Is There A Relationship between Existence, Relatedness and Growth in Online Learning Motivation?

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Abstract
The interplay among relatedness, existence, and growth in learning motivation holds a pivotal role in self-determination theory. These three elements work together harmoniously to fuel intrinsic motivation and active involvement in the learning journey. When students experience a sense of connection, possess autonomy in their learning, and recognize possibilities for personal development, their motivation thrives. By acknowledging and cultivating these dimensions within educational contexts, we can cultivate a supportive atmosphere that nurtures students' intrinsic motivation, resulting in more profound and meaningful learning encounters. The objective of this study is to study the relationship of existence, relatedness and growth towards online learning motivation. A quantitative survey which comprised of 4 main sections. It includes the sections on demographic data, expectancy, value and social support. 93 respondents from the Universiti Teknologi MARA (UiTM) Foundation of Science and Engineering program in Dengkil, Selangor, did participate in this survey. The survey was disseminated via WhatsApp and the responses were recorded via Google Form. In general, positive relationship between existence, relatedness and growth with their learning motivation were determined. By understanding the content and materials with the support from the instructor in responding to their query clearly have positively reinforced their grades hence increase their learning motivation. It is also required to have their full attention in class and have a good time management to ensure an effective student learning time as stipulated in their course information.

Introduction

Background of Study

The relationship between relatedness, existence, and growth in learning motivation is a central concept in self-determination theory. Relatedness refers to the need for connection and belonging, existence represents the need for autonomy and competence, and growth encompasses the desire for personal development and mastery. These three factors interact synergistically to drive intrinsic motivation and engagement in the learning process. When students feel a sense of belonging, have control over their learning, and perceive opportunities for growth, their motivation flourishes. Recognizing and nurturing these dimensions within educational settings can foster a supportive environment that promotes students' intrinsic motivation, leading to deeper and more meaningful learning experiences (Fawzi, 2020). The COVID-19 pandemic has brought significant disruptions to the education sector worldwide, leading to unprecedented changes in the learning environment (Chiu et al., 2021). These disruptions have had a profound impact on the dimensions of relatedness, existence, and growth in learning motivation. This study explores the effects of the pandemic on these motivational factors and their implications for students' engagement and academic development. The pandemic has posed challenges to the sense of relatedness among students. The shift to remote learning has reduced face-to-face interactions, created feelings of isolation and diminished social connections within educational settings. Research by Chiu et al (2021) suggests that this lack of social contact can negatively affect students' motivation, as the sense of belonging and connectedness with peers and teachers plays a crucial role in fostering intrinsic motivation for learning. Efforts to maintain virtual social interactions, such as online group activities and collaborative projects, can help mitigate the impact of reduced relatedness on students' motivation. The pandemic has also influenced the dimension of existence in learning motivation. The sudden shift to online learning has disrupted established routines and structures, challenging students' sense of autonomy and competence. The lack of direct teacher guidance and the need for increased self-regulation can lead to feelings of uncertainty and reduced motivation. However, research by Fawzi (2020) suggests that providing students with opportunities for autonomy, such as setting personal learning goals and engaging in self-directed learning, can help restore a sense of existence and promote intrinsic motivation in the remote learning context. The pandemic has presented both obstacles and opportunities for growth in learning motivation. The challenges posed by remote learning have required students to adapt and develop new skills, such as digital literacy and self-directed learning abilities. This necessity for growth can foster a sense of purpose and drive intrinsic motivation among students (Fawzi, 2020). Additionally, the availability of online resources and platforms has expanded students' access to diverse learning opportunities, allowing for personal development and mastery in specific areas of interest. The COVID-19 pandemic has significantly impacted relatedness, existence, and growth in learning motivation. The reduction in social interactions and the need for self-regulation have challenged the sense of relatedness and existence among students. However, the pandemic has also created opportunities for growth and personal development. Educators and institutions can address these challenges by fostering virtual social connections, providing autonomy-supportive environments, and promoting online resources for skill enhancement. By recognizing and addressing these motivational factors, we can

ensure that students remain engaged and motivated in the face of evolving learning environments (Dos Santos, 2022).

