






An Empirical Study on College Students' Agency for Learning in Sabah, Malaysia

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ABSTRACT

The primary purpose of this study was to examine the agency for learning among college students in Kota Kinabalu, Sabah, Malaysia. The methodology involved administering the Agency for Learning Questionnaire online to 70 randomly selected college students. Responses were then automatically transferred onto a spreadsheet, and SPSS 26.0 was utilized to analyze the data. Mann-Whitney U test showed no significant gender differences in the college students' agency for learning, while Kruskal-Wallis H test revealed no significant differences by way of ethnicity and age. Wilcoxon signed rank test revealed the following: (1) For intentionality/planful competence, three of the items were significant at $p < 0.001$, (2) for intentionality/decision competence, none of the items were significant, (3) for forethought/extrinsic motivation, six of the items were significant at $p < 0.001$, (4) for forethought/intrinsic motivation, six of the items were significant at $p < 0.001$, (5) for self-regulation, only one item was significant at $p < 0.05$, and (6) for self-efficacy, only one item was significant at $p < 0.001$. Lastly, group means indicated that the college students tended to exhibit low to low-average levels of agency for learning. Findings imply that it is crucial for colleges and universities to implement measures that encourage students to take greater agency over their academic life to progress into a meaningful future.

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Contribution/Originality: This study substantially contributes to the extant literature on the agency for learning among college students in Sabah, Malaysia. Empirical research on this particular construct is scarce in Malaysia, particularly Sabah; therefore,

the study narrows the research gap by surveying college students' agency for learning in the Malaysian higher educational milieu. Overall, findings will provide novel knowledge and insight to educators, administrators, and policymakers on ways to enhance college students' agency for learning.

1. Introduction

Agency is the power to originate action, and it enables individuals to regulate and control their cognition, motivation and behavior through self-efficacy (Bandura, 1986, 2000, 2001, 2006). Students' beliefs in their own abilities influence the degree to which they feel efficacious when confronted with problems. Those with high competency beliefs are able to resolve them with effort, relying on their confidence. Their optimistic outcome beliefs concerning challenging academic tasks often dictate the degree to which they overcome complex academic tasks. The more they persist through difficult tasks, the stronger their problem-solving skills will become, resulting in higher personal self-efficacy (Bandura, 1989). According to Gerreyn (2023), the Organization for Economic Cooperation and Development (OECD) Future of Education Skills 2030 has highlighted student agency as a key theme, which refers to students' ability to act independently, make choices, and take control over their own learning. Students with a sense of agency tend to be more motivated and engaged in their academic performance, and are therefore, more capable of fulfilling their intellectual potential. Agency for learning can be enhanced by instilling belief and hope in students to assume greater control over their lives. As a form of personal leadership, agency for learning and the resultant hope encourage them to face reality and seek innovative solutions. Exemplifying agency is the key to maturity and growth as it discourages students from making excuses or developing a victim mentality. It prevents them from feeling helpless and defeated, which in turn, allows them to capitalize on their untapped potential.

Additionally, the United States Department of Education has delineated student agency as a critical element of personalized learning (Renaissance Learning, Inc., 2025). It enables students to seize control over their own intellectual development by encouraging them to take greater initiative. Educators can augment students' mental ability to exert control, augment their achievement motivation, and ensure that they engage in relevant and appropriate activities derived from their own interests and self-initiated learning. Further, agency allows them to express their own opinions and choice with regard to the ways they acquire novel knowledge and skills. When students feel that their voice and self-direction are respected, they tend to engage more actively in their learning. Additionally, each choice gives them the chance to display their mastery in various ways; by permitting them to make their own selections that enthuse them most, educators can promote individualized learning through student agency. However, to demonstrate agency for learning, students need to know their goals, while trusting their instructors to allow them to progress along their chosen path by providing meaningful feedback that further motivates them to comprehend, take action, and perceive that they are in charge. Lastly, to promote agency, educators can provide a variety of activities to allow students to choose from; for instance, students can opt for projects, writing assignments, or oral presentations to demonstrate their mastery, which in turn, will trigger a greater investment in their own academic pursuits.

