

 Research Article

University Support for Self-Directed Learning: Cambodian Students' Perceptions and Experiences

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Abstract

One of the trends in higher education today is the increased focus on Self-Directed Learning (SDL). SDL helps students develop such important skills and traits as independence, critical thinking, lifelong learning, and adaptability to the dynamic educational and professional environment. Thus, universities should encourage their students to be engaged in SDL by providing sufficient resources and other kinds of help to their students. Although the process of reforming higher education in Cambodia was accompanied by an increasing interest in the promotion of student-centered learning, little information could be found regarding students' perceptions of the level of university assistance in SDL. That is why it became necessary to analyze the perceptions of university students regarding university support of self-directed learning. A quantitative descriptive research method was applied to examine the level of SDL in 634 undergraduate students who study at the National University of Cheasim Kamchaymear and the University of Heng Samrin Thbongkhmum. For this purpose, a questionnaire was distributed to the respondents to fill out. To analyze the data collected, descriptive statistics were used. The study demonstrated that Cambodian university students had positive attitudes toward university assistance in SDL in such aspects as encouragement of self-learning, access to appropriate material, presence of learning guidelines, and availability of online sources. Yet, there was evidence of some gaps in university assistance in SDL in regard to a supportive learning environment, tutoring/mentoring, incentives to successful self-learning, and assessment of progress in SDL (the last one received the lowest rating). Overall, one can conclude that the universities of Cambodia managed to promote SDL via resources and motivational support, but more work remains to be done in the field of SDL monitoring and feedback.

Keywords: Self-Directed Learning, Higher Education, Institutional Support, Students' Perception, Cambodia

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1. INTRODUCTION

Self-Directed Learning (SDL) has become more prominent in higher education within the past few years (Knowles, 1975; Song & Hill, 2007). This trend is mainly due to the nature of SDL as an essential tool through which learners are equipped with the necessary competencies to facilitate lifelong learning outside the classroom environment. More precisely, SDL helps learners to act, set goals, identify available sources, evaluate progress made, and assess the results achieved (Garrison, 1997). Thus, higher educational institutions are becoming responsible for preparing learners who will be capable of excelling in different environments and applying autonomous and flexible learning strategies. Moreover, according to Candy (1991) and Morris, Bremner et al. (2025), these changes have been triggered by fast-paced knowledge and technological advancements as well as increasing labor market demands.

Further, the availability of resources, conducive environments, and processes in support of students taking ownership of their learning experiences represents an essential part of the role of the university in

promoting self-directed learning (SDL) (Hiemstra, 2013). For instance, according to Merriam et al. (2007), institutional support may be in the form of access to library facilities, online sources, training sessions, mentoring opportunities, or conducive spaces for learning. As such, there would be a chance for students to develop the ability to take charge of themselves, feel motivated to do well, and have the ability to regulate themselves, all of which are crucial in academic performance and preparation for practice (Loyens et al., 2008; Zimmerman, 2002). Therefore, autonomy, motivation, and self-regulation represent some of the key ingredients of success in academia.

In terms of the Cambodian setting, the higher education system in the country has been reformed in order to encourage the use of learner-centered practices and alignment with international standards (Em, Huot et al., 2025; Ministry of Education, Youth and Sport [MoEYS], 2018). In this regard, it was reported by Em, Huot et al. (2025) that there was generally a consensus that the quality of teaching and learning needed to improve, pedagogies needed to be integrated, and that learners needed to be supported to become independent. These sentiments were expressed not only in the framework but also in policies. However, despite these efforts, several challenges remain, specifically regarding institutional capacity and the lack of formal support for school-based learning (Ouch, 2022). It is thus crucial that, given the increasing numbers of students in Cambodian colleges, the way in which students view institutional support for SDL is assessed.

Furthermore, international literature has highlighted the importance of institutional support for self-directed learning (SDL) (Morris, Bremner et al., 2025; O'Shea, 2003). However, there has been an inadequate amount of empirical research focusing on higher education institutions in Cambodia (Heng et al., 2023). Hence, it is essential to investigate the perspectives of learners concerning the resources, services, and learning environment offered by their institution. Besides, it is important to know whether those factors encourage or discourage learners to engage in SDL (Brookfield, 2009).

Consequently, the current research intends to delve into the perceptions of Cambodian university students about institutional support for SDL. The study will analyze the attitudes of students toward institutional resources, services, incentives, and assessment mechanisms that promote or hinder their autonomous learning.

Accordingly, the following research questions were used to direct the investigation:

1. How do students perceive university support for self-directed learning activities?
2. What strengths and gaps can be identified in institutional efforts to promote SDL from the students' perspective?

2. LITERATURE REVIEW

This section examines essential principles and current research about SDL and its significance in higher education. The section begins with a definition of SDL and an examination of its theoretical underpinnings, then addresses the critical importance of institutional assistance in fostering students' independent learning. The section subsequently analyzes global perspectives, describing how colleges across various countries have employed SDL to enhance students' autonomy and academic success. The section ultimately situates SDL within Cambodia, examining existing challenges and potential, as well as the necessity for more empirical research on institutional support for SDL in the country, particularly in rural areas.

