An Assessment of Student Motivation in Online Learning Environments

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ABSTRACT

This study assesses student motivation in online learning environments, with the purpose of exploring how affiliation influences learners' power and achievement in university learning. The study is guided by McClelland's Theory of Needs (1965) and Fowler's (2018) online motivation framework, which frame motivation through affiliation, power, and achievement. The research problem concerns the difficulty of sustaining motivation online, where students may experience isolation, reduced focus, and heavy demands for self-discipline despite the normalisation of virtual education. A quantitative survey design was employed using a convenient sample of 199 students. Data were collected through a five-point Likert-scale questionnaire adapted from Fowler's motivation to learn online instrument and analysed using descriptive statistics, reliability analysis, t-tests, and Pearson correlation in SPSS. The findings showed no significant differences in online motivation across gender, clusters, education background, and academic years, suggesting that demographic factors were not the main source of motivational variation. The findings also revealed that learners perceived affiliation, power, and achievement positively, while affiliation had strong positive relationships with both power and achievement. Overall, online motivation appears to depend strongly on meaningful connection and instructor support. The study implies that educators should design affiliation-rich online learning environments, while future research should use mixed-method approaches to examine learner motivation.

Keywords: Student motivation, Online learning, Online teaching, Affiliation, Confidence

INTRODUCTION

Background of Study

The rapid development of digital technologies has transformed the way that higher education is operated. Nowadays, learning is no longer restricted to physical lecture halls or face-to-face interactions; it can be conducted online. This shift has not only altered the way assignments and teaching work but also the psychological experience of students and, in particular, their motivation (Sudarnoto et al., 2025). In traditional classrooms, social routines and physical environments help maintain student focus. In contrast, when learning and teaching are conducted virtually, the responsibility for sustained engagement rests solely on the individual student.

Educational researchers define the online learning environment as an immersive, technology-driven digital space where academic materials are hosted, and classes are delivered over the internet, which removes the need for students to be physically close to each other or present on a real campus (Kovtoniuk et al., 2022; Singh & Thurman, 2019). In this context, the computer screen serves as the primary medium. With the use of digital spaces, this forces students to have independent study habits and self-directed time management.

Within this technology-driven context, student motivation is the primary determinant of academic success. In educational psychology, motivation is defined as the internal process that activates, guides, and sustains a student's behaviour and learning habits over time (Anderman & Anderman, 2020). Motivation influences a student's decision to participate, the mental effort invested in assignments, and persistence when encountering challenging or unengaging content (Slavin, 2019). While motivated students naturally engage deeply with their coursework and take ownership of their success, those who lack this drive often struggle to do so.

Initial studies, such as those by Hodges et al. (2020), regarded virtual classrooms as temporary solutions during emergency school closures. However, today, virtual platforms are no longer just a temporary backup plan; they have become a permanent and vital feature of standard university education (Ravichandran & Kohli, 2021). As a result, the challenges students encounter have changed significantly. Rather than struggling with technical issues like internet access or unfamiliar digital platforms like in the early days, students now face persistent psychological challenges such as screen fatigue, virtual isolation, and diminished focus. Therefore, an in-depth assessment of student motivation in these online learning environments is crucial to understanding what truly drives academic success and student engagement.

Statement of Problem

When online learning works effectively, undergraduate students feel highly confident in their digital skills, manage their own study schedules easily, and maintain strong, active relationships with their instructors and peers. This baseline naturally translates into regular participation in virtual discussions, high engagement with course materials, and overall academic success.

However, the day-to-day reality of online learning is often much more challenging for students. When students miss out on the steady schedule and clear expectations of a normal school environment, they easily lose interest and struggle to absorb information (Zhang & Hou, 2024). This structural shift away from regular campus life frequently causes a noticeable loss of academic focus. Instead of feeling driven, students often experience a psychological disconnect from their classes due to a lack of regular social interaction (Meşe & Sevilen, 2021). Without face-to-face supervision or a physical classroom routine, keeping up with course demands becomes a heavy personal burden (Yusof et al., 2023). Ultimately, managing a virtual class successfully requires an overwhelming amount of personal self-discipline from the learner (Ravichandran & Kohli, 2021).

Furthermore, recent academic literature shows mixed messages about how online motivation actually works across different student profiles. For instance, Ajlouni et al. (2022) found distinct gender differences, noting that female students online tend to show a much higher level of inner drive, while male students are more prone to a total lack of motivation. On the other hand, researchers such as Rahmat et al. (2023) and Saufianim et al. (2023) suggest that basic human needs, such as the desire to connect and belong (affiliation), are universally important in driving a student's confidence and desire to succeed, regardless of their demographic background.

This situation reveals a major gap in modern educational literature. Since virtual courses have evolved from a short-term emergency solution into a standard part of regular university tracking, looking at old data is no longer enough. What we need now is a clearer assessment of how a student's basic need to belong (affiliation) impacts their self-confidence (power) and their determination to meet milestones (achievement) in today's public university environment. As such, this research was specifically designed to address this issue.

Objective of the Study and Research Questions

This study is done to explore the influence of affiliation on online motivation. Specifically, this study is done to answer the following questions;

- RQ1: Is there a significant relationship for online motivation across gender?
- $H_{o1:}$ There is no significant relationship for online motivation across gender
- RQ2: Is there a significant relationship for online motivation across clusters?
- $H_{o2:}$ There is no significant relationship for online motivation across clusters
- RQ3: Is there a significant relationship for online motivation across education backgrounds?
- $H_{o3:}$ There is no significant relationship for online motivation across education background
- RQ4: Is there a significant relationship for online motivation across academic years?
- $H_{o4:}$ There is no significant relationship for online motivation across education background
- RQ5: How do learners perceive affiliation in online learning?
- RQ6: How do learners perceive power in online learning?
- RQ7: How do learners perceive achievement in online learning?
- RQ8: Is there a significant relationship between affiliation and power?
- H_5: There is no significant relationship between affiliation and power
- RQ9: Is there a significant relationship between affiliation and achievement?
- H_6: There is no significant relationship between affiliation and achievement

LITERATURE REVIEW

Theoretical Framework of the Study

McClelland Theory and Online Motivation

This study utilises two theoretical frameworks to evaluate student motivation in online learning environments: McClelland's (1965) theory of needs and Fowler's (2018) framework for online learning motivation. McClelland (1965) suggested that human motivation is driven by three intrinsic needs acquired through life experiences: the Need for Achievement (nAch), the Need for Affiliation (nAff), and the Need for Power (nPow). Understanding these underlying dispositions is critical to optimising student motivation (Rahmat et al., 2023). In an effort to synthesise these paradigms within online education, Rahmat et al. (2023) mapped Fowler's (2018) online motivation subscales onto McClelland's core constructs. Specifically, power is operationalised as self-efficacy and control of learning beliefs; achievement is aligned with intrinsic goal orientation, extrinsic goal orientation, and task value; and affiliation is manifested through social engagement and instructor support.