1.1. Purpose and Significance of the Study

The primary purpose of the study was to examine the agency for learning among college students in Kota Kinabalu, Sabah, Malaysia. The current study was significant for several reasons. Findings would increase knowledge and awareness on the role of agency for learning. It would encourage educators to adopt a range of instructional pedagogies that are based on principles of students' intentionality, forethought, self-regulation, and self-efficacy to promote intellectual achievement. When instruction is anchored in the core aspects of agency, students are given opportunities to have power and monitor their own learning. They become advocates for themselves and the issues they are concerned about. Moreover, findings would also encourage educators to adopt agentic pedagogies that are developed collaboratively with students to help them understand how they learn, as well as, the factors influencing their own success. Additionally, agentic students tend to actively pursue challenging projects, share their viewpoints, and assume leadership roles. Findings would also encourage educators to emphasize the need for students to actively lead their own learning and professional lives to cope with real-world problems and issues. Further, findings can suggest to educators that students require agency as an internal compass to establish meaningful goals, assess the progress toward those goals, manage time effectively, and develop proactive learning strategies. Supporting agentic independence among students also enables educators to efficaciously address learning differences in terms of goal-setting and evaluating abilities, time management, and behavioral control amongst students. Lastly, a literature review showed that there is a dearth of empirical research on students' agency for learning in Sabah, Malaysia; hence, a research gap has been identified.

1.2. Research Questions

Three research questions were formulated to provide direction for the present study:

- i. Were there any significant age, gender, and ethnic differences in college students' agency for learning?
- ii. Were there any significant differences in the agency for learning items (agreement/disagreement) based on a hypothesized value of 3.5?
- iii. What were the means of students' agency for learning and their implications?

2. Review of Literature

2.1. Learning Motivation, Learning Power, and Academic Performance

A literature review was conducted to establish a conceptual framework for the study. Several studies have shown that agency for learning tends to be associated with learning motivation, learning power, and academic performance. [Blair \(2009\)](#), who examined the connections between learner agency and music learning, found that learner agency tends to motivate students to proactively seek understanding and growth in their own musicianship, while employing strategies that enhance their own success by listening to, performing, and creating their own craft. On the other hand, [Deakin et al. \(2015\)](#) maintained that mindful agency is a crucial component of learning power that equips students with the assertiveness and self-awareness to proceed and attain their own academic achievement. It also gives them the confidence to recognize and recover from failure and disappointments associated with learning, as well as, the ability to plan and manage themselves in a variety of learning situations. Moreover, mindful agency allows them to be creative, curious, and optimistic, reflecting that it is the fundamental

mechanism of learning power that is often enhanced by meta-reflection on pragmatic learning. Overall, mindful agency reflects students' relationship with themselves; students can enhance their mindful agency by exposing themselves to different settings that require different degrees of innovativeness, inquisitiveness, and optimism, while reflecting on their own progress. Additionally, it enables them to develop the insight and awareness essential for guiding their agentic choices about the ways to learn, while developing the assertiveness to advance. Lastly, it allows them to develop resilience, which is the agency to effectively respond to uncertainty, risk, and critical issues.

2.2. Impact of Agency for Learning

O'Rourke and Addison (2017) provided an extensive evidence base that has identified what actually occurs when students display stronger agency in their academic lives. First, students tend to demonstrate more in-depth learning, better intellectual performance, and more effective problem-solving skills. They also tend to engage in more personally- and socially-relevant and rigorous learning when codesigning and enacting the curriculum. Second, students tend to go beyond mere engagement to demonstrate authentic decision-making, while experiencing a stronger sense of community that reflects a greater willingness to collaborate with others. Their propensities as deep learners increase as they become more self-directed, self-motivated, and engaged. Third, they tend to become more diligent, set more ambitious goals, and show greater preference for challenging tasks. They also become more adept in strategizing, exerting greater focus, and displaying greater interest in acquiring novel knowledge and skills. Lastly, they tend to utilize more metacognitive, behavioral, and motivational self-regulation to press on their own learning, while feeling more ascertained in leveraging digital technologies and other resources to improve their own communities, as well as, to keep the curriculum informed.

