

PERCEPTION OF CAN THO UNIVERSITY STUDENTS ON THE IMPORTANCE ROLE OF MOTIVATION IN ONLINE LEARNING

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ARTICLE INFO	ABSTRACT
Received: 14/01/2025 Revised: 21/7/2025 Published: 28/7/2025	This study analyzes students' perceptions at Can Tho University regarding the role of motivation in online learning, focusing on four key aspects: self-regulation, participation and interaction, goal attainment, and learning persistence. A survey was conducted with 892 students from various academic units using a five-point Likert scale, revealed an overall motivation perception score of 4.10, with self-regulation scoring the highest (4.15). Quantitative analysis, including descriptive statistics, ANOVA, and post-hoc tests, identified significant differences in motivation perception based on academic year, academic unit, academic performance, and online learning experience, but no significant differences by gender. Students with extensive online learning experience and high academic achievement demonstrated stronger self-regulation and goal orientation. These findings highlight the crucial role of motivation in enhancing self-directed learning and online learning effectiveness. It also highlights the necessity of implementing appropriate strategies tailored to specific individual characteristics to foster learning motivation and enhance the quality of online learning for students at Can Tho University.
KEYWORDS	
Motivation	
Online learning	
Perception	
Students	
Self-regulated learning	

NHẬN THỨC CỦA SINH VIÊN TRƯỜNG ĐẠI HỌC CẦN THƠ VỀ TẦM QUAN TRỌNG CỦA ĐỘNG LỰC HỌC TẬP TRỰC TUYẾN

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Ngày nhận bài: 14/01/2025 Ngày hoàn thiện: 21/7/2025 Ngày đăng: 28/7/2025	Nghiên cứu này phân tích nhận thức của sinh viên tại Trường Đại học Cần Thơ về vai trò của động lực trong học tập trực tuyến, tập trung vào bốn khía cạnh: khả năng tự quản lý, tham gia và tương tác, đạt mục tiêu, và duy trì hoạt động học tập. Khảo sát thực hiện với 892 sinh viên đến từ nhiều đơn vị đào tạo, sử dụng thang đo Likert 5 điểm. Kết quả cho thấy điểm trung bình chung về nhận thức động lực là 4,10, với khả năng tự quản lý đạt cao nhất (4,15). Phân tích định lượng bằng thống kê mô tả, ANOVA và hậu kiểm cho thấy sự khác biệt đáng kể trong nhận thức dựa trên năm học, đơn vị đào tạo, kết quả học tập và kinh nghiệm học trực tuyến, nhưng không khác biệt theo giới tính. Sinh viên có kinh nghiệm học trực tuyến lâu dài và thành tích học tập cao thể hiện khả năng tự quản lý và định hướng mục tiêu rõ ràng hơn. Kết quả nghiên cứu nhấn mạnh tầm quan trọng của động lực trong nâng cao kỹ năng tự học và hiệu quả học tập trực tuyến. Đồng thời, nghiên cứu cũng chỉ ra sự cần thiết phải có các chiến lược phù hợp cho đặc điểm cá nhân cụ thể để phát triển động lực học tập và nâng cao chất lượng học tập trực tuyến của sinh viên tại Trường Đại học Cần Thơ.
TỪ KHÓA	
Động lực	
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1. Introduction

Under the impact of the Fourth Industrial Revolution, Vietnam's higher education system faces both opportunities and challenges, prompting higher education institutions to adapt to digital transformation and integrate information technology into teaching and learning. To promote the implementation of online education in higher education, the Ministry of Education and Training issued Circular No. 08/2021/TT-BGDĐT on March 18, 2021, stipulating that for formal and part-time training programs, up to 30% of the total curriculum can be delivered online [1]. Can Tho University (CTU) has implemented online teaching in accordance with this regulation. However, in practice, students have not actively engaged in online learning activities, and their level of interaction remains limited. This situation necessitates not only compliance with online teaching requirements but also ensuring the quality of education, demonstrating that the effectiveness of online classes is not inferior to that of traditional face-to-face classes.