In McClelland's (1965) theory of needs for motivation, the Need for Achievement (nAch) explains a person's desire to excel, achieve significant goals, master complex skills, and receive feedback on performance. These traits are seen in those leaning towards tasks that involve higher skills in problem-solving, calculated risk-taking, and progress-tracking, and are called high achievers (McClelland, 1965). In the same theory, the Need for Affiliation (nAff) describes a person whose desire leans towards building harmonious relationships, being accepted socially, and having a sense of belonging in a group. Cooperation, mutual understanding, and fear of rejection or isolation are values found in high affiliation seekers (McClelland, 1965). The Need for Power (nPow)

is explained as the desire in a person to influence, coach, or command and control one's environment - to make an impact. This can be divided into personal power, where these power-driven individuals aim to control others directly, and institutional power that involves organising others to achieve a greater systemic goal (McClelland, 1965).

In the framework by Fowler (2018), power in online education is redefined as self-efficacy and control of learning beliefs. In online classes, students have autonomy over when, where, and how they consume content and study materials. Power is also manifested through mastery over the digital tools that the students can access as part of their learning process, such as leading a discussion in an online meeting session or commanding attention through text-based arguments in a group chat (Fowler, 2018). Fowler's (2018) framework of online motivation suggests that achievement-driven students are assessed through values such as intrinsic goal orientation, extrinsic goal orientation, and task value. They overcome the absence of a physical classroom by changing the way they perceive their milestones. They thrive in online courses that have clear

milestones, such as immediate quiz feedback and visible, animated progress bars, and their motivation is tightly tied to the outcome of their independent efforts towards success (Fowler, 2018). Fowler (2018) suggests that affiliation is the hardest factor to sustain, as it relies on social engagement and instructor support, dynamics that occur organically in face-to-face settings but require intentional design online. Students with a high need for affiliation gravitate toward active online interactions and interactive discussion boards as they derive motivation from collaborative environments that validate the human presence behind the interface (Fowler, 2018).

Past Studies

Past Studies on Motivation for Online Learning

Ajlouni et al. (2022) conducted a study to investigate the gender differences in the motivational profile of online undergraduates. The study is anchored by Self-Determination Theory (SDT) to understand the level and types of motivations among online undergraduates across two genders. The study sample comprised 433 undergraduates (271 female and 162 male) from the University of Jordan. A quantitative research methodology was adopted to conduct statistical analyses on the sample population, whereas a descriptive design was implemented using a web-based questionnaire to provide a numeric description of the undergraduates' motivation. Findings demonstrated a significant gender difference in motivation types. Females had more self-determination, intrinsic motivation to experience stimulation, identified regulation, and introjected regulation, while males had more motivation.

A study by Rahmat et al. (2023) was conducted to investigate students' online learning motivation from the perspective of McClelland's (1965) Theory of Needs. The study is anchored in measuring how power, achievement, and affiliation influence motivation to learn online and investigating the relationships among these variables. Data was collected from 156 participants from a public university in Malaysia. A 5-point Likert-scale instrument consisting of 4 sections was employed as the instrument. Findings showed that there is a positive impact of the needs for power, achievement, and affiliation on online language learning among students. The study also found that there is a strong positive correlation between all the variables in motivating students for online language learning.

Saufianim et al. (2023) conducted a study to explore the perception of learners on their learning motivation by examining how affiliation, achievement, and power influence learners' motivation. The study sample comprised 208 students from public and private universities in Malaysia. The instrument used in the study is a survey in the form of 5-point Likert-scale rooted in McClelland (1965) and Fowler (2018), consisting of 4 sections. Results showed that there exists a significant relationship between all three factors in learning motivation. Implications of the study may help policymakers in designing frameworks that promote student engagement and motivation in online learning.

In summary, these past studies highlight that student motivation in online learning environments is a multi-dimensional construct heavily influenced by demographic factors and core psychological needs. By examining online learners through the lenses of Self-Determination Theory and McClelland's Theory of Needs, this

demonstrates that motivation is neither uniform nor static. Instead, it varies significantly by gender, with females often exhibiting higher self-determination and intrinsic drive, and is strongly reinforced by the distinct human desires for achievement, affiliation, and power. These insights underscore the necessity of a nuanced analytical framework. Evaluating online student motivation cannot rely on a one-size-fits-all metric but a comprehensive assessment must map out how diverse psychological drivers and demographic variables intersect to shape student engagement and success in a digital classroom.

Conceptual Framework of the Study

In online learning environments, learner engagement remains a major concern. A lack of engagement can lead to reduced motivation, as learners may experience feelings of isolation during online lessons (Rahmat, 2025). Fowler (2018) argues that motivation in online learning is shaped by three key factors: expectancy, value, and social support. Expectancy refers to learners' beliefs in their ability to succeed through effort, while value encourages learners to remain goal-oriented. Social support plays a particularly crucial role in online learning, as it fosters connection and sustained engagement among learners.

Figure 1 shows the conceptual framework of the study. This study is anchored on McClelland's (1965) theory of needs for motivation. This theory is used to merge with Fowler's (2018) motivational factors to bring into context the types of online motivation. Hence, the need for power in online learning requires learners to depend on their self-efficacy and control of learning beliefs. Next, learners sign up for classes because they strive for achievement. In online learning, they can gain this through intrinsic and extrinsic goal orientation as well as task value. One of the many demotivating factors for online learning is the lack of connection or affiliation. Learners need to be affiliated through social engagement and instructor support. This study thus explores the relationship between affiliation with power and achievement for online motivation.

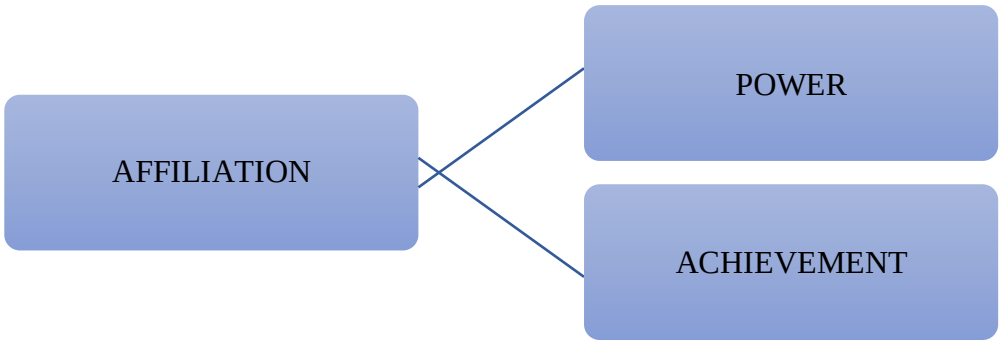

Figure 1- Conceptual Framework of the Study

The Influence of Affiliation on Online Motivation

METHODOLOGY

This quantitative study is done to explore the influence of affiliation on online motivation. A convenient sample of 199 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Fowler (2018) to reveal the variables in Table 3 below. Table 1 below shows the categories used for the Likert scale; 1 is for Strongly Disagree, 2 is for Disagree, 3 is for Undecided, 4 is for Agree and 5 is for Strongly Agree.

