

Factors Impacting Online Learning Motivation: An Examination of Expectancy for Success, Value towards Online Learning, and Social Support

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ABSTRACT

The COVID-19 pandemic has accelerated the global shift to online education, presenting both opportunities for flexible learning and challenges in sustaining student motivation. This study examines undergraduate students' motivation towards online learning in the context of expectancy for success, perceived value towards online learning, and social support. A quantitative research design was employed with purposive sampling involving 113 diploma and bachelor's degree social sciences students at a Malaysian university. The study sought to identify students' perceived levels of motivation, differences across academic levels, and the interrelationships among the three motivational constructs. Findings indicate high motivation to learn online among the students, and there is no significant variation in expectancy, value, and social support between the diploma and bachelor's degree students. Findings also support past studies that the three motivational constructs have strong positive associations. The results underscore the need for institutions to strengthen motivational support in online learning through pedagogical innovation, structured guidance, and enhanced social interaction. Implications for policy and practice highlight the importance of targeted interventions to optimise student engagement and learning outcomes.

Keywords: motivation, online learning, expectancy in online learning, value towards online learning, social support

INTRODUCTION

The COVID-19 pandemic has dramatically reshaped the landscape of education worldwide. This crisis has triggered a profound transformation in the educational landscape. It has inaugurated an era of change and upheaval that was previously unimaginable. In the face of lockdowns and social distancing measures, educational institutions swiftly adapted, transitioning to remote and online learning platforms (Pokhrel & Chhetri, 2021). The pandemic accelerated the digital transformation of education. Institutions invested heavily in learning management systems, online collaboration tools, and digital content creation. Due to technological advancements and the COVID-19 pandemic, numerous learning institutions in Malaysia have transitioned to online and blended learning styles (Izni et al., 2024). This shift not only allowed for the continuation of education but also opened new possibilities for flexible and accessible learning options, with recorded lectures, interactive materials, and online libraries becoming increasingly prevalent.

While this shift allowed for the continuity of education, it also unveiled a multitude of challenges. Many students faced difficulties in accessing technology and reliable internet connections, exacerbating existing educational inequalities (Cullinan et al., 2021). Educators grappled with the complexities of virtual instruction, striving to maintain engagement and interaction in a digital environment. In addition to that, institutions were also forced to explore alternative assessment approaches such as online quizzes, projects, and exams, which required a rethinking of evaluation methods. However, the crisis spurred global collaboration and knowledge-

sharing among educators and researchers (Woo & Archambault, 2023). Best practices for online teaching and learning were exchanged, leading to innovations in pedagogy.

Online learning, while laden with opportunities for self-paced study and remote access to resources, can often be accompanied by a sense of isolation, distraction, and disengagement that can profoundly impact students' motivation (Sutcliffe & Noble, 2022). As students found themselves navigating online courses from the confines

of their homes, they encountered a myriad of obstacles to staying motivated. The absence of a physical classroom, face-to-face interactions with peers and instructors, and the structure of a traditional classroom created a unique set of challenges. Motivation is a fundamental driver of learning and academic success. Without it, the efficacy of online education can be compromised.