A study by Luo et al. (2019) investigated the influence of student agency on the academic achievement and outcomes in a flipped classroom among undergraduate students. Findings revealed that student agency tends to significantly influence students' academic performance and outcomes. Further, even a low degree of student agency tends to result in more favorable academic performance and evaluation ratings among students. At the graduate level, Yang et al. (2020), who examined students' agency and experiences with research design, found that students' agency tends to be associated with their personal and professional background, while supervisors' feedback can increase students' agency in modifying or elaborating on their research design. Moreover, Taub et al. (2020), who investigated the influence of agency on learning, problem solving, and affect among college students in game-based learning, found that moderate agency tends to help them achieve more favorable learning outcomes; lastly, even low levels of agency tend to positively impact their problem solving and knowledge acquisition.

2.3. Social Cognitive Theory

According to Code (2020), agency for learning is a component of social cognitive functioning, as it allows agentic abilities to mediate the impact of behavioral, personal, and socioenvironmental facets on students. Since it is often displayed in distinct contexts for discrete reasons, agency should be considered from the perspectives of students in the context of learning because it acts as an incipient capability that is evidenced in individual abilities to interact with behavioral, personal, and socioenvironmental variables in the learning environment. Additionally, Code (2020) elaborated that agency for learning is

self-generated and intentional, while being influenced by external sources. Since it emanates through self-generated intention, it is manifested through the interaction among students' intentionality, forethought, self-regulation, and self-efficacy. In other words, students exhibit agency through their capability to synchronize their own behavioral, mental, and emotional functions as they interrelate with various socioenvironmental factors. It enables them to demonstrate the behavioral skills needed in self-directing various environmental possibilities, as well as the personal agency and knowledge to validate those skills in appropriate contexts. Therefore, agency for learning offers a better picture of how students regulate and use their influence to attain personal and collective goals, while providing educators a framework to examine student learning in various educational contexts.

2.4. Impact on Language Learning and Educational Technology

Additionally, research shows that agency tends to have an impact on language learning; for example, [Maretha and Waluyo \(2022\)](#), who examined the agency for English learning among undergraduate students, found that first-year students tend to display significantly higher level of agency for learning than those in the second year. Furthermore, a study by [Jang \(2022\)](#), which examined the relationship between learner agency and second language writing practices, indicated that successful project writing can be facilitated when students possess a greater sense of agency. It sets the boundaries of their writing space, reflecting that they are agentic language users who can utilize knowledge and context to develop their writing identities.

[Brod et al. \(2023\)](#) provided a synthesis on the cruciality of agency in educational technology (EdTech), which includes learning platforms, educational games, apps, and other kinds of software that comprise the wider media milieu. Given the increasing application of EdTech in education, it is crucial to innovate digital technologies that can enhance agency for learning. EdTech that adapts to agentic learning often draws on smart tutoring solutions or adaptive learning technologies to facilitate student-digital interaction. Such personalized EdTech systems have important implications on agency, as they automatize choices and control what students view on their computer screens. Moreover, some EdTech systems allow students to have more options in things that they innovate and dispense since they can also include their own images, texts, or audio-recordings in any length, pattern, or combination of images and texts. Nevertheless, educators need to determine the guidelines to assess the scope and the manner in which student's agency is allowed or buttressed by EdTech. Lastly, EdTech systems need to have personalization loops installed so that the level of agency is balanced between students' free choice of content and teachers' allotment of optimal content to them.

3. Methodology

3.1. Research Design and Approach

A quantitative approach was adopted because an online survey was administered to obtain numerical data, while SPSS 26.0 was conducted to analyze data to understand the concept of agency of learning. This approach was appropriate for the study since it attempted to find significant gender x age x ethnic differences in the construct, use means and percentages to interpret data, and draw relevant conclusions based on the empirical findings.

3.2. Research Location

The study was conducted in Kota Kinabalu, Sabah, Malaysia, where empirical research on college students' agency for learning is scarce. Students from a private local university college were recruited as respondents because the study was delimited to examining students' agency for learning in the Kota Kinabalu area, which was deemed sufficiently representative of the college population in Sabah. Moreover, there are only three private university colleges in Kota Kinabalu, and the other two have declined to participate in the study. Besides, data collection was more convenient at the chosen location because the first author serves as the head of its Master of Education program. The study also received little funding; therefore, it was more pragmatic to collect data in a small district in Sabah. Overall, data collection was limited to only one private university college due to constraints in terms of time, accessibility, and funding.

3.3. Sample

The sample consisted of 70 early childhood education students ($n = 70$) recruited from a private university college in Sabah, Malaysia, who were randomly chosen through systematic random sampling. The total enrollment of childhood education students at the college was 190 ($N = 190$); every second student was asked to respond to the online questionnaire that was uploaded onto the group WhatsApp.