Table 1- Likert Scale Use

1	Never
2	Seldom
3	Sometimes
4	Often
5	Almost Always

Table 2- Distribution of Items in the Survey

SECTION	VARIABLE MOTIVATION	CONSTRUCT	NO OF ITEMS	
B	POWER	Self-Efficacy	7	11 (.912)
		Control of Learning Beliefs	4	
C	ACHIEVEMENT	Intrinsic Goal Orientation	4	14 (.919)
		Extrinsic Goal Orientation	4	
		Task Value	6	
D	AFFILIATION	Social Engagement	5	12 (.890)
		Instructor Support	7	
				37(.957)

Table 2 shows the distribution of items in the survey. Section B has 11 items on Power. Section C has 14 items on Achievement. Section D has 12 items on Affiliation.

Table 3- Reliability Levels, Cronbach's Alpha Ranges, and Their Interpretations

Reliability Level	Cronbach's Alpha range	Interpretation
Excellent	0.9 and above	Indicates very high internal consistency
Good	0.80-0.89	Reflects strong internal consistency
Acceptable	0.70-0.79	Indicates acceptable internal consistency
Questionable	0.60-0.69	Reflects questionable internal consistency
Poor	Below 0.6	Indicates poor internal consistency

To determine the instrument's internal reliability, a reliability analysis is conducted. Table 3 above shows the distribution and interpretation of the Cronbach Alpha range. According to Ahmad et al. (2024), Cronbach Alpha scores between 0.7 to 0.9 is considered acceptable to excellent.

Table 2 also shows the reliability of the survey. The analysis shows a Cronbach alpha of .912 for Power, .919 for Achievement, .890 for Affiliation. The overall Cronbach alpha for all 37 items in .957; thus, revealing a good reliability of the instrument chosen/used. Further analysis in SPSS is conducted to present findings that answer the research questions for this study.

FINDINGS

Demographic Analysis

According to Ziegenfuss et al. (2021), researchers report demographic data in percentages to establish sample representatives, and allow for generalizability to a larger population. The reporting also provides an overview of participants' characteristics. Percentages offer a clear and understandable picture of the sample makeup.

Table 4- Percentage for Demographic Profile

Question	Demographic Profile	Categories	Percentage (%)
1	Gender	Male	29%
		Female	71%
2	Discipline	Science & Technology	36%
		Social Sciences & Humanities	64%
3	Education Background	Diploma	50%
		Bachelor	50%
4	Academic Year	First year students	43%
		Second year students	37%
		Third year students	11%

		Final year students	9%

The demographic profile of the respondents was categorised into four clusters, as presented in Table 4. The sample was predominantly female, with females comprising 71% of the participants, while males accounted for 29%. In terms of discipline, the majority of respondents were from the social sciences and humanities, representing 64% of the sample, whereas those from science and technology constituted 36%. Regarding educational background, with equal value of 50% for two items, the respondents are from diploma programmes and bachelor degree programmes. With respect to the respondents' academic year, first-year students formed the largest group (43%), followed by second-year students (37%), third-year students (11%), and final-year students (9%). Overall, the sample is largely composed of female undergraduates from the social sciences and humanities, with a majority pursuing bachelor's degree programmes. In addition, most respondents are in the early stages of their academic journey, particularly in the first and second years, indicating a relatively junior undergraduate cohort. Overall, the sample is predominantly female and largely drawn from the social sciences and humanities, with an equal representation of diploma and bachelor's degree students. Most respondents are in the earlier stages of their studies, particularly first- and second-year undergraduates, reflecting a relatively junior academic cohort.

Inferential Statistics

According to Shah (2024), there are three main functions of a t-test. Firstly, T-tests are done to compare means. This test is also done to determine if the average scores (mean) or values of two groups, or one group against a known value, are different enough to be considered statistically meaningful and are not just due to random chance. Secondly, a t-test is done to test hypotheses. Researchers use t-tests to test hypotheses about means, such as whether a new treatment significantly impacts a variable or if there's a difference in performance between two distinct groups. Lastly, t-test is used to identify significant differences. The output of a t-test provides a p-value (significance value). If this p-value is below a pre-determined threshold (often 0.05), it indicates a statistically significant difference, allowing researchers to draw conclusions about the populations from which their samples were drawn.

Findings for Gender

This section presents data to answer research question 1: Is there a significant relationship for online motivation across gender?

$H_{o1:}$ There is no significant relationship for online motivation across gender

Table 5: t-test for online motivation across gender

		MEAN	SD	T-Statistics *df*	p-value	OUTCOME
Gender	Male	3.78	0.70	t(197)=.226	0.822	H_o accepted
	Female	3.79	0.48			

A two-sample t-test was performed to evaluate online motivation across gender. There was no significant difference in online motivation(p=0.822) across gender. Null hypothesis is accepted for $H_{o1.}$

Findings for Clusters

This section presents data to answer research question 2: Is there a significant relationship for online motivation across clusters?

$H_{o2:}$ There is no significant relationship for online motivation across clusters

Table 6: t-test for online motivation across clusters

		MEAN	SD	T-Statistics *df*	p-value	OUTCOME
Cluster	S&T	3.80	0.46	t(197)=.295	0.768	H_o accepted
	SS, H & B	3.78	0.60			

A two-sample t-test was performed to evaluate online motivation across clusters. There was no significant difference in online motivation(p=.768) across clusters. Null hypothesis is accepted for H_{o2}

Findings for Education background

This section presents data to answer research question 3: Is there a significant relationship for online motivation across education background?

$H_{o3:}$ There is no significant relationship for online motivation across education background

Table 7: t-test for online motivation across educational background

		MEAN	SD	T-Statistics *df*	p-value	OUTCOME
Education Background	Diploma	3.80	0.57	t(197)=.382	0.703	H_o accepted
	Bachelor	3.78	0.53			

A two-sample t-test was performed to evaluate online motivation across education background. There was no significant difference in online motivation(p=.703) across clusters. Null hypothesis is accepted for $H_{o3.}$

Findings for Year of Study

This section presents data to answer research question 4: Is there a significant relationship for online motivation across academic years?