2.1. The Concept of SDL

SDL is widely recognized as a pedagogical approach that is of the utmost significance in the field of higher education. Specifically, SDL is a strategy that is defined by Knowles (1975) as a way in which students take the lead in defining the types of assistance they require for their education, creating objectives, accessing resources, choosing tactics, and evaluating the results of their learning process. In this sense, this concept places a significant amount of emphasis on the significance of learner autonomy and active engagement in the process of education. Moreover, Knowles' basic work is expanded upon by heutagogy, which is also known as self-determined learning. In particular, heutagogy places an emphasis on the significance of learner agency, the development of capabilities, and adaptive learning paths (Hase &

Kenyon, 2000). Accordingly, individuals who can learn well on their own are said to be intrinsically motivated, reflective, and capable of regulating their own education, as stated by theories of SDL (Candy, 1991; Garrison, 1997). Furthermore, according to Loyens et al. (2008) and Zimmerman (2002), SDL has a multitude of benefits, some of which include enhanced capacities in aspects such as critical thinking, problem-solving, flexibility, and the ability to engage in learning that continues throughout one's life. Consequently, all of these advantages are gaining an ever-increasing amount of significance in a global economy that is continuously and continuously changing.

2.2. The Support of Institutions Concerning SDL

Despite the fact that SDL is a learner-centered approach to education, it is absolutely necessary to have institutional support in order to successfully apply it in higher education (Hiemstra, 2013; Merriam et al., 2007). In particular, students have the opportunity to foster their own SDL by taking advantage of the resources, facilities, and structured support systems that universities offer. In addition, this environment is conducive to the development of students' individual learning styles. For instance, it is possible that they could include access to libraries, digital learning platforms, and research databases, in addition to physical locations such as study spaces and laboratories that are conducive to independent study (O'Shea, 2003). Moreover, another important aspect is the provision of supervision through mentorship and tutoring programs, which enable students to maintain their independence while receiving guidance. In addition, SDL can also be supported by the utilization of assessment strategies that encourage students to engage in self-reflection and formative feedback (Song & Hill, 2007). Furthermore, these strategies can help students monitor their progress and support the implementation of SDL. In addition, awards and scholarships, which are examples of the benefits that are granted for academic performance, are significant factors that motivate students to achieve their academic potential. Therefore, to summarize, when students receive aid from their educational institutions, they are better equipped to effectively engage in SDL and keep their motivation over the course of their academic career (Morris, Koutsouris et al., 2025).

2.3. Global Perspectives

Importantly, studies conducted on a global scale have repeatedly demonstrated that the support provided by universities plays a significant part in the enhancement of SDL. For example, based on research conducted in developed countries such as the United States of America, Australia, and Europe (Candy, 1991; Garrison, 1997), it has been found that students' abilities to engage in SDL are significantly enhanced when they have access to a wide range of learning resources, online platforms, and structured mentoring. Similarly, in Asian contexts, universities in countries such as China, Japan, and Malaysia have increasingly incorporated SDL into curricula, with evidence suggesting that students exposed to supportive environments develop higher levels of autonomy, motivation, and academic performance (Abdullah, 2001; Lin & Tsai, 2013). Thus, even if there are cultural differences in the methods in which individuals learn, the global trend indicates that institutional support is vital for encouraging SDL. In addition, recent research has brought to light the fact that the digital transformation that is currently taking place in higher education, and more specifically the expansion of e-learning platforms, has further increased the opportunities for SDL by supplying learning paths that are not only adaptable but also easily accessible (Morris, Koutsouris et al., 2025).

2.4. Theories Supporting SDL

Human-centered, socially situated perspectives regard self-directedness as a continuous spectrum that varies according to age, experience, and context (Cronin-Golomb & Bauer, 2023; Ginzburg, 2021). Significant conceptual variations exist among each theory's fundamental ideas, assumptions, and terminology, yet they converge, complement, and integrate into a coherent cluster (Kolbergýtė et al., 2014; Mezirow, 1997). Transformative learning theory identifies the need to engage critically with one's own assumptions and beliefs in developing mature self-directness (Kolbergýtė et al., 2014; Mezirow, 1997), while modelling theory of school learning highlights the social aspects of self-directedness as a function of one's own and others' joint activity (Vass & Littleton, 2010). The knowledge-creating school perspective offers

an extension of the modelling theory concept by focusing on how peer influence plays an important role in supporting the development of self-directedness (Scardamalia & Bereiter, 2003; Watson, 1999). In addition, mutability theory provides an overall account of how self-directedness evolves and deepens over a lifetime (Cronin-Golomb & Bauer, 2023).