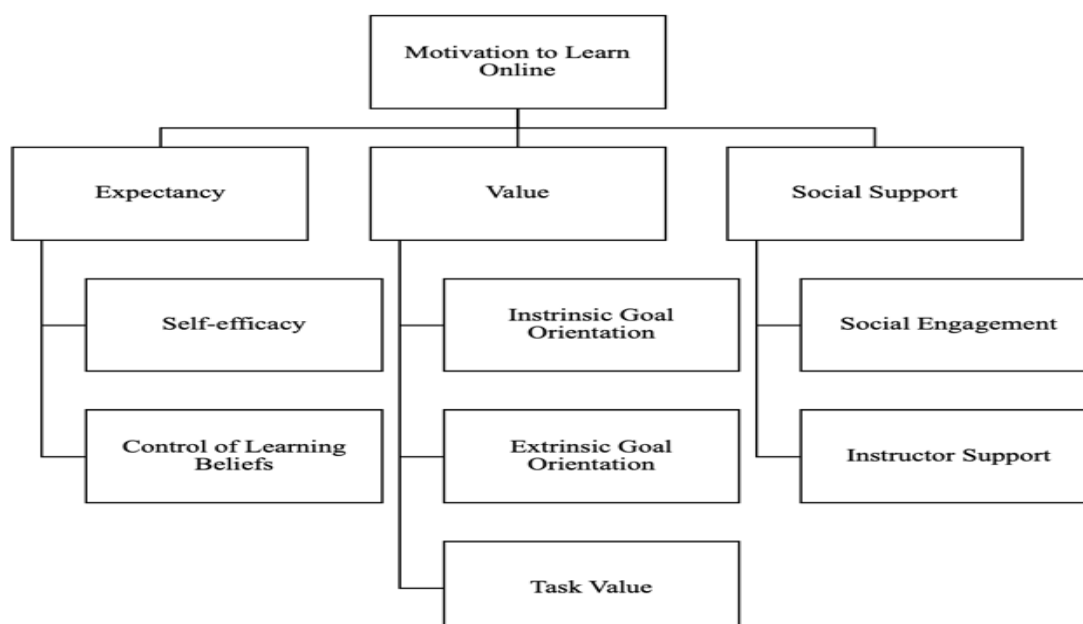
The current landscape of online education presents a critical need to understand the perceptions and experiences of learners in the context of their online learning motivation based on three scales, namely expectancy of learning online, value towards online learning, and social support for online learning. Specifically, this study was conducted to answer the following questions:

1. What is the students' perceived level of motivation to learn online based on expectancy for success, online learning value, and social support on online learning scales?
2. Is there any significant difference in the students' perceived level of expectancy for success, value towards online learning, and social support in online learning between diploma and bachelor's degree students of social sciences?
3. Is there a significant relationship among expectancy for success, online learning value, and social support?

LITERATURE REVIEW

The success of online learning depends largely on how motivated learners are towards online learning. Students' motivation to learn online relies on a number of variables. To explore students' perceptions of their online learning motivation, this study focused on the three main constructs of Fowler's (2018) Motivation to Learn Online Questionnaire (MLOQ) which are expectancy for success, value towards online learning, and social support as presented in Figure 1 below.

Figure 1 Fowler's (2018) Motivation to Learn Online Questionnaire (MLOQ)



Fowler's (2018) Motivation to Learn Online Questionnaire (MLOQ) was adapted from Pintrich et al.'s (1991) Motivated Strategies for Learning Questionnaire (MSLQ) by adding social support as an additional construct to the existing constructs (i.e. expectancy and value). Fowler claims that students' social interactions also influence their motivation to learn. This leads him to design another motivational construct, which is called social support.

Expectancy construct refers to how students perceive their ability to complete a learning task. These include self-efficacy and control of learning beliefs. Students' performance expectations and self-appraisal of their ability to master a learning task are referred to as self-efficacy. Control of learning beliefs, on the other hand, refers to students' perception of their learning efforts and how their efforts influence their learning outcomes.

Another motivational construct is value towards learning. It is students' perception of the value they put on their learning tasks. Value construct includes goal orientation (both, intrinsic and extrinsic) and task value. Goal orientation is students' perception of reasons for their learning engagement. Intrinsic goal orientation refers to the internal factors such as challenge, curiosity, and mastery, that students have that influence their learning engagement; whereas extrinsic goal orientation refers to the external factors, for instance, rewards, grades, performance, and evaluation by others. Task value refers to students' perception of their learning tasks in terms of their interest, importance, and usefulness.

Lastly, social support construct refers to how students view their environment and interaction with others when they learn online. These include social engagement in online classes, and the emotional and practical support given by instructor in their online learning.