Statement of Problem
Motivation in online learning can be understood in the context of Aldefer's ERG theory, which categorizes human needs into three core area: existence, relatedness and growth. Ahmad et al. (2022) has explored the learner's motivations for online learning. The research is based on Aldefer's ERG theory. Based on the study, they discovered that learners feel a sense of existence, relatedness, and growth during online learning. Ismail et al. (2023) has explored and analyzed in detail the existence, relatedness and growth factors which influence learning motivation. However, there is no study shows the relationship between existence, relatedness, and growth in online learning motivation.

Objective of the Study and Research Questions
This study is done to explore perception of learners' motivation. Specifically, this study is done to answer the following questions;
- How does existence influence learners' motivation?
- How does relatedness influence learners' motivation?
- How does growth influence learners' motivation?

Literature Review
Demotivation and Motivation to Learn Online
Digital media have improved the teaching and learning experiences of university students and professors in recent years. In just a few years, the use of online learning and digital media for teaching and learning has risen quickly (Paechter and Maier, 2010). According to Alawamleh et al (2020), some students prefer classroom classes over online classes due to many problems they face when taking online classes, such as lack of motivation, understanding of the material, decrease in communication levels between the students and their instructors, and their feeling of isolation caused by online classes. A decrease in students' motivation to learn and sense of belongingness in exclusively online classrooms during the COVID-19 era due to less effective communication and interaction with health profession educators and other students led to a feeling of lack of support and encouragement in students (Salarvand, 2023). The use of student-centred strategies can increase students' motivation to learn in an online course. Hanshaw, (2019) found that a well-designed student-centred online learning experience can create a greater change in a student's feeling of connectedness and intrinsic motivation to learn than a traditional face-to-face course.

Past Studies on Motivation to Learn Online
Motivation has been suggested as an important consideration in online learning by a few researchers. Hartnett (2016); Gustiani (2020) have studies the importance of motivation in online learning. Based on their research, it was revealed that the learner's motivation was influenced by intrinsic and extrinsic motivation. Intrinsic and extrinsic motivation are related to the existence factor derived from Alderfer's theory. Lin et al (2017) investigated the level of intrinsic and extrinsic motivation. The study looked at the effects of learning techniques and motivation on learning in an asynchronous language course. They collected completed questionnaires from 466 high school level online language students in a Midwestern virtual school. Based on the study, they discovered that the student's levels of intrinsic and extrinsic

motivation were low during their online course. The researchers described the poor motivation among the students might have been caused by a lack of real-time interaction with teachers and classmates. Next, the study by Firat et al (2018) only looked at intrinsic motivation. The study aims at determining the level of intrinsic motivation of open and distance education students. The data for the study were gathered from 1,639 distance education students in 22 programmes. The results of the study indicate that open and distance education students have high intrinsic motivation in e-learning environments. However, there is no statistically significant difference between them based on factors such as gender, programme structure (graduate/undergraduate), instruction type (distance-blended) or academic disciplines.

Conceptual Framework

Figure 1 shows the conceptual framework of the study. This study explores learners' motivation using Alderfer's (1969) theory. The theory states that people are motivated by (a) existence, (b) relatedness and (c) growth. In order for growth to take place, a person needs to be satisfied with his/her existence and feel a sense of relatedness in what he/she is doing. In the context of this study, Alderfer's (1969) three components are scaffolded onto Fowler's (2018) motivational constructs for learning among students. When it comes to learning, having gained the knowledge gives the learners confidence that they have progressed (Rahmat et.al., 2021). In the context of this study, the learning process begins with learners feeling a sense of existence. This is derived from the learners giving value to the learning task which comes from the learners' (i) intrinsic goal orientation, (ii) extrinsic goal orientation and (iii) task value. Next, motivation also comes from the learners having a sense of relatedness. This comes from the social support that surrounds the learners that can be from (i) social engagement and (ii) instructor support. Finally, learners' motivation can be a pushing factor for growth. Growth can improve learners' expectancy through (i) self-efficacy and 9ii) control of learning beliefs.
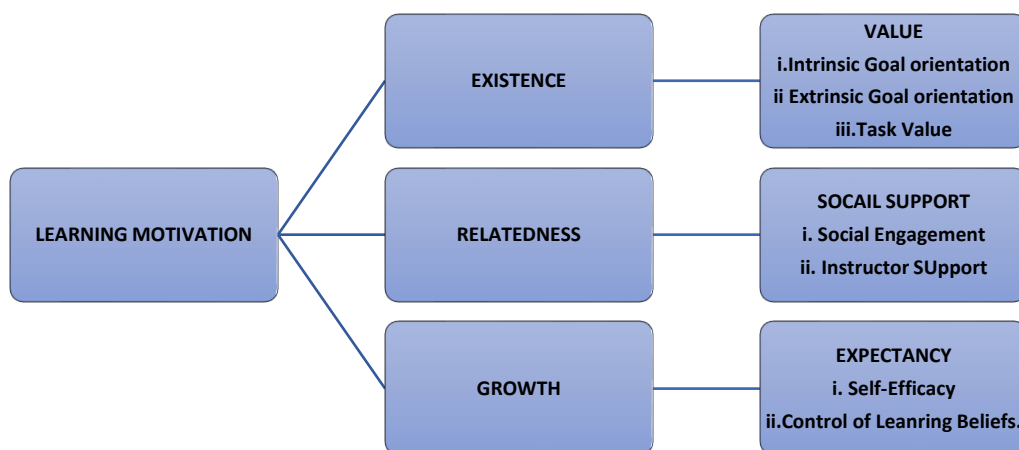