According to the central limit theorem, a minimum sample size of 30 is acceptable for most survey studies; the deduction behind the rule of 30 is based on the assumption that the distribution of sample means tends to approach a normal distribution as the sample size increases. Therefore, a sample size equal to or greater than 30 is deemed sufficient to yield meaningful data for analysis (Lin & Chen, 2006; Memon et al., 2020). By procuring a total of 70 random data points, the authors could generate meaningful insight into their research purpose, with reasonably high confidence in the results.

Lastly, students come from ethnically diverse communities and are fluent in English and the Malay Language. Male students comprised 47.1 percent, while female students comprised 52.9 percent of the sample. About 64.3 percent are between 18 to 20 years old; 17.1 percent are between 21 to 23 years old; 10.0 percent are between 24 to 26 years old; finally, 8.6 percent are above 26 years old. Ethnicity-wise, 58.6 percent are Kadazandusuns, 10 percent are Malays, while another 31.4 percent are Rungus, Muruts, and Lundayehs (see Table 1).

Table 1: Demographic Characteristics of the Sample ($n = 70$)

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	33	47.1%
	Female	37	52.9%
Age	18-20	45	64.3%
	21-23	12	17.1%
	24-26	7	10.0%
	Above 26	6	8.6%
	Ethnicity	Kadazandusun	41
	Malay	7	10.0%
	Others	22	31.4%

3.4. Instrument

The Agency for Learning Questionnaire (AFLQ), developed by Code (2020) was utilized to collect data. The developer has published elaborate details of its psychometric properties, predictive validity, and internal consistency. The 28-item AFLQ comprises agentic functioning with six dimensions, including (1) intentionality/planfulness, (2) intentionality/decision confidence, (3) forethought/intrinsic motivation, (4) forethought/extrinsic motivation, (5) self-regulation, and (6) self-reflectiveness/self-efficacy. The items were selected based on their high discrimination values ($\alpha > 1.0$). Additionally, Code (2020) found that planfulness, decision confidence, intrinsic motivation, extrinsic motivation, self-regulation, and self-efficacy tend to be significantly and positively related with one another, with r ranging from 0.11 to 0.57 at $p < 0.01$. Lastly, in terms of predictive validity of the AFLQ, Code (2020) also revealed its significant correlations with academic achievement: Planfulness ($r = 0.121, p < 0.01$), decision confidence ($r = 0.136, p < 0.01$), intrinsic motivation ($r = 0.141, p < 0.01$), self-regulation ($r = 0.114, p < 0.01$), and self-efficacy ($r = 0.263, p < 0.01$). Overall, the AFLQ can be regarded as a reliable, valid, and multidimensional assessment of agency for learning based on previous quantitative studies.

3.5. Data Collection and Analysis

A total of 70 randomly chosen college students completed the questionnaire on Google Forms; they were told that its completion was indicative of their consent to voluntarily participate in the research. All respondents were assured of their anonymity, while their responses were kept strictly confidential. Data were automatically transferred onto a spreadsheet and subsequently analyzed using SPSS 26.0. First, Kruskal-Wallis H test was run to determine if there were any significant differences in the students' agency for learning in relation to ethnicity and age. Second, Mann-Whitney U test was conducted to determine if there were any significant differences in terms of gender. Third, Wilcoxon signed rank test was executed to determine if significant differences existed in agency for learning based on a hypothesized value of 3.5. Lastly, percentages of agreement were used to present the overall levels of college students' agency for learning.

4. Findings

4.1. Kruskal-Wallis H Test and Mann-Whitney U Test Results

Kruskal-Wallis H test revealed no significant differences in the college students' agency for learning by way of ethnicity and age, while Mann-Whitney U Test showed no significant differences in terms of gender (see Table 2).