$H_{o4:}$ There is no significant relationship for online motivation across education background

Table 8: t-test for online motivation and education background

	Year	MEAN	SD	T-Statistics *F*	p-value	OUTCOME
Education Background	First	3.67	0.60	t(195)=3	0.016	H_o rejected
	Second	3.93	0.44			
	Third	3.67	0.62			
	Final	3.87	0.51			

A post-hoc pairwise comparisons (Tukey's HSD) was performed to evaluate online motivation across education background. There was a significant difference in online motivation(p=.016) across clusters. Null hypothesis is rejected for $H_{o4.}$

Descriptive Statistics

Why is there a need to report the mean and standard deviation? According to Vetter (2017), Mean (M) represents the average, or centre of a data set. Standard deviation (SD) indicates the typical distance of individual observations from the mean which shows the data's variability or spread. A low SD means the data points are clustered close to the mean whole a high. SD indicates they are more spread out. It is good to have a high SD.

Findings for Affiliation

This section presents data to answer research question 5: How do learners perceive affiliation in online learning? In the context of this study, this is measured by (i)social engagement and (ii) instructor support.

Table 9 Mean (M) and Standard Deviation (SD) for Social Engagement (SSE)

Statement	M	SD
SSEQ1 I feel "disconnected" from my teacher and fellow students in classes.	2.47	1.12
SSEQ2 I pay attention in classes.	4.04	0.78
SSEQ3 I enjoy class discussions.	3.97	0.91
SSEQ4 I feel like I can freely communicate with other students in classes.	3.80	0.87
SSEQ5 I have strong relationships with fellow students in this course.	3.73	0.96

Table 9 presents the mean scores for items measuring the respondents' social engagement. The data indicates a general inclination towards the respondents' personal reflections in classes. One item has the highest mean score of 4.04 which is "SSEQ2 I pay attention in classes". This is followed by the mean score of 3.97 for the item "SSEQ3 I enjoy class discussions". One item represents the lowest mean score of 2.47 which is "SSEQ1 I feel "disconnected" from my teacher and fellow students in classes".

Table 10 Mean (M) and Standard Deviation (SD) for Instructor Support (SIS)

Statement	M	SD
SISQ1 I feel like I can freely communicate with the instructor in this class.	3.75	0.80
SISQ2 The instructor responds to questions, clearly, completely, and in a timely manner.	4.20	0.83
SISQ3 The instructor's expectations for me in this class are clear.	3.89	0.86
SISQ4 The instructor provides the guidance I need to be successful in this class.	4.06	0.82
SISQ5 The instructor presents the material in a way that makes it relevant to me.	4.07	0.83
SISQ6 In this course, I have the freedom to guide my own learning	3.90	0.81
SISQ7 The instructor provides regular feedback that helps me gauge my performance in this class.	4.00	0.86

Table 10 displays the mean scores for the respondents' viewpoints on instructor support. The data reveals a heightened emphasis on the respondents' awareness of the support given by instructors/lecturers in classes either through the materials provided, guidance, feedback and other aspects. The statement "SISQ2 The instructor responds to questions, clearly, completely, and in a timely manner" garnered the highest mean score of 4.20. Followed closely by the statement "SISQ5 The instructor presents the material in a way that makes it relevant to me" with a mean score of 4.07. The lowest mean score with 3.75 will be the statement "SISQ1 I feel like I can freely communicate with the instructor in this class".

Findings for Power

This section presents data to answer research question 6: How do learners perceive power in online learning? In the context of this study, this is measured by (i) self-efficacy and (ii) control of learning beliefs.

Table 11 Mean (M) and Standard Deviation (SD) for SELF- EFFICACY (ESE)

Statement	M	SD
ESEQ1 I believe I'll receive excellent grades in my classes.	3.65	0.87
ESEQ2 I'm certain I can understand the most difficult material presented in the readings.	3.30	0.86
ESEQ3 I'm confident I can learn the basic concepts that are being taught.	3.64	0.88
ESEQ4 I'm confident I can understand the most complex material presented by the instructor online.	3.18	0.91
ESEQ5 I'm confident I can do an excellent job on assessments online	3.63	0.85
ESEQ6 I'm certain I can master the skills being taught online.	3.24	0.86
ESEQ7 Although online classes can be challenging, I think I can do well.	3.65	0.91

Table 11 outlines the mean scores for items related to the respondents' self-efficacy. The results indicate that respondents generally perceive the possibility of showing positive behaviour from being confident in online classes. Two items have the highest mean score of 3.65 which are "ESEQ1 I believe I'll receive excellent grades in my classes" and "ESEQ7 Although online classes can be challenging, I think I can do well". This is followed by the mean score of 3.64 for one item which is "ESEQ3 I'm confident I can learn the basic concepts that are being taught". One item represents the lowest mean score of 3.18 which is "ESEQ4 I'm confident I can understand the most complex material presented by the instructor online".

Table 12 Mean (M) and Standard Deviation (SD) for CONTROL OF LEARNING BELIEFS (ECB)

Statement	M	SD
ECBQ1 If I study in appropriate ways, then I'll be able to learn the material.	3.86	0.82
ECBQ2 It's my own fault if I don't learn the material taught.	3.84	0.91
ECBQ3 If I try hard enough, then I'll understand the material presented.	2.96	0.87
ECBQ4 If I don't understand the material presented, it's because I didn't try hard enough.	3.62	0.96

Table 12 presents the mean scores for the respondents' control of learning beliefs. From the data, it can be seen that the respondents have a high tendency to have a sense of awareness in terms of trying to understand the learning materials provided. The statement "ECBQ1 If I study in appropriate ways, then I'll be able to learn the material" has the highest mean score of 3.86. This is followed by the statement "ECBQ2 It's my own fault if I don't learn the material taught" with a mean score of 3.84. The lowest mean score is the statement "ECBQ3 If I try hard enough, then I'll understand the material presented" with a score of 2.96.

Findings for Achievement

This section presents data to answer research question 7: How do learners perceive achievement in online learning?

In the context of this study, this is measured by (i) intrinsic goal orientation, (ii) extrinsic goal orientation and (iii) task value.

Table 13 Mean (M) and Standard Deviation (SD) for Intrinsic Goal Orientation (VI)

Statement	M	SD
VIQ1 I prefer online material that really challenges me, so I can learn new things.	3.36	0.86

VIQ2 I prefer online material that arouses my curiosity, even if it's difficult to learn.	3.51	0.95
VIQ3 The most satisfying thing for me is trying to understand the online content as thoroughly as possible.	3.64	0.88
VIQ4 I choose assignments that I can learn from even if they don't guarantee a good grade.	3.71	0.87

Table 13 represents the respondents' intrinsic goal orientation, which reflects the respondents' perception on the online materials provided. One item has the highest mean score of 3.71 which is "VIQ4 I choose assignments that I can learn from even if they don't guarantee a good grade". This is followed by the item with the score of 3.64 which is "VIQ3 The most satisfying thing for me is trying to understand the online content as thoroughly as possible". One item has the lowest mean score of 3.36 which is "VIQ1 I prefer online material that really challenges me, so I can learn new things".