Table 1. Key Summary of Theories Supporting SDL

Theory	Authors	Main Ideas	Relevance to SDL
Andragogy	Knowles (1975)	Adults are autonomous, self-directed, internally motivated, and bring prior experience to learning.	Forms the foundation of SDL by emphasizing learner autonomy, readiness to learn, and responsibility for personal learning.
Self-Regulated Learning Theory	Zimmerman (2002)	Learners plan, monitor, and evaluate their own learning using metacognitive, motivational, and behavioral strategies.	Aligns with SDL because it requires learners to manage and take control of their learning process.
Constructivist Learning Theory	Piaget (1952), Vygotsky (1978)	Learning is actively constructed through experience, reflection, and social interaction.	Supports SDL's emphasis on active engagement, knowledge construction, and learner responsibility.
Heutagogy (Self-Determined Learning)	Hase and Kenyon (2000)	Learners determine their own learning paths, develop capabilities, and pursue flexible, non-linear learning.	Extends SDL by promoting learner agency, autonomy, and self-determined learning environments.
Experiential Learning Theory	Kolb (1984)	Learning is a cycle involving concrete experience, reflection, conceptualization, and experimentation.	SDL requires learners to reflect, plan, and act independently, mirroring the experiential cycle.
Transformative Learning Theory	Mezirow (1991)	Learners critically examine assumptions and undergo perspective transformation.	Encourages learners to reflect independently and question prior beliefs, strengthening autonomous learning.
Self-Determination Theory (SDT)	Deci and Ryan (2000)	Autonomy, competence, and relatedness increase intrinsic motivation.	Supports SDL through the principle that autonomy enhances motivation for independent learning.

Based on Table 1, it can be interpreted that a second cluster of theories addresses the processes through which people take control over their own and others' learning. Bandura's social learning theory highlights the role of imitation of proximal models, motivation, and self-regulation (Bandura, 1977), while Zimmerman integrates these ideas into a broader view of self-regulated learning (Zimmerman, 1989). Kağıtçıbaşı's model of human development and the theory of social construction of self put cultural and social variables into the foreground as determinants of self-directedness and self-regulation (Kağıtçıbaşı, 2007; Vygotsky, 1978). All these concepts share the idea that supported self-direction promotes the autonomy of the individual and the society at large because the socially constructed self tends to turn around and support others' learning and development. This cluster of theories also extends to the area of young people's involvement in surveys, studies, and initiatives directed towards improving their schools and settings.

Andragogy, which comprises the study of adult learning, shapes a different category of SDL. Malcolm Knowles introduced the theory post-World War II, basing it on six assumptions that diverge from pedagogy (Knowles, 1980). Some criticism arose for the lack of empirical evidence supporting the theory, even though it is widely embraced in practice. An alternative view is that it applies primarily to the development stage of adulthood, from age twenty to approximately age forty. Both perspectives have merit: many adults enjoy regulated environments with a defined subject yet a variable approach; however, even in theory-supported practice, its abundance is thin.

Since Rogers suggested SDL, a concept of the learning process distinguished by the independence of the learner, and implied developing instructional methods for group SDL, the concept of SDL has gained acceptance, fueling curriculum creation and research (Merriam & Caffarella, 1999; Rogers, 1969). Rogers,

Merriam, and Caffarella recognize SDL as an educational strategy; however, it serves as a natural paradigm for adult learning rather than a clearly defined objective. Other scholars take a more pragmatic approach. Garrison proposes a four-phase self-directed instructional design model: (1) identification of learning and instructional needs, (2) planning the learning process, (3) implementing the plan, and (4) evaluating the outcome (Garrison, 1997). It provides a structured, easy-to-apply design framework for enabling and facilitating SDL. Merriam asserts that Rogers's original concept may be reversed; group learning can also be considered. Regardless, andragogy can underpin the process of designing, implementing, and evaluating group learning experiences.

Self-regulated learning theory focuses specifically on cognitive, motivational, and behavioral processes that learners use to understand and control their learning environment (Zimmerman, 1989). Educational psychology describes self-regulated learning as a process through which learners personally activate and sustain cognitions, behaviors, and affects that are systematically oriented toward the attainment of learning goals (Zimmerman, 2015).

Measurements of self-regulation phenomena account for teachers' and parents' roles in assistance, feedback, and modelling. For different predictors of self-reported adaptive functioning and maladaptive functioning, contrasting patterns of relationships with self-efficacy perceptions, academic procrastination, and school performance indicate the need to study self-regulation-related processes and failing or succeeding outcomes through distinct paths (Corkin et al., 2014). An analysis of two decades of self-regulated learning research provides instructional guidance on the design of self-regulated learning support systems. Structured, collaborative, and multimodal support contributes to learning outcomes, but supporting experiences such as interaction with teachers' pedagogical agents and instructor modelling or feedback must be sensitive to students' knowledge and self-regulation levels. The results suggest a rethinking of computer systems dedicated to the support of self-regulated learning and an analysis of the effects of culture on self-regulated learning behaviors.

Many educational theorists believe that learners construct their own meanings and understandings based on their own experiences, intellect, and knowledge. Learners possess a prior knowledge base, which provides a reference for the interpretation of events. Constructivists propose that meaningful learning occurs when learners are actively involved in their own learning process rather than passively receiving knowledge transmitted by an instructor (Hase & Kenyon, 2000).

Constructivism envisages a curriculum framed around realistic tasks that are designed so that learners can successfully engage in active experimentation and construct the understandings necessary for application in similar and new situations. In the constructivist classroom, the teacher serves as a facilitator rather than the sole source of knowledge; an environment is created where learners feel secure and motivated to learn from one another; where construction of meaning is shared; and where learners are encouraged to relate to others, seek help when they need it, feel free to fail, and participate in their own assessment (Candy, 1991). Such collaborative learning and peer support are considered particularly important for adolescents. The roles of learner and facilitator are more frequently exchanged, promoting a deeper, more reflective approach to study and encouraging strategies such as elaboration, self-regulation, and metacognition (Tabachnick et al., 2008).