Table 2: Kruskal-Wallis H and Mann-Whitney U Results

Dimensions	Fixed variables	Non-parametric test	p -value
Intentionality/Planful competence	Gender	Mann-Whitney U test	0.920
	Age	Kruskal-Wallis H test	0.058
	Ethnicity	Kruskal-Wallis H test	0.947
Intentionality/Decision competence	Gender	Mann-Whitney U test	0.914
	Age	Kruskal-Wallis H test	0.397
	Ethnicity	Kruskal-Wallis H test	0.522

Forethought/Extrinsic motivation	Gender	Mann-Whitney U test	0.337
	Age	Kruskal-Wallis H test	0.549
	Ethnicity	Kruskal-Wallis H test	0.143
Forethought/Intrinsic motivation	Gender	Mann-Whitney U test	0.763
	Age	Kruskal-Wallis H test	0.317
	Ethnicity	Kruskal-Wallis H test	0.887
Self-regulation	Gender	Mann-Whitney U test	0.768
	Age	Kruskal-Wallis H test	0.088
	Ethnicity	Kruskal-Wallis H test	0.606
Self-efficacy	Gender	Mann-Whitney U test	0.498
	Age	Kruskal-Wallis H test	0.311
	Ethnicity	Kruskal-Wallis H test	0.793

4.2. Wilcoxon Signed Rank Test Results

Wilcoxon signed rank test results showed that, for intentionality/planful competence, three of the items were significant at $p < 0.001$: Students indicated that they (1) considered how best to carry out a decision, (2) tried to be clear about their objectives before choosing their major, and (3) liked to collect a lot of information when making decisions. Two of the planful competence items were significant at $p < 0.05$: Students indicated that they (1) took a lot of care before choosing their course and (2) liked to consider all of the alternatives before choosing their course (see [Table 3](#)).

Table 3: Wilcoxon Signed Rank Test Results for Intentionality/Planful Competence

Item	<i>p</i> -value
I take a lot of care before choosing my course	0.008*
I consider how best to carry out a decision	< 0.001***
I try to be clear about my objectives before choosing my major	< 0.001***
When making decisions, I like to collect a lot of information	< 0.001***
I like to consider all of the alternatives before choosing my course	0.005*

*** $p < 0.001$; * $p < 0.05$

For intentionality/decision competence, none of the items were significant (see [Table 4](#)).

Table 4: Wilcoxon Signed Rank Test Results for Intentionality/Decision Competence

Item	<i>p</i> -value
I feel confident about my ability to make decisions	0.033
I think that I am a good decision maker	0.129
The decisions I make turn out well	0.180

For forethought/extrinsic motivation, six of the items were significant at $p < 0.001$, whereby students indicated that they attended college because (1) it was part of the way in which they had chosen to live their life, (2) of the prestige of being a college graduate, (3) it was one of the best ways they had chosen to develop other aspects of their life, (4) college made them feel that they could take responsibilities for changes in their life, (5) training hard would improve their performance, and (6) they wanted to show themselves

that they could succeed in their studies. Only one item was significant at $p < 0.05$, whereby students attended college for the material and/or social benefits of being a graduate (see Table 5).

Table 5: Wilcoxon Signed Rank Test Results for Forethought/Extrinsic Motivation

Item	p-value
I attend college because it is part of the way in which I've chosen to live my life	< 0.001***
I attend college for the prestige of being a college graduate	< 0.001***
I attend college because it is one of the best ways I have chosen to develop other aspects of my life	< 0.001***
I attend college because it is an extension of me	0.113
I attend college because I must go to college to feel good about myself	0.108
I attend college for the material and/or social benefits of being a graduate	0.017*
I attend college because college makes me feel that I can now take responsibilities for changes in my life	< 0.001***
I attend college because training hard will improve my performance	< 0.001***
I attend college because I want to show myself that I can succeed in my studies	< 0.001***

*** $p < 0.001$; * $p < 0.05$

For forethought/intrinsic motivation, six of the items were significant at $p < 0.001$. Students indicated that they attended college because they (1) experienced pleasure and satisfaction while learning new things, (2) experienced pleasure while surpassing themselves in their studies, (3) experienced pleasure when they discovered new things never seen before, (4) experienced pleasure in broadening their knowledge about subjects which appealed to them, (5) felt satisfaction when they were in the process of accomplishing difficult academic activities, and (6) experienced a high feeling while reading about various interesting subjects (see Table 6).

