The Effects of Learner Autonomy on Academic Performance Among Cambodian Students Studying English in Higher Education

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Abstract- This study investigates the correlations between academic performance and learner autonomy among Cambodian students studying English in higher education among 108 respondents. The quantitative method was employed in this study. The results revealed high positive correlations between learner autonomy and academic performance—which was statistically and respectively significant [$r= 0.74$, N $= 108, p < 0.01$]. This finding implicated that learner autonomy strongly correlates positively with academic performance. The findings of this study suggest several pedagogical implications; learner autonomy plays a crucial role in promoting academic performance. The more substantial learner autonomy, the higher academic performance.

Index Terms- Learner Autonomy, Correlations, Academic Performance, Higher Education

I. INTRODUCTION

As English is ASEAN's working language, being a member of Cambodia has enabled more Cambodians to learn the language (Tweed & Som, 2015). Ouk and Sok (2020), English language teaching and learning in Cambodia, highlighted the importance of improving teacher quality and providing more opportunities for students to practice speaking and listening skills. In addition, Phal (2018) investigates the current status of English language teaching in Cambodia, highlighting the need for more resources and teacher training to improve the quality of instruction. Similarly, Kong and Oh (2021), English language education in Cambodia faced the challenges faced by the country, such as a lack of qualified teachers and limited resources. However, Oum (2019) discussed the challenges faced by English language education in Cambodia, including the lack of resources, low teacher salaries, and limited access to technology, and provides recommendations for improving the situation. Overall, these studies suggest that English language education in Cambodia faces significant challenges, including a shortage of qualified teachers and limited resources, but there is potential for improvement through increased investment in teacher training and resources.

The Cambodian educational system has been split into three phases since 1979 (Hayden & Martin, 2011). Pre-school, non-formal education, and vocational training are also active (Ministry of Education, Youth, and Sport, 2014). The system is so limited and weak that the international higher education market would be of little interest to it (Ford, 2015). Cambodia produces an over-supply of unqualified graduates yearly from narrow, poor programs. The low standard of teaching is at the root of many of Cambodia's educational problems (Kelsall et al., 2016). However, Seng and Ming (2019) provided an overview of the historical evolution of the Cambodian educational system and discussed current challenges, such as limited resources and a shortage of qualified teachers. Heng and Yin (2020) added that the development of Cambodia's education system since the 1990s, highlighting achievements and challenges and discussing prospects for the future, such as increasing investment in education and improving the quality of teacher training. Also, Choum and Lee (2021) highlighted the challenges faced by education in Cambodia, such as limited resources and inequities in access to education, and discussed potential solutions, such as improving teacher training and increasing investment in education. Pen (2018) discussed the challenges and opportunities facing the Cambodian education system, including the need for greater teacher training and infrastructure investment. Overall, these studies suggest that the Cambodian education system faces significant challenges, such as limited resources and a shortage of qualified teachers, but there is potential for improvement through increased investment and improvements in teacher training and infrastructure.

II. RESEARCH ELABORATION

Learner autonomy is the desired objective for educational purposes when learning a language (Yu, 2020). It recommends that all learners take more responsibility for their language learning (Fredholm et al., 2015). Autonomy can only be achieved through an active process of support that helps learners grow and systematize their skills (Gandhimathi & Devi, 2016). In developing countries, learner autonomy can have a special kind of

significance because there is disagreement about what formal education can deliver (Smith et al., 2018).

The study by Kassarnig et al. (2018) indicated that the academic performance of peers has significant explanatory power for individual academic achievement and that attendance is the most trustworthy established academic performance indicator. Various research found that class attendance displayed the greatest association with academic achievement when only individual effects were taken into account (Kassarnig et al., 2018).