Past studies

Demotivating and Motivating Factors for Online Learning

Studies regularly demonstrate that online learning is not always effective because while flexibility and convenience might increase engagement, infrastructure deficiencies, decreased contact, and negative emotions can decrease it. These motivators and obstacles were summarised in a systematic analysis of 25 studies, which also highlighted that results differed depending on the methods used to quantify engagement and efficacy (Koh & Daniel, 2022; Meng et al., 2024). These findings highlight a straightforward conflict in which online platforms increase accessibility but at the same time reduce social presence and self-control. Consequently, design decisions that reduce friction and establish a routine for interaction tend to increase motivation, while inadequate access and unclear tasks subtly deplete effort.

Motivation is influenced by the social and psychological supports embedded in the course. A cross-sectional survey of 605 undergraduates revealed that perceived social support predicted e-learning engagement through growth mindset and well-being pathways, highlighting a social-affective route to motivation (Wang & Wang, 2024). Likewise, a longitudinal two cohort study (face to face vs. pandemic online; N=225 and N=311) found motivation declined across a semester in both cohorts, yet students who used more evidence-based learning activities showed more positive motivational development (Bosch & Spinath, 2023). Together, these studies suggest that consistent, visible support and structured learning actions mitigate declines in motivation, implying that engagement is not only a feature of the platform but also by the surrounding social ecology.

Difference of the Perceived Level of Expectancy for Success, Value Toward Online Learning, and Social Support between Study Levels

Comparative evidence by program level is limited, and several studies either aggregate cohorts or prioritise relationships over group contrasts. For example, a multi-institutional Malaysian survey conducted by Izni et al. (2024) involving 208 participants adapted MLOQ instrument to examine correlations among expectancy, value, and social support; however, it did not report formal differences by study level, reflecting a common

gap in the field. A systematic review of 25 studies indicated that findings on online effectiveness were inconsistent and the methodologies varied with limited analyses of subgroup differences such as diploma versus degree programs (Meng et al., 2024). These patterns imply that level-based motivation profiles remain underdescribed resulting in program planning that often lacks definitive comparative evidence.

Methodological syntheses of online teaching during the pandemic era emphasize the adoption of strategies, but they seldom stratify by academic level. A systematic review of 36 empirical articles mapped eight teaching–learning strategies used to maintain continuity and noted persistent challenges with self-regulation and engagement; however, it offered limited insights on potential differences in motivational levers across program tiers (Koh & Daniel, 2022). In short, many studies are cross-sectional and convenience sampled, which complicates the detection of true level differences. The implication is straightforward as future research must include adequate comparisons to assess whether expectancy, value, and social support vary across diploma and bachelor’s degree populations.

Relationships Among the Motivation Constructs

Recent quantitative work indicates that expectancy, value, and social support are interrelated, influencing learners’ motivation in online courses (Izni et al., 2024). In their study using an MLOQ adapted survey reported significant correlations among the three constructs and with overall motivation for online learning. Another quantitative study on students’ motivation to learn online (N=156) was done by Siok et al. (2023). Using McClelland’s Theory of Needs, it was revealed that expectancy, value, and social support have a strong and positive correlation in determining student’s motivation in such a learning context. A large cross sectional study (N=605) found that social support improves engagement indirectly through mindset and well-being, mechanisms that align with value and expectancy gains when learners perceive themselves as capable and connected (Wang & Wang, 2024). Despite differences in methodology, these studies converge on a practical claim as motivation strengthens when students believe in their potential for success, perceive the task as worthwhile, and experience consistent support.

Expectancy–value perspectives are also evident in technology-enabled contexts, where perceived value is closely associated with users’ intention and engagement. An EVT-based instrument study with a sample size of 405 validated scales for value, cost, and knowledge and reported strong correlations between perceived value and intention to use learning technologies, suggesting transferability to online course design decisions (Chan & Zhou, 2023). Moreover, Bosch and Spinath (2023) also concur that semester-long monitoring reveals that students who actively use learning activities maintain better motivational trajectories, aligning with the idea that value cues and competence experiences feed expectancy over time. Altogether, the pattern is consistent which ties among expectancy, value, and support are not incidental but formative, and they are most powerful when measured together and reinforced through course-integrated practices.