Table 14 Mean (M) and Standard Deviation (SD) for Extrinsic Goal Orientation (VE)

Statement	M	SD
VEQ1 Getting a good grade is the most satisfying thing for me.	4.38	0.83
VEQ2 I want to do well in my classes so that I can get awards and recognition	4.08	1.01
VEQ3 I want to get better grades than most of the other students in my classes.	3.94	1.01
VEQ4 I want to do well in my classes because it's important to show my ability to my family, friends, employer, or others.	4.13	1.03

Table 14 presents the mean scores for items measuring the respondents' extrinsic goal orientation. The data indicates a general inclination towards their expectations on academic performances in getting rewards or praises.

One item has the highest mean score of 4.38 which is "VEQ1 Getting a good grade is the most satisfying thing for me".

This is followed by the mean score of 4.13 for the item "VEQ4 I want to do well in my classes because it's important to show my ability to my family, friends, employer, or others". One item represents the lowest mean score of 3.94 which is "VEQ3 I want to get better grades than most of the other students in my classes".

Table 15 Mean (M) and Standard Deviation (SD) for Task Value (VT)

Statement	M	SD
VTQ1 I think I will be able to use what I learn in this course in other courses.	3.95	0.79
VTQ2 It is important for me to learn the course material in this class.	4.07	0.78
VTQ3 I am very interested in the content area of this course.	3.92	0.82
VTQ4 I think the course material in this class is useful for me to learn.	3.87	0.81
VTQ5 I like the subject matter of this course.	3.90	0.82
VTQ6 Understanding the subject matter of this course is very important to me.	4.14	0.81

Table 15 displays the mean scores for the respondents' task value. The data reveals a heightened emphasis on the respondents' perceptions on the course materials as well as subject matter that they learned and whether it has any importance to them or simply liking it. The statement "VTQ6 Understanding the subject matter of this course is very important to me." garnered the highest mean score of 4.14. Followed closely by the statement "VTQ2 It is important for me to learn the course material in this class" with a mean score of 4.07. One item has the lowest mean score of 3.90 which is "VTQ5I like the subject matter of this course".

Exploratory Statistics

According to He (2024), correlation is a statistical technique that shows how strongly two variables are related to each other or the degree of association between the two. It's a common tool for describing simple relationships without making a statement about cause and effect. This section presents data to answer research question on correlation. According to He (2024), 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.

To determine if there is a significant association in the mean scores between affiliation and power, achievement data is anlaysed using SPSS for correlations. Results are presented separately in Table 16 below.

Table 16- Correlation between affiliation and power, achievement

Correlations				
		AFFILIATION	POWER	ACHIEVEMENT
AFFILIATION	Pearson Correlation	1	.586**	.728**
	Sig. (2-tailed)		<.001	<.001
	N	199	199	199
	N	199	199	199
**. Correlation is significant at the 0.01 level (2-tailed).				

Findings for the Relationship between affiliation and power

This section presents data to answer research question 8: Is there a significant relationship between affiliation and power?

H_5: There is no significant relationship between affiliation and power

Table 16 shows that there is a strong, positive, significant relationship between affiliation and power (r=.586**) and (p=.000). Null hypothesis is rejected for H_5.

Findings

This section presents data to answer research question 9: Is there a significant relationship between affiliation and achievement?

H_6: There is no significant relationship between affiliation and achievement

Table 16 also reveals that there is a strong, positive, significant relationship between affiliation and power (r=.728**) and (p=.000). Null hypothesis is rejected for H_6.

DISCUSSIONS CONCLUSION

Discussion for RQ1 - Is there a significant relationship for online motivation across gender?

The first research question examined whether online motivation differed significantly across gender. The finding showed that there was no significant difference in online motivation between male and female students, and therefore, the null hypothesis was accepted. This suggests that gender did not strongly shape students' motivation in the present online learning context. Although the sample was predominantly female, the overall motivational pattern appeared relatively similar across both gender groups. This finding may indicate that online motivation is influenced less by gender and more by broader learning conditions, such as instructor support, social engagement, self-efficacy, and task value. In online learning environments, both male and female students are required to manage similar challenges, including independent learning, digital communication, and reduced face-to-face interaction. Therefore, the finding implies that gender alone may not explain how students remain motivated in virtual classes. This means that motivation in online learning should be understood as a shared learner experience rather than a gender-specific issue.

This finding partially challenges the study by Ajlouni et al. (2022), which reported significant gender differences in online motivation among undergraduate students. Their study found that female students showed stronger self-determination and intrinsic motivation, while male students showed higher levels of motivation. However, the present study did not show the same pattern, suggesting that gender differences may depend on educational context, institutional culture, or the structure of online learning itself. One possible explanation is that students in the present study may have become more accustomed to online learning, making motivation less dependent on gender and more related to the availability of support. This also aligns with the idea that online learning has moved beyond emergency remote teaching and has become a normal part of higher education. As students become more familiar with online classes, gender-based differences may become less visible. This suggests that motivation may change over time as students adapt to online learning environments.

The finding also complements Rahmat et al. (2023), who emphasised that online motivation can be shaped by the needs for affiliation, achievement, and power rather than demographic identity alone. In this study, students' motivation appeared to be connected to their learning experiences, such as receiving instructor feedback, paying attention in class, and valuing course content. These factors may have created similar motivational conditions for both male and female students. In addition, the strong role of affiliation in the study suggests that motivation is supported when learners feel connected and guided, regardless of gender. This is important because online learning can reduce natural classroom interaction, making structured support more meaningful. Therefore, instead of designing motivation strategies based mainly on gender, educators should focus on creating inclusive learning environments that support all learners. In other words, the finding shows that online motivation is better strengthened through meaningful engagement than through assumptions about gender differences.

Discussion for RQ2 - Is there a significant relationship for online motivation across clusters?

The second research question investigated whether online motivation differed significantly across academic clusters, particularly between students from Science and Technology and those from Social Sciences and Humanities. The finding showed no significant difference in online motivation across clusters, and the null hypothesis was accepted. This suggests that students from different fields of study may experience online motivation in broadly similar ways. Although disciplines may differ in content, assessment style, and learning activities, online learning still requires common motivational qualities such as self-discipline, engagement, confidence, and goal orientation. In this study, students across clusters were likely exposed to similar online learning structures, including digital platforms, virtual discussions, online materials, and instructor-led activities. As a result, their motivational experiences may have been shaped more by the online learning environment than by their academic field. This means that disciplinary background may influence learning tasks, but it does not necessarily create major differences in online motivation.