Learning motivation is a crucial psychological factor that significantly influences students' engagement and academic performance in an online learning environment [2], [3]. While numerous studies have examined factors affecting students' learning motivation [4] - [7], few have focused on how students themselves perceive the importance of motivation in the context of online learning especially at the institutional level such as Can Tho University. Studies at CTU indicate that students clearly recognize the benefits of online learning, particularly the ease of note-taking (mean = 4.09) and cost savings (mean = 4.04) [8]. Key factors influencing online learning effectiveness include course design, learning materials, and interactions between instructors and students as well as among students themselves [9]. A study combining the Technology Acceptance Model (TAM) and the DeLone & McLean Information Systems Success Model (D&M) involving 294 students analyzed the impact of E-learning on academic performance, yet did not examine differences among student groups [10]. Most prior research has focused on technical aspects and teaching methods, without an in-depth examination of students' perceptions of online learning motivation.

According to Ryan and Deci's Self-Determination Theory (SDT), motivation is defined as the process that initiates, directs, and sustains goal-oriented behaviors. Ryan and Deci [11] distinguished between intrinsic motivation, which refers to engaging in an activity for its inherent satisfaction, and extrinsic motivation, which involves performing a task to attain external rewards or avoid negative consequences. Motivation has a greater impact on academic outcomes than specific learning strategies [12], [13]. It is an essential factor for self-regulation, engagement, and the achievement of learning goals. Students' attitudes significantly influence their motivation and participation, with self-directed learning promoting active engagement [14]. A supportive learning environment can foster intrinsic motivation and enhance academic performance [15]. Based on previous studies, online learning motivation encompasses four key roles:

Enhancing students' self-regulation in online learning

Learning motivation plays a crucial role in enabling students to manage their online learning effectively. According to Broadbent et al. [16], self-regulated learning strategies are strongly correlated with academic success in online learning environments. Motivated students tend to proactively plan their studies, manage their time efficiently, and stay focus on their academic goals [17]. Additionally, the study by Ca et al. [7] emphasized that self-regulated motivation helps students persist in their studies and overcome challenges in online learning.

Encouraging active participation and interaction in online learning

Students with strong learning motivation are more likely to engage in academic activities and interact with instructors and peers. Stark [3] highlighted that learning motivation is directly linked to students' level of participation in online courses. Highly motivated students actively contribute to discussion forums, ask questions, and share their perspectives, which ultimately enhances their learning outcomes [14]. Furthermore, Paterson [18] found that highly cohesive

online learning communities are often formed by students with strong motivation. Positive interactions can serve as a motivational factor, encouraging students to engage more actively in learning [9]. Notably, Vu et al. [19] demonstrate that students' perception of the value of online learning can significantly influence their active participation.

Supporting students in achieving specific learning objectives in online courses

Setting learning goals is a key factor in maintaining students' motivation. Pintrich [12] argued that goal orientation significantly influences students' academic performance, particularly in online learning environments where self-discipline is essential. According to Ferrer et al. [14], highly motivated students tend to set clear learning objectives, which enhances their ability to complete courses successfully. Additionally, Hartnett et al. [20] emphasized that commitment to learning goals sustains students' motivation over time, even when they encounter difficulties in their studies.

Promoting consistent and continuous engagement in online learning

Learning motivation not only influences initial participation but also determines students' ability to sustain long-term engagement in online learning. Ryan and Deci [21] suggested that intrinsic motivation fosters continuous interest and long-term learning commitment. Teodorescu et al. [22] investigated the impact of the COVID-19 pandemic on online learning motivation and found that highly motivated students were more likely to continue their coursework without interruption. Furthermore, Garrison[23] reinforced that motivation plays a central role in the Community of Inquiry model, enabling students to stay engaged and successfully complete their academic requirements [23].

Based on the theoretical foundations, this study has developed a research model as presented in Figure 1.