METHODOLOGY

This quantitative study was conducted to explore motivational factors for online learning among undergraduates. While qualitative insights could provide richer contextual understanding, the objective of the present study is to identify measurable relationships and general trends across a large sample, which is best achieved through a quantitative design.

A purposive sample of 113 undergraduates participated in the study. They were diploma and bachelor’s degree social sciences students of a public university in Malaysia. The detailed distribution of the participants is presented in Table 1.

Table 1 Distribution of the Participants

		Male	Female	Total
Study	Diploma	15	6	21

Level	Degree	26	66	92
Total		41	72	113

To explore learners' perceptions of online learning motivation, Fowler's (2018) Motivation to Learn Online Questionnaire was adopted. The five-point Likert scale questionnaire consists of four sections, which are:

Section A: Demographic Profile

Section B: Expectancy

Section C: Value

Section D Social Support

Section A collects the participants' demographic profile. Section B has 12 items on expectancy. Section C has 14 items on value. Section D has 12 items on social support. The distribution of items measuring motivation to learn online is as indicated in Table 2.

Table 2 Distribution of Items in the Questionnaire

Section	Motivation Scales	Sub-Scales	No Of Items
B	Expectancy	Self-Efficacy	8
		Control of Learning Beliefs	4
C	Value	Intrinsic Goal Orientation	4
		Extrinsic Goal Orientation	4
		Task Value	6
D	Social Support	Social Engagement	5
		Instructor Support	7
Total			38

Before analysing the data, a reliability test was run to see the consistency of the items in the questionnaire for the sample of 113 respondents in the study. Its result is presented in Table 3 below.

Table 3 Reliability of the Instrument

Reliability Statistics	
Cronbach's Alpha	N of Items
0.944	38

As seen in Table 3, the Cronbach Alpha value of the questionnaire items is 0.94. This suggests a high internal consistency of the 38 items, hence a reliable measure of what it was used to measure in the study, since the minimum value of Cronbach's Alpha coefficient to be considered reliable is 0.70 as suggested by George and Mallery (2003).

RESULTS

The following are the results of the study based on the research questions from a quantitative lens.

Research Question 1: What is the students' perceived level of motivation to learn online based on expectancy for success, value towards online learning, and social support in online learning scales? To address this research question, a descriptive analysis of the participants' responses was done.

The result of the analysis on each scale is as follows.

Table 4 Perceived Level of Motivation Based on Expectancy, Value Towards Online Learning and Social Support

Scales	Sub-Scales	Mean Sub-Scales	Std. Dev.	Mean Overall	Std. Dev. Overall
Expectancy (N=113)	Self-Efficacy	3.70	.59	3.79	.51
	Control of Learning Beliefs	3.98	.60		
Value (N=113)	Intrinsic Goal Orientation	3.51	.73	4.07	.53
	Extrinsic Goal Orientation	4.42	.65		
	Task Value	4.22	.62		
Social Support (N=113)	Social Engagement	3.70	.53	3.90	.51
	Instructor Support	4.04	.60		