This finding complements the theoretical view presented in Fowler's (2018) framework, where online motivation is shaped by expectancy, value, and social support. These three factors are relevant to students across academic fields because all online learners need confidence, meaningful learning goals, and support from others. Whether a student is studying science, technology, social sciences, or humanities, online learning still requires the ability to manage independent study and remain engaged without the structure of a physical classroom. The finding

also reflects McClelland's Theory of Needs, where power, achievement, and affiliation are viewed as broad human motivational needs rather than discipline-specific characteristics. Therefore, the absence of a significant difference across clusters suggests that the motivational needs of online learners may cut across academic boundaries. This indicates that online motivation frameworks can be applied across disciplines when they address common learner needs.

At the same time, the finding should not be interpreted to mean that discipline has no role in online learning. Students from different clusters may still face different types of tasks, such as laboratory-based work, essay writing, technical problem-solving, or discussion-based assignments. However, these differences may not be strong enough to produce significant differences in general motivation. Rahmat et al. (2023) and Saufianim et al. (2023) found that affiliation, achievement, and power were important motivational factors among learners, suggesting that these needs are not limited to one academic field. The present finding supports this view by showing that online motivation remained stable across clusters. Therefore, educators should design online learning environments that address shared motivational needs while still allowing flexibility for discipline-specific teaching methods. In other words, the finding shows that motivation support should be general enough for all learners but adaptable enough for different academic fields.

Discussion for RQ3 - Is there a significant relationship for online motivation across education background?

The third research question examined whether online motivation differed significantly across educational background, particularly between diploma and bachelor's degree students. The finding showed no significant difference in online motivation across education background, and therefore, the null hypothesis was accepted. This indicates that students from both levels appeared to share similar motivational experiences in online learning. Although diploma and bachelor's degree students may differ in academic maturity, learning exposure, and assessment expectations, they still operate within similar online learning conditions. Both groups need to manage course materials, attend virtual classes, complete online assessments, and communicate with instructors and peers. The equal representation of diploma and bachelor's degree respondents also suggests that the finding reflects both groups fairly. Therefore, educational background may not be the main factor explaining online motivation in this study. This means that students' online motivation may depend more on learning support and engagement than on their level of study.

This finding can be linked to McClelland's Theory of Needs, which explains motivation through achievement, affiliation, and power. These needs may be experienced by learners at different educational levels because all students want to succeed, feel connected, and have control over their learning. Fowler's (2018) framework also supports this interpretation, as expectancy, value, and social support are relevant to both diploma and bachelor's degree students. In the present study, students showed positive responses toward instructor support, task value, and extrinsic goal orientation. These findings suggest that both groups were motivated by clear guidance, meaningful course content, and academic outcomes. This may explain why no significant difference emerged across educational backgrounds. In online learning, students may be more influenced by whether the course is well-structured and supportive than by whether they are diploma or bachelor's degree learners. This suggests that effective online motivation depends on how learning is designed, not only on who the learners are.

The finding also complements Saufianim et al. (2023), who found significant relationships among affiliation, achievement, and power in learning motivation. Their study indicates that learner motivation is shaped by psychological needs that can apply across different student groups. Similarly, the present study suggests that diploma and bachelor's degree students may share similar motivational needs when learning online. However, this does not mean both groups require identical forms of support. Diploma students may need more structured guidance, while bachelor's degree students may benefit from more autonomy and research-based tasks. Still, the overall motivational pattern may remain similar because both groups value interaction, confidence, and achievement. Therefore, teaching strategies should be inclusive but flexible. Online instructors should provide clear expectations, timely feedback, and meaningful activities for all levels of learners. In other words, the finding shows that online motivation can be strengthened through supportive learning design that responds to different academic experiences.

Discussion for RQ4 - Is there a significant relationship for online motivation across academic years?

The fourth research question investigated whether online motivation differed significantly across academic years. Based on the findings, the study aimed to compare students from different years of study, with the sample mainly consisting of first- and second-year students. The overall pattern suggests that academic year may be a contributing factor in explaining online motivation, especially since the respondent profile was largely made up of junior undergraduates. First-year and second-year students may still be adjusting to university learning, while senior students may have more experience managing independent study. However, in an online environment, all students face similar expectations, such as attending virtual sessions, completing tasks independently, and staying engaged without physical classroom routines. This shared context may reduce differences across academic years. This means that online learning creates common motivational demands for students, regardless of their stage of study.

This finding is relevant to the discussion by Ravichandran and Kohli (2021), who noted that online learning requires considerable self-discipline from learners. In the present study, students from different academic years were required to manage similar responsibilities in virtual learning spaces. Even senior students, who may be more academically experienced, still need motivation to remain focused during online classes. Likewise, junior students may compensate for limited experience through strong instructor support and social engagement. The descriptive findings show that students valued timely instructor responses, guidance, and relevant course materials. These forms of support may help reduce motivational gaps between academic years. In this sense, motivation is not only shaped by how long students have been in university but also by how well online learning is supported. This suggests that academic maturity matters, but supportive online teaching can help students at different stages remain motivated.

The finding also aligns with Fowler's (2018) view that online motivation is shaped by expectancy, value, and social support. These factors are important for students across all academic years because online learning requires confidence, goal orientation, and connection. For first-year students, instructor support may help them adapt to the university environment. For final-year students, task value and achievement may become more important because they are closer to graduation. However, the motivational framework remains relevant to both groups. Rahmat et al. (2023) also found that power, achievement, and affiliation were positively related in online learning, suggesting that these needs remain important across student profiles. Therefore, educators should not assume that senior students are automatically motivated or that junior students are always less motivated. In other words, the finding shows that online motivation should be supported continuously throughout students' university journey.

Discussion for RQ5 - How do learners perceive affiliation in online learning?

The findings show that learners generally perceived affiliation positively in online learning, especially through social engagement and instructor support. Students reported that they paid attention in class, enjoyed class discussions, and felt able to communicate with classmates. These responses suggest that learners still value interaction even when learning takes place through digital platforms. In online learning, affiliation is important because students may easily feel separated from teachers and peers when physical classroom routines are removed. This finding supports Fowler's (2018) view that affiliation is one of the most difficult motivational factors to sustain online because social engagement and instructor support do not happen naturally in virtual spaces. It also complements McClelland's theory, where the need for affiliation refers to learners' desire to belong, cooperate, and build positive relationships. Therefore, students' positive responses indicate that online motivation is strengthened when learners feel socially connected. This indicates that affiliation functions as a social foundation that helps students remain attentive, involved, and emotionally present in online learning.

The findings also show that instructor support played a strong role in learners' perception of affiliation. Students valued instructors who responded to questions clearly and promptly, provided useful guidance, presented relevant materials, and gave regular feedback. This suggests that online affiliation is not only built through peer interaction but also through the presence of responsive instructors. This finding complements Rahmat et al. (2023), who found that affiliation, power, and achievement positively influenced online learning motivation. It also supports Saufianim et al. (2023), whose study showed significant relationships among affiliation, achievement, and power in learning motivation. However, the low response for feeling disconnected from teachers and peers indicates that some learners still experience isolation. This partly supports Meşe and Sevilen's

(2021) concern that lack of interaction can reduce motivation in online learning. In other words, affiliation in online learning depends on intentional interaction, where instructor presence and peer communication reduce isolation and support motivation.