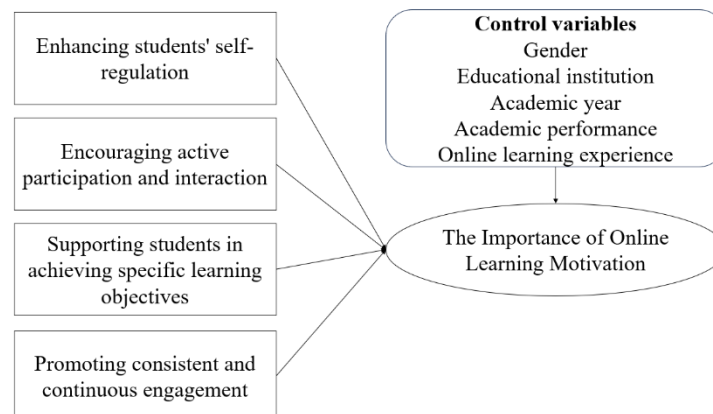


Figure 1. Research model

In summary, learning motivation not only enhances individual academic behaviors but also serves as a foundational element of online learning effectiveness. Therefore, understanding students' motivational dynamics, particularly in the context of online education at Vietnamese universities like Can Tho University, is essential for developing tailored instructional strategies. This study aims to fill that gap by examining students' perceptions of online learning motivation and analyzing how individual characteristics influence these perceptions. Findings are expected to offer practical insights to improve teaching practices and foster student engagement in online learning environments. The study aims to address two following research questions:

1. How do students at Can Tho University perceive the importance of motivation in online learning?
2. Are there any differences in students' perceptions of the importance of motivation in online learning based on individual characteristics (gender, educational institution, academic year, academic performance and online learning experience)?

2. Methods

This study employs a mixed-methods approach, integrating both quantitative and qualitative methods to provide a comprehensive understanding of students' perceptions of the importance of online learning motivation at CTU.

Table 1. Number of survey participants by academic units at Can Tho University

No.	Educational institution	Quantity	Percentage (%)
1	College of Engineering Technology	330	37.0
2	School of Education	65	7.3
3	School of Information and Communication Technology (ICT)	71	8.0
4	School of Foreign Languages	45	5.0
5	School of Political Science	31	3.5
6	College of Natural Sciences	35	3.9
7	School of Law	37	4.1
8	College of Aquaculture & Fisheries	59	6.6
9	College of Environment & Natural Resources	57	6.4
10	School of Social Sciences and Humanities	48	5.4
11	College of Agriculture	71	8.0
12	College of Economics	43	4.8
Total		892	100.0

Quantitative data were collected through an online survey, which included questions assessing students' perceptions of the significance of online learning motivation. The survey utilized a 5-point Likert scale (1 - Not important at all, 2 - Slightly important, 3 - Neutral, 4 - Important, 5 - Very important). Additionally, several open-ended questions were incorporated to collect qualitative data, providing deeper insights into the factors influencing students' online learning motivation.

Table 2. Descriptive statistics of survey participants

Survey Information	Content	Quantity	Percentage (%)
Gender	Male	494	55.4
	Female	398	44.6
Academic Year	1st Year	242	27.1
	2nd Year	387	43.4
	3rd Year	146	16.4
	4th Year	115	12.9
	5th Year	2	0.2
Academic Performance	Excellent	150	16.8
	Good	373	41.8
	Fair	317	35.5
	Average	52	5.8
Online Learning Experience	None	20	2.2
	Less than 1 year	187	21.0
	1–2 years	390	43.7
	More than 2 years	295	33.1

The research sample was randomly selected from different academic units at Can Tho University, with a total of 892 students participating in the survey. The sample size was determined based on Green's method, Green [24] recommended the formula (1) as below:

$$N \geq 50 + 8p \quad (1)$$

Where n is the minimum required sample size and p is the number of independent variables in the model to determine the appropriate sample size, ensuring reliability and generalizability of the findings.

Data collection was conducted from September to December 2024. The survey participants consisted of students ($n = 892$) from various academic units at Can Tho University. Descriptive statistics of the participants are detailed in Tables 1 and 2.

Quantitative data were analyzed using SPSS software. Descriptive statistics, including mean (M) and standard deviation (SD), were calculated to assess overall trends and the variability of responses. The reliability of the measurement scale was tested using Cronbach's Alpha, yielding a result of 0.914, indicating high reliability (Cronbach's Alpha > 0.7 is considered acceptable [25]). Additionally, a one-way ANOVA was performed to examine differences among student groups, followed by post-hoc tests to identify significant differences between specific pairs of groups.