Table 6: Wilcoxon Signed Rank Test Results for Forethought/Intrinsic Motivation

Item	p-value
I attend college because I experience pleasure and satisfaction while learning new things	< 0.001***
I attend college for the pleasure I experience while surpassing myself in my studies	< 0.001***
I attend college for the pleasure I experience when I discover new things never seen before	< 0.001***
I attend college for the pleasure that I experience in broadening my knowledge about subjects which appeal to me	< 0.001***
I attend college for the satisfaction I feel when I am in the process of accomplishing difficult academic activities	< 0.001***
I attend college because my studies allow me to continue to learn about many things that interest me	< 0.001***
I attend college for the "high" feeling that I experience while reading about various interesting subjects	0.247

*** $p < 0.001$

For self-regulation, only one item was significant at $p < 0.05$, whereby students knew how to motivate themselves even when their endurance or patience decreased (see Table 7).

Table 7: Wilcoxon Signed Rank Test Results for Self-regulation

Item	p-value
I know exactly how to decrease my nervousness	0.993
Most of the time I feel at peace with myself	0.089
I can rapidly relax myself even when I am in a state of strong internal tension	0.331
In most situations, I feel free to do as I please	0.850
I know how to motivate myself even when my endurance/patience decreases	0.024*
When something upsets me, I can easily calm down	0.053
Many things work out well because I approach them with lots of energy	0.735
When striving for a goal I can fully identify myself with my actions	0.255
When a task gets boring, I usually know how to make it interesting again	0.302
I can reduce my tension level if it starts bothering me	0.968

* $p < 0.05$

For self-efficacy, only one item was significant at $p < 0.001$, whereby students were confident to study when there were other interesting things to do. Besides, only one item was significant at $p < 0.05$, whereby students were confident to motivate themselves to do academic work (see Table 8).

Table 8: Wilcoxon Signed Rank Test Results for Self-efficacy

Item	p-value
I am confident to study when there are other interesting things to do	< 0.001***
I am confident to always concentrate on the subject during class	0.326
I am confident to take good notes during class instruction	0.087
I am confident to plan my college work for the day	0.716
I am confident to organize my college work	0.186
I am confident to remember information presented in lecture and textbooks	0.761
I am confident to arrange a place to study without distractions	0.416
I am confident to motivate myself to do academic work	0.031*

*** $p < 0.001$; * $p < 0.05$

4.3. Group Means of Agency for Learning

Groups means were calculated to obtain an overall impression of college students' agency for learning. Results showed that college students tended to demonstrate low to low-average levels of agency for learning in all the dimensions (see Table 9).

Table 9: Means of Agency for Learning among College Students

Dimensions	High	Average	Low	Mean
Intentionality: Planful Competence	23-25	18-22	< 18	19.63
Intentionality: Decision competence	14-15	11-13	<11	10.46
Forethought: Extrinsic motivation	41-45	32-40	< 32	35.46
Forethought: Intrinsic motivation	32-35	25-31	< 25	27.60
Self-regulation	45-50	35-44	< 35	35.90
Self-efficacy	36-40	28-35	<28	29.20

5. Discussion and Recommendations

Findings implied that the college students in Sabah tend to possess low to low-average levels of agency for learning. This finding was supported by previous research. An early

study by [Betz and Hackett \(1987\)](#) that examined agentic behaviors indicated that college students tend to provide only minimally competent responses to various situations. While demonstrating relatively high levels of perceived efficacy, the college students tend to exhibit weak efficacy beliefs. Additionally, [Hartnett et al. \(2020\)](#) found that the abrupt and impromptu shift to remote online teaching and learning tends to negatively impact students' agency, which is characterized by less control over their learning, motivation, confidence, and concentration. Besides experiencing challenges while learning remotely, they also tend to experience a lack of structure, anxiety, distraction, stress, ostracism, and difficulties in juggling academic/life demands.

On the other hand, [Kazin \(2023\)](#) reiterated that higher education tends to impede student agency and self-direction, since most of it revolves around administrative requirements and faculty interests rather than student learning. Students often do not get the experience of managing real-life problems because most schools are organized by departments and disciplines, which limit the opportunities to integrate what they are learning across discrete courses. Additionally, student agency is often limited by fear of failure. Students generally try to avoid failures at all costs; however, higher education should normalize failure by providing a safe space and encouragement for students to take calculated risks, make mistakes, and learn from them.