Heutagogy, also known as self-determined learning, is defined as an emerging area of research and practice that engages learners in a process of questioning, exploring, and self-critiquing key concepts and issues at the heart of the world in which they live and work (Hase & Kenyon, 2000). Others define it as a model of self-determined learning in which learners are recognized as able to define what and how they learn, not just for a specific class, but across a range of life experiences (Blaschke, 2012). Heutagogy is distinguished from andragogy (adult learning) and pedagogy (child learning) by the emphasis on learners' self-determined capacity to create learning; the perspective that learning is the process of creation rather than reproduction, because knowledge is constructed by learners drawing on their experiences, society, and culture; and that teaching and learning should prepare learners for present and future living.

The steering and guiding role of the teacher is still acknowledged, but at the same time, the increasing use of the Internet, global capital markets, rapid advances in technology, and the unpredictability of the modern world indicate that the student-creators, more than teachers, steer and guide the creation of new art-forms, technologies, and major breakthroughs in thinking, products, and processes. Such students are also becoming increasingly critical about the information they receive. The growth in interest in critical

theory and practice and in critical pedagogy moves like Freire in second language education is symbolically akin to the changes taking place in the world of artistic production and assessment (Freire, 1970).

To understand the concept of SDL, the research of the following theorists is worth consideration: Tough, Knowles, Lindeman, Maslow, Rogers, Kolb, and Dewey. Information drawn from these theorists helps to develop a conceptual framework for relating to one's peers as adults, from a position of honesty and mutuality, and then working together to determine the best path for their SDL (Dewey, 1986; Knowles, 1980; Kolb, 1984; Lindeman, 1926; Maslow, 1943; Rogers, 1969; Tough, 1971).

In *SDL: Perspectives and Strategies*, Davis identifies skills that support SDL, which embody qualities that both learners and their mentors should strive to develop and model (Davis, 2003). These qualities include confidence in oneself and in the group process, the capacity to suspend judgment, open-mindedness to other viewpoints, and willingness to work through differences. Rogers states that when these elements are present, learners seek honest relationships, without the dehumanizing distance of traditional teaching and learning. They can share their feelings and opinions honestly. Empathetic responses, the listener's honest attempts to understand another's feelings, encourage this degree of openness. Such an environment of mutuality assists the group to work toward a common goal, with members able to join together to assist those who are struggling (Rogers, 1969).

Transformative Learning Theory, proposed by Mezirow, highlights the role of 'disorienting dilemmas' in prompting personal perspective shifts, labelled 'transformation' (Mezirow, 1997). Although encompassing Freire's emphasis on reflection, critical thinking, and social justice, Mezirow nonetheless prioritizes cognitive development over emotional or moral growth, a position critiqued by Kolb (Kolb, 1984). Warning against a narrow focus on social life and external influences, Kolb expands transformative learning to encompass the entire learning experience.

Compared to SDL, the transformative theory is less comprehensive as it addresses only how cognitive change occurs. Nevertheless, it is particularly relevant when SDL involves critical challenges or disorienting dilemmas. Indeed, Mezirow identifies as transitional any integrated or supported SDL activity undertaken to resolve a challenging intention or disorienting dilemma (Mezirow, 1997). Kolb's work extends this concern. Transformative Theory combines the SDL process components with those recommended for facilitating learning transitions. For SDL to be transformative, students must actively negotiate an authentic curriculum in collaboration with a teacher acting as a resource, facilitator, and mentor, and must engage in higher-order, demand-appropriate, and personally meaningful metacognitive learning (Kolb, 1984).

Self-Determination Theory (SDT) posits that human beings possess inherent tendencies towards personal growth and social development (Deci & Ryan, 2000). It asserts that the quality of motivation for acting is more important than the quantity of motivation; therefore, not all motivations are created equally. Basic psychological needs drive intrinsic motivation, while the fulfillment of these needs leads to improved performance, persistence, creativity, and well-being. When motivation is external, instead of internally directed, it is controlled and fragile, leading to inconsistency and poorer performance. When regulation is self-determined, it is more positive, reflective of the individual's true self, and viable. Supportive officials foster personal growth through a nurturing environment, empowering others with confidence and autonomy, creating a sense of community, and facilitating the search for effective strategies toward the achievement of personal goals. Despite the small and manageable cognitive load required, basic need fulfillment remains a naïve and unrealistic expectation because it is often absent in the real world. In contrast, some people have all of their basic needs thwarted chronically, and others experience daily frustration. It is also difficult to create a fully structured environment in which every person feels included, understood, and cared for, and in which every person experiences a sense of belonging while at the same time enjoying relatedness-based autonomy (Deci & Ryan, 2000).

When participants make decisions for others, autonomy-supporting messages lead to more prosocial behavior than controlling ones (Iyengar & Lepper, 1999). This finding suggests that changing the way people communicate about cooperation might help to sustain cooperation among individuals, even when they are not making decisions for themselves, as well as have a positive impact on their own well-being. In the long run, enhancing the quality of motivation underlying socially beneficial behavior and making people aware of the underlying forces might enhance the sustainability of cooperation in society. Support for these

needs is a key feature in the environment that emotion regulation strategies can help buffer the negative impact of chronic loneliness on well-being (Gross, 2007).