3. Results and Discussion

3.1. Students' perception of the importance of online learning motivation at Can Tho University

The results in Table 3 indicate that students at CTU have a high level of awareness regarding the importance of online learning motivation (mean = 4.10), highlighting its essential role in maintaining and developing learning capacity. However, the high standard deviation ($SD = 0.819$) suggests significant variation among students in their evaluations.

Table 3. Students' perception of the importance of online learning motivation at Can Tho University

No.	Importance of online learning motivation	Mean	Standard Deviation
1	Motivation enhances students' self-regulation in online learning	4.15	0.783
2	Motivation encourages active participation and interaction	4.04	0.849
3	Motivation helps achieve specific goals in online courses	4.08	0.802
4	Motivation supports consistent and continuous learning activities	4.10	0.841
	Total	4.10	0.819

Among the four surveyed aspects, self-regulated learning received the highest mean score (4.15), emphasizing the role of motivation in time management and self-discipline, consistent with Zimmerman's findings [17]. Consistent and continuous learning was also highly rated (4.10), while motivation to achieve learning goals scored 4.08, aligning with Pintrich's theory [12]. However, participation and interaction received the lowest score (4.04), indicating that students do not fully recognize its importance in online learning, despite Garrison's assertion [23] that interaction is a crucial factor in enhancing learning effectiveness.

Students highly value self-regulation due to the autonomous nature of online learning and personal circumstances, such as balancing study and work. Conversely, the lower evaluation of interaction may reflect unfamiliarity with online discussions, the influence of passive learning culture, external distractions, and current teaching methods that do not provide sufficient opportunities for engagement. Therefore, measures should be implemented to promote interaction in online classes to enhance learning outcomes.

3.2. Differences in perceptions of online learning motivation among surveyed groups

The study employed one-way ANOVA to identify statistically significant differences in awareness among student groups based on gender, educational institution, academic year, and academic performance and online learning experience, with the results presented in Table 4.

Table 4 indicates no significant differences in online learning motivation between male and female students, suggesting gender does not affect motivation evaluation, consistent with those documented by Nguyen et al. [13]. There are significant differences in online learning motivation among students from different training units ($Sig < 0.05$), indicating that curriculum design and learning environments may influence perceptions. This aligns with the results found in Pham's study [9], where it was found that course design and materials significantly impact online learning effectiveness. Analysis by academic year shows significant differences in active participation and interaction ($Sig = 0.043$), while other aspects show no significant differences ($Sig > 0.05$),

indicating that students' familiarity with online learning affects participation. Analysis by academic performance reveals significant differences in perceptions of motivation's role in self-regulation (Sig = 0.024), with higher-performing students viewing motivation as more critical due to better planning and time management skills. This aligns with Vu's study [19], which highlighted the connection between motivation and performance. Analysis by online learning experience indicates significant differences in motivation perception across all aspects, with more experienced students showing greater awareness of motivation's importance. Pham et al. [9] emphasized the role of experience and interaction in enhancing online learning effectiveness.

Table 4. ANOVA analysis of perceptions of online learning motivation

Factor	Aspect	F	Sig
Gender	Self-regulation	0.124	0.724
	Active participation and interaction	0.284	0.594
	Goal achievement	0.274	0.601
	Sustained learning activities	0.073	0.787
Educational institution	Self-regulation	1.913	0.034
	Active participation and interaction	2.608	0.003
	Goal achievement	1.984	0.027
	Sustained learning activities	2.511	0.004
Academic Year	Self-regulation	1.334	0.256
	Active participation and interaction	2.476	0.043
	Goal achievement	1.736	0.140
	Sustained learning activities	0.666	0.615
Academic Performance	Self-regulation	3.170	0.024
	Active participation and interaction	1.208	0.306
	Goal achievement	1.728	0.160
	Sustained learning activities	2.322	0.074
Online Learning Experience	Self-regulation	5.273	0.001
	Active participation and interaction	3.799	0.010
	Goal achievement	3.505	0.015
	Sustained learning activities	3.145	0.025

Overall, factors such as training unit, academic year, academic performance, and online learning experience significantly influence online learning motivation, while gender shows no significant impact. Strategies to enhance motivation should optimize learning environments, support inexperienced students, and tailor programs to the characteristics of each training unit and student group.