In view of the findings, some practical recommendations on how to increase students' agency for learning were made. [Zeiser, Scholz, and Cirks \(2018\)](#) identified three pedagogic measures that can be utilized to foster student agency. First, to develop positive interpersonal relationships with students, teachers need to be aware of their own agency needs, motivators, and strengths. They can model agency skills to students in a meaningful context or equip them with strategies, resources, and tools to help them master agency skills. Further, teachers can provide them with opportunities to do group assignments to develop the agency necessary for team success. Besides, they can encourage students to revise assignments or assessments after providing constructive feedback. Moreover, they can allow students to self-reflect using journals, logs, or other structured templates or tools. Second, teachers can help students set goals to complete challenging tasks, while striving to improve their own agency. They can conduct individual meetings with students to discuss the components of student agency and its relationship to academic performance. They should also allow students to voice their opinions by offering opportunities to make important decisions in the teaching and learning process. Third, teachers can create formative and summative assessments to appraise student agency, while providing them with motivational tasks to build agency. Further, they can provide direct and explicit instructions to enhance student agency, for example, by providing positive reinforcement to students who demonstrate agency. Lastly, they can verbally cue students through short spoken prompts to remind them to demonstrate agency in class.

According to [Weeks \(2023\)](#), teachers need to permit students agency over their own learning so that they become more engaged, assertive, and prepared to succeed in an ever-evolving learning environment. To reinforce student agency, educators need to encourage students to become more proactive in choosing their academic path to attain greater intellectual, socioemotional, and personal success. First, being naturally curious as they explore the surrounding environment, students should be encouraged to capitalize on these curiosities and interests to attend to their own learning. This allows them to become co-creators along their learning path, while having a voice right from the beginning of a lesson or assignment. As they peruse topics that enthuse them, students often gain confidence in deriving innovative solutions to real-life predicaments. Second,

students need different alternatives to demonstrate their knowledge and successfully complete their assessments. Teachers can ask them to reflect on how they prefer to assimilate novel information, for example, by checking if they prefer reading, listening to audios, or watching movie/video clips. Moreover, teachers should give students clear expectations and indicate how they will be evaluated to ensure that they will actively self-reflect as well as give/receive feedback. Third, they can help them gain deeper insight into their own academic strengths and challenges. Overall, students need to have an accurate perception of their own level of performance to determine the steps they need to progress, while teachers should help them reflect on the styles they learn best as well as the type of learning environment and strategies that are most conducive for them.

Gerreyn (2023) outlined a few ways for students to take agency over their life to progress into brighter future. First, students should be encouraged to have a voice; instead of regarding their current situation as a problem or crisis, they can take it as a reinvention. Instead of feeling disappointed and helpless, they should convince themselves that they are excited about their future and strive to seek new opportunities to influence their own actions and perspectives. Second, students can identify and acknowledge their own emotions and sit compassionately with themselves through difficult times. Learning how to let their emotions move through them helps them become more resilient and better equipped to handle negative emotions without fear or avoidance, which in turn, strengthens their agency. Third, students need courage to raise their expectations in the right direction, for instance, they should expect things from themselves rather than external things. Instead of anticipating to be successful or happy, they can expect that they will have the courage and confidence to fulfill their goals. To thrive, they must have courage to perform challenging things better than anybody else. Lastly, students must be willing to bear personal responsibility by asking themselves what they can do despite having problems, while allowing themselves to consciously use the problems as a reason to do something more constructive. In brief, they should attempt to do a little more than what they thought they could.

6. Conclusion

Since the college students in Sabah tend to possess low to low-average levels of agency for learning, it is imperative to implement measures to reinforce this psychosocial attribute among them to promote achievement motivation, academic engagement and intellectual performance at Malaysian higher institutions of learning. Lastly, this study is a novel addition to the research literature; nevertheless, its limitations are an impetus for future research. Generalizability of findings might be limited because the sample comprised only 70 college students who completed a questionnaire in their own setting. Future research should involve a bigger sample and examine whether students' agency for learning could predict their academic performance and other aspects of tertiary life. It should also explore agency for learning in samples from other age and ethnic groups as well as communities to increase generalizability of findings.

Ethics Approval and Consent to Participate

The research study has strictly adhered to all ethical guidelines and procedures involving human participants. Besides closely following ethical research principles, informed consent was obtained from all participants who were also allowed to stop participating in the study anytime.

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Conflict of Interest

The authors declare no conflict of interest in terms of authorship or publication of this article.

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