2.5. Context Within Cambodia

Significantly, a significant number of modifications have been implemented in Cambodia's higher education system in order to bring it in line with regional and international recommendations. In particular, the policies place a significant emphasis on learning that is centered on the student as well as the development of skills that will help learners throughout their entire lives. According to MoEYS (2014) and MoEYS (2018), respectively, both of these ideas are intimately connected to the concept of SDL. Nevertheless, in spite of these policy initiatives, there are still challenges that need to be addressed. For instance, SDL continues to be hampered in Cambodian institutions by a number of issues, including traditional teacher-centered pedagogies, resource limits, and low institutional capacity (Coburn et al., 2012; Em, Huot et al., 2025). However, opportunities are available to be taken advantage of. Specifically, the incorporation of SDL into practices in higher education is made possible by several factors that generate advantageous circumstances, including the rapid growth of institutions, the increasing availability of technological resources, and the emphasis placed on providing quality education by the government (Heng et al., 2023). Importantly, in Cambodia, there are still a relatively limited number of empirical studies that have been conducted on higher education, particularly about the support that institutions provide for SDL. Consequently, doing research into the perspectives of students concerning the manner in which universities offer assistance for their SDL is not only pertinent to the current situation, but it is also vital for the goal of shaping both policy and practice in Cambodian higher education (Em, Mok et al., 2025).

3. METHODOLOGY

This section explains the methodological approaches employed in this article. It elaborates on the application of a quantitative descriptive survey method to explore students' views on the institutional support for SDL, followed by a description of the samples selected from two universities in Cambodia. Additionally, the section provides detailed information about the structured questionnaire employed for data collection and the statistical techniques used to analyze the data. Collectively, these elements guarantee a systematic and dependable strategy for addressing the research objectives.

3.1. Research Design

To begin with, a descriptive survey strategy was used in this quantitative research investigation. Specifically, it was thought that this method was suitable for gathering and evaluating numerical data systematically in order to explain the demographic characteristics of the people who participated in the study and how they felt about the amount of assistance that the university provided for SDL. Furthermore, the descriptive survey research method was selected due to the fact that it allows the researcher to gain insights into the current conditions, attitudes, and practices of students in the setting of higher education. In addition, it makes it possible to detect patterns and trends that may be used to lead to institutional improvements (Cohen et al., 2018; Creswell & Creswell, 2018).

3.2. Participants

In terms of participants, the study was carried out with the participation of a total of 634 undergraduate students, who were recruited from two Cambodian universities, namely the National University of Cheasim Kamchaymear (NUCK) and the University of Heng Samrin Thbongkhmum (UHST). A convenience sampling technique was employed to recruit participants based on accessibility, availability, and willingness to participate during the data collection period. These institutions were specifically chosen for the purpose of providing a balanced sample from higher education schools that exist outside of Phnom Penh, while at the same time ensuring that there is significant diversity in the backgrounds of the students. Notably, students who were both male and female and who were in different academic years, spanning from Year 1 to Year 4, were among those who participated. Moreover, the participants had

a wide range of ages, from sixteen years old to over twenty-six years old, and they stated that they had varying degrees of experience with past learning. Consequently, due to the huge sample size, trustworthiness was guaranteed, and the development of generalizable conclusions within the context of the study was made possible (Fraenkel et al., 2019; Gay et al., 2012).

3.3. Research Instrument

Regarding data collection, a structured questionnaire consisting of two sections was used to gather data for this article. The internal consistency reliability of the questionnaire was assessed using Cronbach's alpha, which yielded a coefficient of 0.89, indicating good reliability. All questionnaire items were positively worded; therefore, reverse coding procedures were not necessary during data analysis. Specifically, the first element of the survey was dedicated to gathering demographic information, which included gender, age, academic year, university affiliation, years of experience, and preferred self-learning schedule. Meanwhile, the second portion of the survey evaluated the extent to which students felt that the university assisted in self-directed study. In this regard, there were ten statements in this part (SLA1–SLA10), and these statements were aimed at measuring institutional assistance across a variety of aspects, including the provision of resources, encouragement, advice, learning spaces that are conducive to learning, workshops, support services, internet access, monitoring, and rewards. Furthermore, a five-point Likert scale was used to record the responses, with 1 representing 'Strongly Disagree' and 5 representing 'Strongly Agree.' Since the questionnaire included ten perception items, the minimum possible score was 10 and the maximum possible score was 50. On average, respondents required approximately 10–15 minutes to complete the questionnaire. Importantly, prior to the instrument being put into use, it was subjected to an evaluation by field professionals in order to guarantee that it was both genuine and dependable (DeVellis, 2017; Likert, 1932).

3.4. Data Collection Procedure

The data collection exercise was carried out by administering the questionnaire on-site during scheduled lectures at the universities concerned after prior approval from university authorities and lecturers. The researchers gave a clear explanation of the purpose and importance of the study to the respondents before distributing the questionnaire. It was made very clear that their participation was voluntary. Confidentiality of information and its use exclusively for academic and research purposes were assured. It was emphasized that respondents could refuse to participate or leave the study midway at their discretion without any adverse effect on them. To maintain consistency and uniformity in the data collection exercise, the researchers and research assistants administered the questionnaire personally to the respondents in their classroom. Respondents were given enough time to answer the questionnaire independently, and any further explanation was made available when needed to avoid any confusion regarding the survey questions. It took about 10-15 minutes on average for a respondent to fill out the questionnaire.