Most educators were unfamiliar with the idea of learner autonomy, and there was little evidence that they actively promoted it in their speech or teaching (Smith, Kuchah, & Lamb, 2018). Additionally, the teacher interviews revealed that many students, although enrolled in one of Cambodia's most recognized degree programs, lack the motivation to work consistently throughout the semester (Moore, 2017). The above issues remain problems in the Cambodian educational context nowadays; especially, lack of learner autonomy was a big problem in the Cambodian educational system.

This research study aimed to solve the gaps mentioned above by examining the relationship between academic performance and learner autonomy among Cambodian students studying English in higher education. Moreover, the research hypothesis defines (H_0): Learner autonomy and academic performance have no relationship. Three sub-hypotheses support the research hypothesis in the findings and discussion section.

A. Theoretical Framework

The researcher drew a theoretical framework based on what has been reviewed in the literature review chapter. Firstly, the self-determination theory is used to measure learner autonomy (Ryan & Deci, 2008), which comprises three dimensions: autonomy, competency, and relatedness. Secondly, the self-efficacy theory (Bundura, 1997) is used to measure academic performance; it has three dimensions: magnitude (or level), strength, and generality; however, the researcher adopted only two of them: strength and generality—to conclude this study. Thirdly, the Monitor Model (Krashen, 1982) proposes four hypotheses for second language acquisition (SLA): the acquisition/learning hypothesis, the monitor hypothesis, the natural order hypothesis, the input hypothesis, and the affective filter hypothesis.

The self-determination theory is an evidence-based theory of human motivation, development, and well-being (Ryan & Deci, 2008). It states that when one is actively involved or engaged in an activity where one's talents are balanced with the activity's challenge, one can approach an optimal experience state (Bundura, 1997). Also, the flow theory correlates with the self-efficacy theory. In short, the self-determination theory strongly correlates with self-efficacy during the Second Language Acquisition (SLA) process.

III. RESEARCH METHODOLOGY

A. Research Design

In this research study, a quantitative method was applied since the quantitative study is the processing and analysis of numeric data to describe, forecast, and/or monitor phenomena of interest (Nardi, 2018).

B. Participants in The Research

This research study was conducted at three private and public universities in Phnom Penh, Cambodia. In this study, to avoid sample biases on population features that allow the researcher to respond to the research hypothesis, random sampling (Clustering sampling technique) was implemented. The researcher selected the sample by calculating the sample size of the entire population and picking a random number of samples from each category (major English students in their second, third, and fourth years) from each university. The population comprised 589 students who were studying English major from the 2nd year to the 4th year of the above universities. Therefore, the sample size was 108 students selected.

C. Data Collection

To collect data for this research study, a questionnaire in both English and Khmer versions was employed as the instrument. The most suitable method for data collection was the personal administration of the questionnaire and test. The questionnaire began with demographic information, such as gender, age, year level, and degree. To examine the participants' learner autonomy, a 16-item self-determination scale developed by Johnston and Finney (2010) and Wang et al. (2019) was adopted. Additionally, a 10-item self-evaluation scale on academic performance adapted from Moneta (2012) and Keller and Landhäußer (2012) was used to measure the participants' academic performance.

D. Validity and Reliability

To ensure the validity and reliability of the data collection instrument, the researcher conducted a pilot study. A questionnaire of three sections: Section A: Respondent demographic information; Section B: Learner autonomy; and Section C: Academic performance—with a 5-point Likert scale, a total of 26 items—were adapted and translated from English to Khmer. Then, they distributed to the target group of 30 respondents from the 3rd and 4th years majoring in English to complete the questionnaires. Finally, a reliability evaluation, as seen in Table 1, was conducted based on the quantitative results from the pilot test.

Table 1. Reliability test on learner autonomy and academic performance

Variables	N^0 of items	Cronbach's alpha
Learner autonomy	16	0.84
Academic Performance	10	0.83

For the responses to learner autonomy, Cronbach's alpha for 16 items was 0.84 (Table 1), representing a good correlation between items. Moreover, in the responses to the academic performance, Cronbach's alpha for ten items was 0.83 (Table 1), which indicated a good relationship among items. Overall, the pilot study's findings indicated that all of the questionnaire's items were trustworthy for gathering information for the main research study.