3.3. Detailed analysis of group differences

Although the ANOVA results indicate a statistically significant difference among student groups in their perception of online learning motivation, it does not specify which groups differ. Therefore, a post hoc LSD analysis was conducted to make detailed comparisons between groups, providing a clearer understanding of these differences in perception (*Only the statistics with a significance level (Sig) < 0.05 are presented*).

Results of post-hoc (LSD) test by academic units

The analysis results in Table 5 indicate significant differences among School of Education regarding students' self-management abilities, reflecting their perceptions of the importance of online learning motivation. Students from the College of Engineering Technology scored lower than those from the Faculty of Education (-0.220), the School of Information Technology (-0.249), and the School of Education (-0.341), with corresponding significance levels of 0.038, 0.015, and 0.006, suggesting a poorer perception of motivation due to a curriculum focused on theory. The School of Education showed a positive difference (0.337) compared to the College of

Agriculture (Sig = 0.012), indicating that students in the School of Education have a higher awareness of learning motivation, likely due to an emphasis on developing teaching skills. Similarly, the College of ICT also had a positive difference (0.324) compared to the College of Natural Sciences (Sig = 0.045), attributed to the use of modern technology.

Table 5. Students' perception of the importance of online learning motivation by academic units

Dependent Variable	(I) Academic Unit	(J) Academic Unit	Mean Difference	Std. Error	Sig.	CI Lower	CI Upper
Self-regulation	College of Engineering Technology	School of Education	-0.220	0.106	0.038	-0.428	-0.013
	College of Engineering Technology	College of ICT	-0.249	0.102	0.015	-0.449	-0.049
	College of Engineering Technology	School of Foreign Languages	-0.341	0.124	0.006	-0.584	-0.099
	School of Education	College of Agriculture	0.337	0.134	0.012	0.075	0.600
	College of ICT	College of Natural Sciences	0.324	0.161	0.045	0.008	0.639

The study underscores the importance of instructor motivation in online learning and highlights that units like the College of Engineering Technology and College of Natural Sciences should enhance their use of technology in online teaching. Conversely, higher-performing units should share their successful practices, and a balance between theory and practice is essential to improve online learning outcomes for all students.

Results of post-hoc testing (LSD) by academic year

The LSD test results in Table 6 indicate significant differences in self-regulation abilities among student groups. Specifically, second-year students demonstrated better self-study and time management skills than first-year students (mean difference = -0.135, Sig = 0.036), reflecting their adaptation to the university learning environment. Fourth-year students had a higher awareness of the importance of participation in learning compared to first-year students (mean difference = -0.235, Sig = 0.014) and third-year students (mean difference = -0.257, Sig = 0.010), highlighting the development of academic skills and career preparation.

These findings align with Ferrer et al. [14], who found that students exhibit higher motivation as they approach graduation. Qualitative data further support these differences: first- and second-year students often struggle to maintain motivation, reporting difficulties such as drowsiness, lack of focus, and reluctance to engage in online learning. Representative statements include: "*I do not feel motivated enough to improve my self-regulation skills*" and "*Motivation is important, but it is still not enough for me to actively participate in class.*".

Table 6. Academic year differences in CTU students' perceptions of online learning motivation

Dependent Variable	(I) Academic Year	(J) Academic Year	Mean Difference	Standard Error	Sig	Lower CI	Upper CI
Self-regulation	1	2	-0.135	0.064	0.036	-0.261	-0.009
	2	1	0.135	0.064	0.036	0.009	0.261
Active participation and interaction	1	2	-0.160	0.069	0.021	-0.297	-0.024
	1	4	-0.235	0.095	0.014	-0.423	-0.047
	2	1	0.161	0.069	0.021	0.024	0.297
	4	1	0.235	0.096	0.014	0.047	0.423
Goal achievement	3	4	-0.257	0.100	0.010	-0.452	-0.061
	4	3	0.257	0.100	0.010	0.060	0.453

In contrast, third- and fourth-year students expressed more positive views on learning motivation. They acknowledged that motivation enhances their time management and planning skills and helps them achieve academic goals. Some students noted: "*Motivation encourages me*

to be more proactive in online classes” and “When instructors introduce rewards for answering questions, I feel more engaged and actively participate”.