Based on Table 4, all three scales of motivation to learn online indicate above-average overall mean scores ($\bar{x}=3.79$, $SD=.51$; $\bar{x}=4.07$, $SD=.53$; $\bar{x}=3.90$, $SD=.51$ for Expectancy, Value and Social Support, respectively), signifying the students' high motivation to learn online. Among the three scales, Value Towards Online Learning scored the highest overall mean ($\bar{x}=4.07$, $SD=.53$). The sub-scales Extrinsic Goal Orientation and Task Value, in particular, contribute to this result as they had the highest and second highest mean scores (4.42 and 4.22, respectively) compared to the other five sub-scales of motivation to learn online measures checked in the study. Social Support had the second highest overall mean score ($\bar{x}=3.90$, $SD=.51$) with the Instructor Support sub-scale having a higher mean score than Social Engagement (4.04 vs. 3.70). Although Expectancy received the lowest overall mean score ($\bar{x}=3.79$, $SD=.51$), its Control of Learning Beliefs sub-scale demonstrates the fourth highest mean score ($\bar{x}=3.98$, $SD=.60$) out of a total of seven sub-scales. The other sub-scale of Expectancy, which is Self-Efficacy also was not with the lowest mean score ($\bar{x}=3.70$, $SD=.59$). Instead, it was Intrinsic Goal Orientation, a sub-scale to the main contributor to the participants' motivation to learn online i.e., Value Towards Online Learning, that received the lowest mean score ($\bar{x}=3.51$, $SD=.73$) indicating the necessity of addressing it to improve students' motivation to learn online.

Research Question 2: Is there any significant difference in the perceived level of expectancy, value, and social support in online learning between diploma and bachelor's degree students of social sciences?

Table 5 presents the mean scores for the participants' perceived level of expectancy, value, and social support in online learning between diploma and degree students of social sciences.

Table 5 Mean Scores for the Perceived Level of Value, Expectancy, and Social Support

	Level of Study	N	Mean	Std. Deviation
Expectancy	Diploma	21	3.8016	.46657
	Degree	92	3.7899	.52246
Value	Diploma	21	4.1020	.43010
	Degree	92	4.0644	.54656
Social Support	Diploma	21	4.0794	.44055
	Degree	92	3.8578	.51630

From the table, it is revealed that diploma students had higher mean scores than Bachelor's Degree students for all three scales of motivation to learn online: Expectancy ($\bar{x}=3.80$, $SD=.47$ vs. $\bar{x}=3.79$, $SD=.52$), Value ($\bar{x}=4.10$, $SD=.43$ vs. $\bar{x}=4.06$, $SD=.55$) and Social Support ($\bar{x}=4.08$, $SD=.44$ vs. $\bar{x}=3.86$, $SD=.52$).

The means were then checked using Welch's T-test to see whether they were significantly different. The test for unequal variances was particularly used to address the unequal sample size (Delacre et al., 2017). The result is shown in Table 6.

Table 6 Welch's T-test

		Statistics	df1	df2	Sig.
Expectancy	Welch	.010	1	32.502	.920
Value	Welch	.117	1	36.376	.734
Social Support	Welch	4.044	1	33.777	.052

As shown in Table 6, the mean differences between diploma and bachelor's degree students in their perceived Expectancy Towards Online Learning, Value Towards Online Learning and Social Support in Learning Online were not significant ($p>0.05$). This indicates that students of both levels of study had equal perceived level of all three scales of motivation to learn online. However, the unequal group sizes (21 diploma students and 92 bachelor's degree students) and p-value close to significance for social support ($p = .052$) suggest a possibility of Type II error, where the statistical analysis may not detect the true difference.

Research Question 3: Is there any significant relationship between the scales of motivation to learn online?

To answer the third research question, the relationship between expectancy and value, expectancy and social support, and value and social support was checked using the Pearson correlation test. See Table 7 for the results.

Table 7 Relationship Between the Scales

Correlations

		MEANEXPEC TANCY	MEANVALUE	MEANSOCIAL SUPPORT
MEANEXPECTANCY	Pearson Correlation	1	.736**	.657**
	Sig. (2-tailed)		<.001	<.001
	N	113	113	113
MEANVALUE	Pearson Correlation	.736**	1	.732**
	Sig. (2-tailed)	<.001		<.001
	N	113	113	113
MEANSOCIALSUPPORT	Pearson Correlation	.657**	.732**	1
	Sig. (2-tailed)	<.001	<.001	
	N	113	113	113

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows there were highly significant positive relationships between the variables. According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong

positive correlation from 0.5 to 1.0. In this study, the strongest relationship was observed between value and expectancy ($r=.736$, $p<.001$). The correlation analysis also shows a highly significant relationship between expectancy and social support ($r=.732$, $p<.001$). This means that there is also a strong positive relationship between value and expectancy, and between value and social support. For all three scales, when one is high, the other is high as well.