3.5. Data Analysis

After data collection, the data that had been gathered were analyzed through the use of descriptive statistics. In particular, in order to provide a visual representation of the distribution of respondents among several categories, including gender, age, year level, university affiliation, and preferred study time, the frequencies and percentages of demographic variables were calculated. Additionally, to determine the central tendency and variability of responses for the perceptual items, mean scores and standard deviations were calculated. Moreover, the normality of the distribution of the data was evaluated by looking at the values of skewness and kurtosis in order to guarantee the reliability of the interpretations. Finally, following this, the responses were grouped into interpretive categories (low, moderate, high) according to the Likert scale, which allowed for a clear understanding of the students' perceptions of university support for SDL (Field, 2018; Pallant, 2020).

4. FINDINGS

This section presents the results of the chapter. It begins by outlining the demographic characteristics of the respondents, providing essential background information that helps contextualize their perceptions of SDL. Then the section reports students' views on the extent of institutional support for SDL activities, using descriptive statistics to summarize their responses to key statements related to resources, learning environments, support services, and motivation. Together, the findings offer a comprehensive overview of how students perceive the role of their universities in facilitating SDL.

4.1. Demographic Information of the Participants

This section delineates the demographic attributes of the respondents who engaged in the survey. A survey was conducted with 634 students from two institutions to collect data on their gender, age, academic year, university affiliation, years of experience, and preferred self-learning schedule. The demographic characteristics furnish critical context for comprehending the respondents' backgrounds and may yield insights into patterns associated with their perceptions of SDL activities.

Table 2. Demographic Characteristics of the Respondents

Variable	Category	Frequency	Percentage (%)
Sex	Male	308	48.6
	Female	326	51.4
Age	16–20	99	15.6
	21–25	217	34.2
	26 and over	318	50.2
University	NUCK	319	50.3
	UHST	315	49.7
Year	Year 1	140	22.1
	Year 2	194	30.6
	Year 3	162	25.6
	Year 4	138	21.8
Experience	1–3 years	466	73.5
	4–6 years	134	21.1
	7 and over	34	5.4
Self-Learning Time	Daytime	117	18.5
	Nighttime	403	63.6
	Weekend	114	18.0

In Table 2, the demographic characteristics of the 634 individuals who took part in the research study are presented. According to the distribution of respondents by gender, the percentage of female respondents was somewhat greater than the percentage of male respondents (51.4% versus 48.6%). In terms of age, the respondents who were the oldest were those who were 26 years old or older, which accounted for 50.2% of the total. Those who were between the ages of 21 and 25 made up 34.2% of the total, while those who were between the ages of 16 and 20 made up 15.6% of the total. The National University of Cheasim Kamchaymear (NUCK) was the university that fifty-three percent of respondents were affiliated with, while the University of Heng Samrin Thbongkhmum (UHST) was the university that forty-nine point seven percent of respondents were affiliated with. This indicates that the two universities had approximately similar representation. The students in Year 2 made up the largest group for the academic year (30.6%), followed by students in Year 3 (25.6%), Year 1 (22.1%), and Year 4 (21.8%).

In terms of experience, the majority of respondents (73.5%) claimed to have between one and three years of experience, while 21.1% had between four and six years of experience, and only 5.4% had seven years or more of experience. The majority of respondents, when questioned about their ideal time for self-learning, said that evening (63.6%) was their preferred period for self-learning, followed by daytime (18.5%), and the weekend (18.0%), which was their favorite.

Generally speaking, the demographic data indicate that there is a balanced distribution in terms of gender and university representation. The bulk of the students are of an advanced age, have modest levels of experience, and have a strong preference for self-learning during the evening hours.

4.2. Students' Perception of Self-Learning Activities

This section provides an examination of students' perspectives on the university's support for SDL activities. Table 4.2 presents descriptive statistics for multiple assertions concerning the resources, support, and frameworks offered by the institution to promote self-study. The results reveal the students' perspectives on factors such as material availability, support services, and self-study options, as well as their assessment of the university's role in promoting independent learning.

Table 3. Descriptive Statistics and Interpretation for University Support of Self-Study Activities

Code	Statement	M	SD	Skewness	Kurtosis	Interpretation
SLA1	The university provides adequate resources for self-study activities.	3.70	0.78	0.08	-0.61	High
SLA2	The university offers a variety of self-study materials and resources.	3.77	0.80	-0.16	-0.52	High
SLA3	The university encourages students to engage in self-study activities.	3.98	0.90	-0.43	-0.76	High
SLA4	The university provides clear guidelines on self-study expectations.	3.86	0.78	-0.25	-0.38	High
SLA5	The university organizes workshops or training sessions on effective self-study techniques.	3.47	0.91	-0.02	-0.80	High
SLA6	The university provides a conducive environment for self-study.	3.40	0.89	0.07	-0.74	Moderate
SLA7	The university offers support services for self-study, such as tutoring or mentorship programs.	3.38	0.89	-0.11	-0.84	Moderate
SLA8	The university provides access to online learning platforms and resources for self-study.	3.55	0.91	-0.15	-0.76	High
SLA9	The university regularly assesses and evaluates students' self-study progress.	2.76	1.05	0.13	-0.48	Moderate
SLA10	The university offers incentives or recognition for students who excel in self-study activities.	3.21	1.02	-0.07	-0.76	Moderate

Note. M = Mean; SD = Standard Deviation. Interpretation is based on a 5-point Likert scale.