Overall, students at CTU recognize the crucial role of motivation in online learning, with significant improvements over the academic years. To further enhance learning motivation, targeted support programs should be implemented to optimize student engagement and academic success.

Analysis of post-hoc testing (LSD) by learning outcomes

Table 7. *Learning outcome differences in CTU students' perceptions of online learning motivation*

Dependent Variable	(I) Learning Outcome	(J) Learning Outcome	Mean Difference	Standard Error	Sig	Lower CI	Upper CI
Self-regulation	Excellent	Good	0.209	0.075	0.006	0.0606	0.357
	Excellent	Fair	0.219	0.077	0.005	0.0676	0.371
	Good	Excellent	-0.209	0.075	0.006	-0.3568	-0.061
	Fair	Excellent	-0.219	0.077	0.005	-0.3712	-0.068
Goal achievement	Excellent	Fair	0.169	0.079	0.034	0.0131	0.325
	Fair	Excellent	-0.169	0.079	0.034	-0.3245	-0.013

The results of the Post-hoc LSD test in Table 7 indicate that students with different academic achievements exhibit varying levels of awareness regarding the importance of online learning motivation. Specifically, high-achieving students demonstrate a greater recognition of motivation's role in online learning compared to average and below-average students. They possess stronger self-regulation skills, effectively plan their studies, manage their time, and maintain a proactive approach to online learning. Additionally, these students set clear academic goals and exhibit strong motivation to achieve them. When asked about the role of motivation, they emphasized that *“motivation helps maintain consistent learning, enhances self-regulation, and supports the achievement of academic goals”*.

Conversely, students with average or lower academic performance tend to be less proactive in their learning and have a limited understanding of motivation's significance. They prefer direct group activities, request slower-paced lectures focused on core content, and advocate for more strategies to foster creativity and critical thinking rather than solely theoretical learning.

These findings align with Ferrer et al. [14], who highlight the critical role of students' attitudes toward online learning in shaping their motivation and engagement levels. Their study found that students with a positive attitude toward online learning tend to exhibit higher motivation, stronger self-regulation skills, and greater participation in class activities compared to those with neutral or negative attitudes. This reinforces our conclusion that learning motivation is crucial in sustaining student engagement and improving academic outcomes in online education.

These insights hold significant implications in the growing landscape of online education. A strong awareness of learning motivation enables students to actively seek knowledge, develop self-learning skills, and maintain focus in virtual learning environments. Therefore, educators should implement effective teaching strategies to enhance student motivation, such as encouraging goal-setting, designing interactive learning activities, and providing personalized feedback. Additionally, institutions should introduce supportive policies, including self-learning training programs, academic counseling services, and improved online learning platforms to create an optimal learning environment.

Analysis of post-hoc testing (LSD) by learning experience

The results from Table 8 reveal significant differences in students' perceptions of the importance of online learning motivation based on their online learning experience. Students with more than two years of online learning experience have a stronger awareness of the role of motivation in maintaining proactivity, engaging in learning, and achieving academic goals compared to those with less than one year or 1–2 years of experience.

Furthermore, students with more than two years of online learning experience have a clearer understanding of the role of motivation in achieving academic goals, with a significant difference compared to those with 1–2 years of experience (-0.183 , $\text{Sig} = 0.003$). They acknowledge that motivation helps them set clearer goals and develop more effective study strategies. Notably, students with less than one year of experience have significantly lower awareness of the role of motivation in sustaining online learning activities compared to those with more than two years (-0.173 , $\text{Sig} = 0.028$). This may stem from their unfamiliarity with online learning and a lack of awareness regarding the importance of motivation in maintaining focus and perseverance in learning.

