance of long-term connection beyond graduation (Weerts & Ronca, 2007). Similarly, operational silos transform into synergistic, student-centred ecosystems, fostering collaboration across academic, administrative, and professional domains. Ultimately, commodified instruction is re-envisioned as a co-created educational partnership that values mutual growth and shared purpose (Snijders et al., 2020).

This paradigm shift represents a transition from a culture of measurement within institutions to one focused on meaning (Cheng, 2001). It emphasises that contemporary

colleges must transform into adaptive ecosystems that incorporate academic excellence, emotional welfare, and professional preparedness. By adopting this relational approach, tourism and hospitality higher education institutions can transition from transactional interactions to enduring educational partnerships that foster belonging, identity, and lifelong development (Weerts & Ronca, 2007).

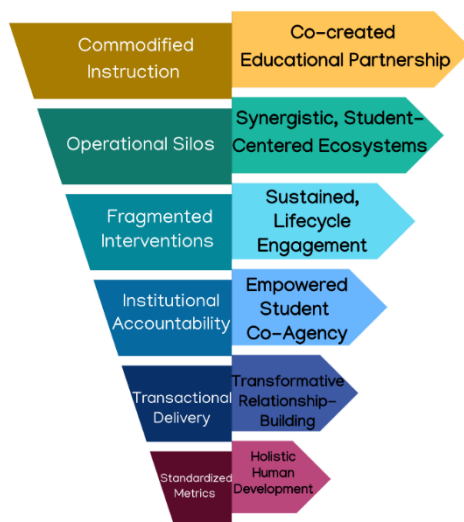


Figure 3. A Paradigm Shift in Institutional Responsibility

6. Conclusion

This study contributes to tourism and hospitality higher education research by proposing a lifecycle student support model that conceptualises student support as an integrated institutional approach rather than a series of isolated interventions. The model provides a holistic perspective on how digital readiness, inclusive practices, and student-centred approaches can be integrated to support Generation Z postgraduate students.

Practically, the findings highlight the importance of designing integrated support systems that combine digital accessibility, personalised learning support, professional development opportunities, and sustained relationships between institutions, students, and alumni. Future research may further validate and extend the proposed model across diverse educational contexts and student populations.

Taken together, the findings reveal four interconnected institutional challenges across the student lifecycle. Pre-enrolment experiences are shaped by institutional signalling and

digital transparency, while enrolment experiences emphasise the importance of responsive academic and technological support. Fragmented support structures highlight governance challenges in coordinating student services, whereas post-graduation expectations demonstrate the need for continued institutional engagement beyond graduation.

7. Implications for Research, Policy, and Practice

This study advances the transformation of student support systems in tourism and hospitality higher education by highlighting the shifting needs of Generation Z postgraduate students and introducing the lifecycle student support model. This model is developmentally consistent, digitally adaptive, and culturally relevant. The implications of these discoveries are not limited to research; they also extend to policy and institutional practice, providing valuable insights that can be used to influence student engagement and success in tourism and hospitality higher education.

7.1 Implications for Research

This study's findings indicate a necessity for additional empirical research on the generational dynamics influencing student expectations. This research focuses on Generation Z postgraduate students; however, subsequent studies may investigate how Generation Alpha, characterised by enhanced digital fluency and flexible identity conceptions, engages with tourism and hospitality higher education in distinct ways. Longitudinal research examining the development of digital-native identities throughout academic stages would provide insights towards enhancing intervention timing and resource distribution.

Moreover, comparative research across academic disciplines is essential. Differences in institutional readiness and support expectations between professional programmes and those in liberal arts or social sciences may necessitate differentiated support strategies. Cross-cultural studies examining how student needs vary across collectivist and individualist societies would inform the global implementation of lifecycle support models, particularly in diverse regions.

Research should also examine the integration of technology in student support systems, especially the effectiveness of AI-driven feedback, hybrid learning platforms, and customised digital engagement tools. These tools need evaluation not only for educational efficacy but also for fostering meaningful, personalised student experiences.

7.2 Implications for Policy

This research highlights the urgent necessity for educational ministries, accreditation organisations, and lawmakers to reevaluate the governance of tourism and hospitality higher education. Contemporary regulatory frameworks embody antiquated industrial-era paradigms that emphasise standardisation rather than developmental results. Policymakers must advocate for a policy transformation that redefines institutional success metrics, prioritising lifecycle involvement and student well-being as fundamental performance indicators rather than relying exclusively on conventional graduation rates. The emergence of digital transformation, hybrid learning, and shifting student identities necessitates the formulation of new policies that emphasise engagement, resilience, and post-graduation alignment, instead of conventional criteria such as graduation rates.

Policymakers should advocate for lifecycle-based funding models that incentivise institutions to invest in technologies that track and integrate student engagement across their academic journeys. These policies should encourage institutions to adopt cross-functional digital infrastructures that personalise support and ensure equity in access to digital resources. Crucially, policy and funding mechanisms should incentivise digital leadership by making support for lifecycle models a criterion for institutional autonomy and performance funding. This is particularly vital in regions with limited technology access, where policy frameworks must bridge the digital divide through infrastructure investment and digital literacy programmes.

7.3 Implications for Institutional Practice

The findings indicate that institutions should transition from fragmented student support approaches to a cohesive, adaptable approach that reflects the shifting needs of Generation Z postgraduate students. Institutions need to invest in integrated digital

platforms that amalgamate academic advice, progress monitoring, mental health assistance, and career development into a singular interface. This strategic digital integration requires the president, vice president, and the leadership team to establish an enterprise-wide data governance policy that enables proactive intervention design and seamless data flow. This would ensure that students receive consistent, personalised support throughout their academic careers.

Additionally, support staff, including faculty, academic advisers, and mental health professionals, must be trained to interpret real-time data and provide personalised support. Training should emphasise digital fluency, emotional intelligence, and intercultural communication to address the varied needs of contemporary students. This comprehensive professional development must be mandated and funded at the institutional level to guarantee that all staff can make a meaningful contribution to the lifecycle support ecosystem. Institutions must incorporate relational support, including mentorship, peer collaboration, and career guidance, throughout all stages of student experience, from pre-enrolment to post-graduation.

Finally, institutions should continue to provide platforms for career support, professional development, and networking opportunities to alumni as lifelong stakeholders, following their graduation. This transition frames alumni not as the conclusion of a relationship but as perpetual constituents of the academic community.

8. Limitations and Future Research

This study has several limitations. First, the qualitative design and purposive sampling approach involving Generation Z postgraduate students in tourism and hospitality higher education contexts in Thailand may limit the transferability of the findings to other educational settings. Second, the findings were based on participants' self-reported experiences and perceptions, which may reflect individual interpretations of institutional support. Future research could employ mixed-method approaches or quantitative validation with larger and more diverse samples to further examine and refine the proposed lifecycle student support model across different institutional and cultural contexts.

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