DISCUSSION

The current study found that students were highly motivated to learn online, as all three motivation scales scored above-average overall mean values, particularly extrinsic goal orientation and task value in the value of online learning scale. Students place a high value on online learning. Although there are students who value online learning, as they find it useful and feel guided, some are not able to manage their learning time on their own. These findings are in line with past studies that were conducted during the pandemic. It was found that online learning can make things easier to get to, but it can also make it harder to communicate with others and challenge self-regulation unless the courses are designed to prevent it (Koh & Daniel, 2022; Meng et al., 2024). Instructor presence is crucial because when students feel consistent support, they become more engaged in learning (Wang & Wang, 2024). In summary, students value online learning and instructor support; however, they require additional support to enhance their confidence and self-regulation.

The study also found no significant difference in students' perceived level of expectancy for success, value towards online learning, and social support in online learning between diploma and bachelor's degree students of social sciences. This finding cannot be directly compared with past research, as there is a limited number of past studies that examined differences across study levels (Koh & Daniel, 2022; Meng et al., 2024). For instance, Izni et al. (2024) also adapted the MLOQ in their study. They investigated the relationship among expectancy, value, and support rather than level differences. However, they did not investigate the differences in the perceived level of the motivation scales among students of different study levels.

Finally, the correlation analysis revealed strong positive associations between the motivation scales to learn online. It was found that there is a strong positive association between value towards online learning and expectancy, and value towards online learning and social support. These findings align with studies conducted by Izni et al. (2024) and Siok et al. (2023). This suggests that expectancy, values towards online learning, and social supports are interconnected and influence students' motivation for online learning. Students are more inclined to engage in their online learning when they see value in an online task. Besides that, students value online learning when they receive sufficient social support.

Suggestions for Future Research

This study has several limitations. First, the sample was drawn exclusively from students within the social sciences discipline, which restricts the generalisability of the findings to students in other fields of study. Second, there was an imbalance in the number of respondents between diploma and bachelor's degree students, which may have influenced the comparative analyses. Third, there is a lack of prior research addressing Research Question 2 (RQ2), limiting the ability to contextualize and interpret the findings within a broader scholarly framework.

For future research, it is recommended to explore perceived levels of expectancy, value, and support across diverse student groups (e.g., diploma vs. bachelor's) to either reinforce or challenge the current findings. Researchers could also investigate mediated pathways—such as the role of social support in shaping mindset, which subsequently affects expectancy, value, and engagement—and examine whether these relationships vary across academic disciplines. The study establishes statistically grounded findings that can guide future

qualitative explorations to contextualise the results further. Other than that, qualitative explorations could also be done in the future to contextualise the results further which leads to a deeper understanding of students' online learning motivation. This may reveal important nuances beyond the statistical similarities identified in the current findings. These directions will contribute to a more comprehensive understanding of online motivation and inform the development of more effective, program-wide strategies to sustain student engagement.

CONCLUSION

The results of the current study affirm the interconnected role of expectancy, value towards learning, and social support in online learning motivation. This suggests that courses should integrate relevant tasks to their learning goals with confidence-building supports (including low-stakes practice and timely feedback) and reliable social connections (such as weekly instructor prompts and structured peer interactions) to enhance online learning engagement among students. It is evident that social support improves engagement by shaping their mindset and enhancing well-being, which explains how students are more likely to participate in online class, complete assignments, or keep up with their online learning (Wang & Wang, 2024). Similarly, the robust connections between expectancy, value, and social support in online learning of higher education indicate that integrated measurement and course design are imperative, not elective (Izni et al., 2024). In summary, program-wide procedures should ensure that tasks are relevant, success is attainable, and social support is dependable to increase student motivation to learn online.

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