E. Data Analysis

After the data was available, a sophisticated tool for evaluating and modifying survey data, "Statistical Package for

Social Sciences (SPSS v.23)" was used to organize and analyze the data. Moreover, correlation coefficients were employed to analyze the data, where the data in figures and tables were present.

IV. RESULTS

A. Demographic Results

As a result, 108 students responded to the questionnaire in four different sections. See the following tables respectively:

Table 2. Gender, age, year level, and degree of students

Respondents	Description	N^0 of respondents	Percentage (%)
Gender	Male	50	46.30
	Female	58	53.70
	Total	108	100
Age	Under 18	0	0
	18-22	52	48.10
	23-26	44	40.70
	27-Up	12	11.10
	Total	108	100
Year Level	2nd Year	34	31.50
	3rd Year	29	26.90
	4th year	45	41.70
	Total	108	100
Degree	Associate degree	7	6.50
	Bachelor's degree	101	93.50
	Total	108	100

A total of 108 students responded to the questionnaire, with 56.30% male and 53.70% female participants (Table 2). The age group data indicated that the majority of respondents were between 18 and 22 years old. The year-level data showed that the majority were in their 4th year. Furthermore, all participants held a bachelor's degree.

B. Research Findings

Here are the study results based on the research hypotheses:

H_0: Learner autonomy and academic performance have no relationship.

Table 3. The correlation coefficient between learner autonomy and academic performance

Main variable	Correlation coefficient	*P*-value
Learner autonomy Academic performance	0.747	0.00
Note: Correlation is significant at the 0.01 level (2-tailed)		

Table 3 shows the hypothesis (H0), which indicates a correlation coefficient of 0.74 between learner autonomy and academic performance with a *P*-value ($p < 0.01$). The value of r = 0.74 indicates a strong positive correlation with significant statistical significance ($p < 0.01$). The result rejected the null hypothesis since the correlation coefficient significantly deviated from zero, and the *P*-value was statistically significant.

C. Research Discussion

The correlation between learner autonomy and academic performance, which ranged from 0 to +1 for these 108 respondents, showed the direction and strength of the association between the two variables. Additionally, learner autonomy and academic achievement showed a significant positive correlation. Therefore, there was enough data to illustrate a significant correlation between learner autonomy and academic performance since the correlation coefficient significantly deviated from zero. This result supported earlier research on the correlation between learner autonomy and academic achievement. They concluded that learner autonomy is positively correlated with academic performance across various educational contexts and subject areas (Han & Huang, 2018; Al-Hamly & Alshumaimeri, 2019; Shu & Zhang, 2020; Lin & Wang, 2021).

It proved that learner autonomy was a crucial factor in promoting academic performance. Therefore, all stage holders, especially teachers, and school administrators, must encourage learner autonomy to improve academic performance. The more the learners have a sense of autonomy in their learning, the higher and better academic performance or learning outcomes they get.

However, the findings were inconsistent with Ezzi's (2018) study, which failed to find a positive correlation between learner autonomy and academic performance. Okada's (2018, 2021) findings also showed a weak positive correlation between perceived autonomy support and academic performance, possibly due to differences in context and students' English knowledge background. These unexpected findings suggest that the relationship between learner autonomy and academic performance may vary depending on various contextual factors, such as the participants' English proficiency and the type of autonomy support provided.

V. CONCLUSIONS

The correlation coefficient between the dependent variable (learner autonomy) and independent variables (academic performance) was presented as follows: there was a high positive

correlation between learner autonomy and academic performance, which was statistically significant. Also, there was sufficient evidence to demonstrate a significant linear relationship between learner autonomy and academic performance. The findings of this study suggest several pedagogical implications; learner autonomy plays a crucial role in promoting academic performance. The more the students engage in learning and teaching activities, the higher the academic performance they gain.

ACKNOWLEDGEMENT

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