Table 3 displays the descriptive statistics about students' perceptions of university assistance for self-directed study activities. The findings indicate that the overall perception was predominantly favorable, with the majority of comments assessed in the "High" category on the 5-point Likert scale.

The top-rated items included SLA3 (the university promotes student engagement in self-study activities, $M = 3.98$, $SD = 0.90$), SLA4 (provides explicit guidelines on self-study expectations, $M = 3.86$, $SD = 0.78$), and SLA2 (offers a diverse array of self-study materials and resources, $M = 3.77$, $SD = 0.80$). The results indicate that students perceive support regarding motivation and access to varied study resources. Likewise, SLA1 (which offers sufficient resources for SDL and SLA5 (which arranges seminars or training sessions) both garnered "High" scores, further reflecting a positive opinion of institutional assistance.

However, some other elements received moderately high ratings, signaling substantial deficiencies within educational institutions, which might become a serious obstacle to the successful implementation of self-study practices. One reason why this might occur could be the shortage of resources, as well as the limited number of independent studying opportunities available at numerous Cambodian universities, especially those located in provincial areas. For example, a supportive study environment can still be deficient because of crowded classrooms, a lack of private studying spaces, and an insufficient number of facilities. At the same time, tutor and mentor services could be underdeveloped due to insufficient numbers of academic advisers and prevailing teacher-oriented methods of instruction. Besides, the low rating received by the element of recognizing and rewarding students for their achievements during self-study may be explained by the lack of appropriate recognition from the university. SLA6 (facilitates a favorable environment for self-study, $M = 3.40$) and SLA7 (provides support services such as tuition or mentorship, $M = 3.38$) received moderate ratings, indicating that although help is available, it may lack adequate strength. The item with the lowest rating was SLA9 (which routinely monitors and evaluates students' self-study progress, $M = 2.76$, $SD = 1.05$), indicating a perceived deficiency in monitoring and feedback systems.

Likewise, SLA10 (provides incentives or recognition for pupils who excel in self-study, $M = 3.21$) resided in the moderate range, signifying an absence of motivation through formal rewards.

The skewness and kurtosis scores were moderate, indicating that the responses were approximately regularly distributed. In conclusion, although students typically regard university assistance for self-study activities favorably, there is a necessity to improve environmental support, assessment processes, and student acknowledgment.

5. DISCUSSION

Overall, a great deal of insight regarding Cambodian students' impressions of the support that universities provide for SDL may be gleaned from the results of this survey. In general, the findings demonstrate that students hold predominantly positive opinions about the tools, support, and directions that their universities provide in order to promote learning that is done independently. However, regions that include monitoring, incentives, and favorable learning environments were given a moderate score, which draws attention to institutional deficiencies that need to be addressed.

Specifically, the high evaluations for resources, encouragement, and guidelines imply that students regard their universities as supportive in encouraging and equipping them for SDL. These findings are in accordance with the current research, which highlights the significance of institutional resources and motivational support in empowering students to assume responsibility for their own education (Candy, 1991; Garrison, 1997). Furthermore, in terms of global research, it has been demonstrated that students who are provided with access to a wide variety of learning materials, clear guidelines, and motivating reinforcement are more likely to actively participate in SDL and achieve positive academic outcomes (Lin & Tsai, 2013; Song & Hill, 2007). In this regard, the Cambodian case demonstrates that these global best practices are being implemented, which indicates progress in aligning national higher education with international trends (MoEYS, 2018).

Nevertheless, in spite of the fact that these perceptions are positive, several institutional shortcomings came to light. For instance, students reported that they were moderately satisfied with the availability of support services like tutoring and mentorship, the provision of conditions that were favorable to learning, and the acknowledgement of accomplishments in SDL. Notably, the monitoring and evaluation of progress in self-study was the area that received the lowest rating, which indicates that there is an absence of structured feedback systems. Importantly, these shortcomings are consistent with issues that have been expressed in other studies, which have emphasized that SDL may not realize its full potential in terms of improving student autonomy and learning outcomes without adequate monitoring and recognition (Abdullah, 2001; Hiemstra & Brockett, 2012).

Consequently, it is possible that Cambodian institutions of higher education will be required to adopt intentional measures in order to fortify their support for SDL as a means of addressing these deficiencies. In the first place, colleges and universities ought to establish procedures for structured assessment and feedback that would allow students to monitor and reflect on their own progress in SDL (Brookfield, 2013). Secondly, it would be beneficial to increase the availability of mentorship and academic advising programs, since this would allow students to receive personalized supervision while still maintaining their independence (Knowles, 1975). Thirdly, in order to provide motivation for students who excel in SDL, educational institutions ought to take into consideration the implementation of recognition or reward systems, such as certificates of achievement or academic credits (Grow, 1991). In addition to improving the learning experiences of individual students, the implementation of such tactics also helps to foster a culture of lifelong learning across the university system (Tough, 1979).