Table 8. Learning experience differences in CTU students' online learning motivation

Dependent Variable	(I) Online Learning Experience	(J) Online Learning Experience	Mean Difference	Standard Error	Sig	Lower CI	Upper CI
Self-regulation	Under 1 year	Over 2 years	-0.178	0.073	0.015	-0.320	-0.035
	1-2 years	Over 2 years	-0.228	0.060	0.000	-0.346	-0.111
	Over 2 years	Under 1 year	0.178	0.073	0.015	0.035	0.320
	Over 2 years	1-2 years	0.228	0.060	0.000	0.111	0.346
Active participation and interaction	1-2 years	Over 2 years	-0.198	0.065	0.002	-0.326	-0.070
	Over 2 years	1-2 years	0.198	0.065	0.002	0.070	0.326
Goal achievement	1-2 years	Over 2 years	-0.183	0.062	0.003	-0.305	-0.063
	Over 2 years	1-2 years	0.183	0.062	0.003	0.063	0.305
Sustained learning activities	Under 1 year	Over 2 years	-0.173	0.078	0.028	-0.326	-0.019
	1-2 years	Over 2 years	-0.179	0.065	0.006	-0.306	-0.053
	Over 2 years	Under 1 year	0.173	0.078	0.028	0.019	0.326
	Over 2 years	1-2 years	0.179	0.065	0.006	0.053	0.306

Students with over two years of experience exhibit a higher level of awareness regarding the importance of motivation for self-regulation, with significant differences compared to those with less than one year (-0.178 , $\text{Sig} = 0.015$) and those with 1–2 years (-0.228 , $\text{Sig} = 0.000$). This indicates that the more exposure students have to online learning environments, the better they understand the role of motivation in time management, study planning, and maintaining proactivity. Additionally, this group also perceives motivation as a key factor in enhancing participation and interaction in online classes, with a significant difference compared to the 1–2-year group (-0.198 , $\text{Sig} = 0.002$). They recognize the importance of motivation in fostering connections with instructors and peers, which encourages more active engagement in learning activities. Analysis of student feedback reveals that those with over 2 years of online learning experience have a clearer understanding of the importance of motivation in learning. They emphasize statements such as, “*Motivation helps me enhance my self-management and plan more effectively,*” and “*Motivation is a key factor for my active participation and interaction in online classes*”. In contrast, students with less than 2 years of experience tend to evaluate their motivation at a lower level, with comments like, “*I don’t feel motivated enough to improve my self-management skills.*”.

This study aligns with previous research. Stark [3] found that students with more extensive online learning experience tend to have a better understanding of the role of motivation in learning, leading to improved self-regulation and higher academic achievement. Similarly, Hartnett [20] concluded that students with more online learning experience are more aware of the importance of motivation in developing effective learning strategies.

Thus, this study not only reinforces prior findings but also provides additional empirical evidence on the differences in students' perceptions of online learning motivation based on their duration of online learning experience. These findings highlight the need for CTU to implement support measures for students who are new to online learning, helping them quickly adapt and enhance their learning effectiveness.

4. Conclusion

This study has elucidated students' perceptions at CTU regarding the role of motivation in online learning, focusing on four key aspects: self-regulation ability, level of participation and interaction, goal achievement capability, and habit maintenance. The findings indicate that the overall average score of these factors is relatively high (4.10), reflecting students' positive awareness of the importance of motivation in the online learning environment. Notably, "self-regulation ability" received the highest average score (4.15), emphasizing its crucial role in achieving success in online education.

ANOVA analysis and post-hoc tests reveal that factors such as academic unit, year of study, academic performance, and online learning experience significantly influence students' perceptions of learning motivation. Students with more extensive online learning experience and higher academic performance tend to have a more positive perception of motivation. However, the differences among student groups, particularly in "level of participation and interaction," highlight the need for additional support solutions to enhance the learning experience, especially for those new to this educational approach. Moreover, lecturers should design their lectures to suit different student groups to optimize learning outcomes.

Based on the research findings, CTU can adjust its educational strategies to maximize students' learning motivation, including creating a supportive learning environment, enhancing interaction, and encouraging active student participation. Implementing modern teaching methodologies and fostering students' self-regulation skills will significantly contribute to improving the quality of online education. These insights will aid the university in refining its teaching approaches, developing support programs for students adapting to online learning, and ultimately enhancing the overall educational quality at Can Tho University.

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