Discussion for RQ6 - How do learners perceive power in online learning?

The findings indicate that learners perceived power in online learning at a moderate to positive level through self-efficacy and control of learning beliefs. Students believed that they could do well in online classes and receive good academic results, even though online learning could be challenging. They also expressed confidence in learning basic concepts and completing assessments online. This suggests that students generally felt capable of managing online learning tasks. In McClelland's theory, power refers to the desire to influence or control one's environment, and in this study, it is reflected through confidence and learning control. Fowler's (2018) framework also explains power in online learning as self-efficacy and control of learning beliefs, where learners need to believe that their effort can lead to success. This means that power in online learning is closely linked to students' confidence in their ability to manage tasks, overcome challenges, and take responsibility for learning.

At the same time, the findings show that students were less confident when dealing with complex online materials. The lower responses for understanding difficult readings, mastering online skills, and understanding complex instructor materials suggest that students may feel capable in general tasks but less certain when learning becomes more demanding. This finding is consistent with Ravichandran and Kohli (2021), who noted that online learning requires strong self-discipline because learners must manage tasks without direct classroom supervision. It also complements Yusof et al. (2023), who explained that online learning can become a heavy personal burden when students lack clear support. Therefore, although students show a sense of power, this confidence must be supported by structured guidance, clear instructions, and accessible learning materials. Thus, learners' sense of power grows when online independence is balanced with instructor support that helps them handle difficult learning content.

Discussion for RQ7 - How do learners perceive achievement in online learning?

The findings show that learners perceived achievement positively in online learning through intrinsic goal orientation, extrinsic goal orientation, and task value. Students reported that they valued assignments that helped them learn, considered understanding online content important, and viewed course materials as useful. These findings suggest that students' achievement motivation is shaped not only by grades but also by the meaning they attach to the learning task. In McClelland's theory, achievement refers to the desire to succeed, improve, and reach important goals. Fowler's (2018) framework further explains achievement through intrinsic goals, extrinsic goals, and task value. Therefore, when students see online materials as useful and meaningful, they are more likely to remain engaged in the learning process. This suggests that achievement in online learning is strengthened when students believe that course tasks are valuable, purposeful, and connected to their academic growth.

However, the findings also show that learners placed particularly strong emphasis on extrinsic achievement, especially the satisfaction of getting good grades. This suggests that external academic outcomes remain an important source of motivation in online learning. The finding complements Rahmat et al. (2023), who found that achievement, affiliation, and power had a positive impact on students' motivation to learn online. It also aligns with Saufianim et al. (2023), who reported significant relationships among these motivational needs. At the same time, the lower response for preferring challenging online materials suggests that students may value success and usefulness more than difficulty itself. Therefore, online instructors should design tasks that are challenging but clearly meaningful, with visible learning benefits and supportive feedback. Hence, students' achievement motivation becomes stronger when online learning balances academic rewards with meaningful learning experiences that help them see the value of effort.

Discussion for RQ8 - Is there a significant relationship between affiliation and power?

The eighth research question shows that there is a strong, positive, and significant relationship between affiliation and power in online learning. This means that students who reported stronger affiliation through social engagement and instructor support also tended to report stronger power through self-efficacy and control of learning beliefs. In other words, students' confidence and sense of control in online learning appear to increase when they feel connected, supported, and guided. This finding is important because power in online learning is not only about individual independence; it is also shaped by the quality of interaction within the learning environment. When students receive timely responses from instructors, understand expectations clearly, and feel able to communicate with others, they may become more confident in managing online tasks. This finding supports Fowler's framework, where social support contributes to motivation by strengthening learners' ability to remain engaged and confident. This means that students' sense of power in online learning is strengthened when affiliation provides them with emotional and instructional support.

This finding also complements McClelland's Theory of Needs because it shows that the need for affiliation and the need for power are connected rather than separate. In McClelland's theory, affiliation refers to the desire to belong and maintain positive relationships, while power refers to the need to influence or control one's environment. In this study, students who felt socially supported appeared more likely to believe that they could manage their learning effectively. This is consistent with Rahmat et al. (2023), who found positive relationships among affiliation, achievement, and power in online learning motivation. Similarly, Saufianim et al. (2023) reported significant relationships among these motivational needs, suggesting that motivation is shaped by the interaction of social, personal, and goal-related factors. Therefore, the present finding strengthens the argument that online motivation is multidimensional. This suggests that affiliation can act as a supportive condition that helps learners develop confidence, control, and persistence in online learning.

The finding has practical meaning for online teaching because it shows that confidence does not develop through autonomy alone. Although online learning requires students to study independently, they still need social and instructional structures that help them feel capable. The descriptive findings show that students valued instructor responsiveness, relevant materials, guidance, and feedback, which may explain why affiliation was strongly related to power. At the same time, students were less confident in understanding complex online materials, showing that support is still needed when learning becomes difficult. This finding also responds to concerns raised in the literature that online learning can create disconnection, reduced focus, and heavy self-discipline demands. Therefore, instructors should not treat affiliation as a secondary element in online learning. Instead, they should design communication, feedback, and discussion as part of the learning process. In other words, the relationship between affiliation and power shows that students become more confident online when independence is supported by meaningful connection.

Discussion for RQ9 - Is there a significant relationship between affiliation and achievement?

The sixth research question examined whether there was a significant relationship between affiliation and achievement in online learning. The findings showed a strong, positive, and significant relationship between affiliation and achievement, leading to the rejection of the null hypothesis. This means that students who experienced stronger social engagement and instructor support were also more likely to report stronger achievement-related motivation. In the context of online learning, this finding is important because achievement is often viewed as an individual outcome. However, the result suggests that students' desire to achieve may be strengthened by their sense of connection with instructors and peers. When students feel supported, they may be more willing to participate, complete tasks, and value course content. Therefore, achievement is not only driven by personal ambition but also by the quality of the online learning environment. This means that affiliation can act as a motivational pathway that strengthens students' achievement in online learning.

This finding strongly supports McClelland's Theory of Needs because it shows that the need for affiliation and the need for achievement are connected rather than separate. Students who feel that they belong in an online class may become more motivated to meet academic goals. This also complements Rahmat et al. (2023), who found strong positive relationships among power, achievement, and affiliation in online language learning. Similarly, Saufianim et al. (2023) found significant relationships among these three motivational needs. The present study confirms that affiliation is especially important because online learning can reduce natural social interaction. When learners receive timely responses from instructors, enjoy class discussions, and feel able to

communicate, they may attach greater value to their academic tasks. This suggests that students' achievement motivation is strengthened when online learning provides emotional, instructional, and social support.