Moreover, the ramifications for policy and practice are substantial. For example, explicitly incorporating social and emotional learning (SEL) into university curricula, institutional policies, and support structures is one way to ensure that students are systematically equipped with the skills necessary for lifelong, independent learning (Organization for Economic Cooperation and Development, n.d.; UNESCO, 2021). By taking these actions, universities in Cambodia may make a contribution to the broader national aims of increasing the quality of education and educating graduates to meet the demands of an economy that is based on knowledge (MoEYS, 2014).

The present research offers a number of implications for various parties interested in the development of higher education in Cambodia. In terms of pedagogical practice, the results obtained in the present study emphasize the need to utilize a student-oriented approach to instruction. Educators should provide learners with guidance, constructive feedback, and mentoring to develop skills of self-directed learning. Curriculum developers may benefit from the results obtained in the current research by developing curricula that incorporate such elements of self-directed learning as reflective practice and research. The development of conducive learning environments through providing access to digital sources of information, learning centers, mentoring, and other support should be prioritized by policymakers and university administrators. Universities should create systems of incentives for motivating learners to participate in self-directed learning processes. Researchers interested in the topic of self-directed learning in Cambodian higher education may find the results presented in the current research valuable for their future studies.

In summary, although students in Cambodia believe that their institutions are supportive of their efforts to develop SDL skills through both resources and encouragement, this research highlights the necessity for enhancements to be made to feedback systems, mentoring, and recognition methods. Ultimately, not only will addressing these issues improve the efficacy of SDL, but it will also boost the role of Cambodian higher education in fostering students who are self-reliant, motivated, and competent.

6. CONCLUSION AND RECOMMENDATION

This article investigated the perspectives of Cambodian university students regarding the amount of institutional support that is available for SDL. Overall, the findings of the study showed that, in general, students believe that their institutions offer them beneficial support, especially when it comes to the availability of resources, the provision of encouragement, and the provision of clear instructions that foster SDL. However, a number of deficiencies were discovered, especially in the areas of evaluation systems, methods for recognition, and the accessibility of surroundings that are conducive to learning. Therefore, the findings of these studies demonstrate that, despite the fact that higher education institutions in Cambodia have achieved some success in encouraging SDL, additional adjustments are required in order to develop a more comprehensive and durable framework that will encourage learning that is done independently.

Importantly, this research provides empirical information from the setting of higher education in Cambodia, which is a region where research studies remain few, and as a result, it contributes to the expanding collection of literature on SDL. In particular, the research emphasizes the role that universities in Cambodia have in promoting SDL by bringing attention to the viewpoints of students. Moreover, it identifies certain institutional practices that are in need of improvement. Consequently, not only are the ideas that are presented here useful to those who are in positions of power, such as university administrators and lawmakers, but they are also pertinent to educators who are looking to improve student-centered approaches to learning.

In light of the findings, several suggestions may be made to enhance institutional support for SDL at Cambodian universities:

1. Firstly, structured systems that assess student progress in SDL and provide timely, constructive feedback should be developed to improve monitoring and feedback procedures.
2. Secondly, tutoring and mentorship services should be made more widely available to students so that they have a greater number of opportunities to receive personalized assistance while still being able to exercise their own autonomy as learners.
3. Thirdly, to further encourage students and reward them for their efforts, formal acknowledgment for great achievements in self-study should be introduced. This can take the form of certificates, awards, or credits, for example.
4. Finally, make sure that the physical and digital spaces on campus are favorable to independent study by providing silent locations, easily available materials, and a dependable technology infrastructure. This will improve the campus environment.

The current study is one of the contributions to the literature that also possesses several limitations that should be mentioned. First, due to the use of convenience sampling, the findings obtained can be generalized only to the population of Cambodian university students. Secondly, it has to be mentioned that the data collection has been carried out only at two provincial universities, which means that the experiences of students at universities in other parts of Cambodia, especially in Phnom Penh, might differ. Finally, since the information was collected through questionnaires, there is a possibility that students' personal biases have influenced their responses. Moreover, the design that has been used by researchers did not allow for a detailed investigation of students' experiences and opinions. Taking all these limitations into account, future research should involve bigger and more diverse samples from universities located throughout Cambodia. It would also be appropriate to conduct qualitative studies to investigate students' experiences more deeply and understand how the institution influences their learning skills. For example, a more comprehensive understanding of the differences in SDL assistance between institutions should be gained by comparative studies that are conducted across a larger selection of Cambodian universities. In addition, qualitative research methods, which include interviews and focus groups, can provide a more comprehensive picture of the experiences and obstacles that students face while practicing SDL. Moreover, longitudinal studies could be used to investigate the long-term effects of institutional assistance on student outcomes, including academic performance, motivation, and lifetime learning capacities.

In conclusion, despite the fact that Cambodian students recognize the good role that their universities play in encouraging SDL, more targeted institutional initiatives are required in order to close the existing gaps. Ultimately, not only will the reinforcement of feedback, mentorship, recognition, and learning settings improve student involvement in SDL, but it will also help to foster resilient, autonomous learners who are prepared to meet the challenges of the twenty-first century.

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Research Ethics. All procedures were performed in accordance with national regulations and the host institution's policies regarding human participants. The study was approved by the Institutional Research Ethics Committee of the National University of Cheasim Kamchaymear. Informed consent was obtained for all participants before they participated in the study.

Data Availability Statement. The data that support the findings of this study are available from the corresponding author upon reasonable request. All data were anonymized to protect participants' confidentiality.

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