The finding also has practical meaning for online teaching. Since affiliation is strongly related to achievement, instructors should not treat interaction as an optional feature of online learning. Instead, interaction should be designed as part of the learning process. This can include regular feedback, guided discussion, collaborative activities, clear expectations, and opportunities for students to communicate freely. The descriptive findings show that students valued instructor responsiveness and relevant teaching materials, which may explain why affiliation was strongly connected to achievement. This also addresses the concern raised by Meşe and Sevilen (2021), who noted that lack of interaction can reduce motivation in online learning. Therefore, improving achievement in online classes requires more than providing content; it requires building a learning environment where students feel noticed and supported. In other words, the relationship between affiliation and achievement shows that online success is both academic and relational.

Implications and Suggestions for Future Research

Theoretical and Conceptual Implications

The findings provide theoretical support for viewing online motivation as a connected process shaped by affiliation, power, and achievement. Since affiliation was significantly related to both power and achievement, the study strengthens McClelland's needs-based view and Fowler's online motivation framework, where social support helps learners build confidence and maintain task value. This finding is consistent with Rahmat et al. (2023), who found positive relationships among power, achievement, and affiliation in online learning, and Saufianim et al. (2023), who showed that these motivational needs are interrelated. Conceptually, demographic variables appeared less influential than learner support and connection. Thus, online motivation should be understood as a relational process, not only an individual psychological state.

Pedagogical Implications

The findings suggest that online teaching should place stronger emphasis on affiliation-based learning design. Since students valued instructor responsiveness, relevant materials, feedback, and class discussions, teachers should intentionally create opportunities for communication, guidance, and collaborative engagement. This supports Rahmat et al. (2023), who highlighted affiliation as part of online learning motivation, and Saufianim et al. (2023), who linked affiliation with achievement and power. Practically, instructors can use structured discussions, regular feedback, peer activities, and clear expectations to reduce isolation while strengthening confidence and achievement motivation. However, interaction should not be treated as an additional activity; it should be embedded into the learning process. In this sense, meaningful connection becomes a teaching strategy that supports both motivation and academic persistence.

Suggestions for Future Research

Future research should extend this study methodologically, practically, and theoretically to better understand online motivation. Methodologically, researchers may use mixed methods by combining surveys with interviews, focus groups, or learning platform data to explain why affiliation supports confidence and achievement. Practically, future studies could compare different online teaching strategies, such as peer discussion, instructor feedback, and collaborative projects, to identify which approach best improves motivation. Theoretically, future researchers should examine how demographic factors interact with affiliation, power, and achievement, especially because Ajlouni et al. (2022) found gender differences in online motivation while Rahmat et al. (2023) emphasised motivational needs. Therefore, future work should explore both learner background and psychological needs to build a fuller model of online motivation. Another consideration is to expand the conceptual framing to incorporate specific Learning Management System (LMS) interactive tools would substantially enhance the practical applicability of these motivational findings for modern virtual learning environments.

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APPENDIX

MOTIVATION TO LEARN ONLINE QUESTIONNAIRE

(this instrument is adopted from Fowler ,2018)

SECTION	VARIABLE MOTIVATION	CONSTRUCT	NO OF ITEMS	
B	EXPECTANCY	Self-Efficacy	7	11
		Control of Learning Beliefs	4	
C	VALUE	Intrinsic Goal Orientation	4	14
		Extrinsic Goal Orientation	4	
		Task Value	6	
D	SOCIAL SUPPORT	Social Engagement	5	12
		Instructor Support	7	
				37

SECTION B – EXPECTANCY(E)

SELF- EFFICACY (ESE)

No	Statement	1	2	3	4	5
1	ESEQ 1 I believe I'll receive excellent grades in my classes.					
2	ESEQ2I'm certain I can understand the most difficult material presented in the readings.					
3	ESEQ3I'm confident I can learn the basic concepts that are being taught.					
4	ESEQ4I'm confident I can understand the most complex material presented by the instructor online.					
5	ESEQ5I'm confident I can do an excellent job on assessments online					
6	ESEQ6 I'm certain I can master the skills being taught online.					
7	ESEQ7 Although online classes can be challenging, I think I can do well.					

CONTROL OF LEARNING BELIEFS (ECB)

No	Statement	1	2	3	4	5

1	ECBQ1If I study in appropriate ways, then I'll be able to learn the material.					
2	ECBQ2It's my own fault if I don't learn the material taught.					
3	ECBQ3If I try hard enough, then I'll understand the material presented.					
4	ECBQ4If I don't understand the material presented, it's because I didn't try hard enough.					

SECTION C – VALUE (V)

Intrinsic Goal Orientation (VI)

No	Statement	1	2	3	4	5
1	VIQ1I prefer online material that really challenges me, so I can learn new things.					
2	VIQ2I prefer online material that arouses my curiosity, even if it's difficult to learn.					
3	VIQ3The most satisfying thing for me is trying to understand the online content as thoroughly as possible.					
4	VIQ4I choose assignments that I can learn from even if they don't guarantee a good grade.					

Extrinsic Goal Orientation(VE)

No	Statement	1	2	3	4	5
1	VEQ1Getting a good grade is the most satisfying thing for me.					
2	VEQ2 I want to do well in my classes so that I can get awards and recognition.					
3	VEQ3I want to get better grades than most of the other students in my classes.					
4	VEQ4I want to do well in my classes because it's important to show my ability to my family, friends, employer, or others.					

Task Value (VT)

No	Statement	1	2	3	4	5
1	VTQ1I think I will be able to use what I learn in this course in other courses.					
2	VTQ2It is important for me to learn the course material in this class.					
3	VTQ3I am very interested in the content area of this course.					
4	VTQ4I think the course material in this class is useful for me to learn.					
5	VTQ5I like the subject matter of this course.					
6	VTQ6Understanding the subject matter of this course is very important to me.					

SECTION D – Social Support (S)

Social Engagemnt (SSE)

No	Statement	1	2	3	4	5
1	ISSEQ1 feel "disconnected" from my teacher and fellow students in classes.					
2	SSEQ2I pay attention in classes.					
3	SSEQ3I enjoy class discussions.					
4	SSEQ4I feel like I can freely communicate with other students in classes.					
5	SSEQ5I have strong relationships with fellow students in this course.					

Instructor Support (SIS)

No	Statement	1	2	3	4	5
1	SISQ1I feel like I can freely communicate with the instructor in this class.					
2	SISQ2The instructor responds to questions, clearly, completely, and in a timely manner.					
3	SISQ3The instructor’s expectations for me in this class are clear.					
4	SISQ4The instructor provides the guidance I need to be successful in this class.					
5	SISQ5The instructor presents the material in a way that makes it relevant to me.					
6	SISQ6In this course, I have the freedom to guide my own learning					
7	SISQ7The instructor provides regular feedback that helps me gauge my performance in this class.					