Figure 1- Conceptual Framework of the Study- Relationship between Existence, Relatedness and Growth in Learning Motivation

Methodology

This quantitative study is done to explore motivation factors for learning among undergraduates. A purposive sample of 93 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Alderfer (1969); Fowler (2018) on learning motivation to reveal the variables in table 1 below. The survey has 4 sections. Section A has items on demographic profile. Section B has 12 items on growth. Section C has 14 items on existence. Section D has 12 items on relatedness.

Table 1
Distribution of Items in the Survey Fowler (2018)

SECTION	ERG Alderfer (1969)	MOTIVATION	SUB-SCALES	NO OF ITEMS
B	GROWTH	EXPECTANCY	Self-Efficacy	8
			Control of Learning Beliefs	4
C	EXISTENCE	VALUE	Intrinsic Goal Orientation	4
			Extrinsic Goal Orientation	4
			Task Value	6
D	RELATEDNESS	SOCIAL SUPPORT	Social Engagement	5
			Instructor Support	7
				38

Table 2
Reliability of Survey

Reliability Statistics

Cronbach's Alpha	N of Items
.936	38

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of .936, thus, revealing a good reliability of the instrument chosen/used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

Findings
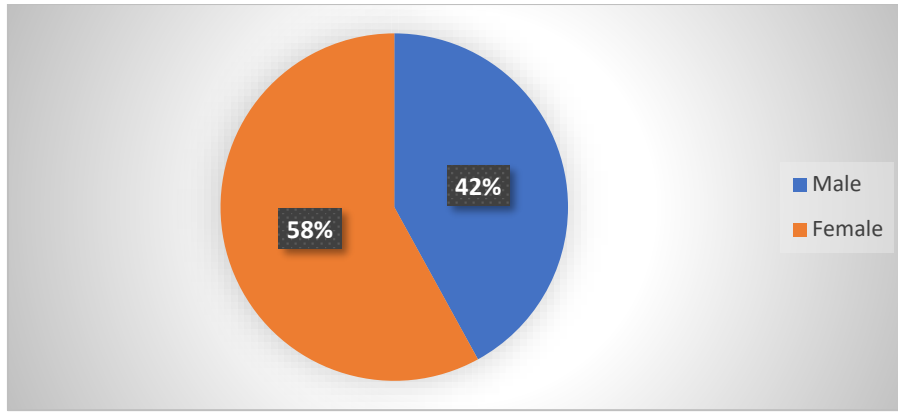Findings for Demographic Profile
Q1. Gender

Figure 2- Percentage for Gender

Figure 2 portrays the percentage of male and female students who have answered the questionnaire. About 42% of students comprised of male while 58% of students are comprised of females. In addition, these students are from the Foundation of Science and Engineering programs. It can be observed that female students are keener to answer the questionnaire as compared to male students. Gender is an important demographic variable that can impact many aspects of life, including health outcomes, economic opportunities, and social experiences. By including a question about gender in the survey and reporting the results, the researchers can better understand how gender may be related to the other variables being studied.
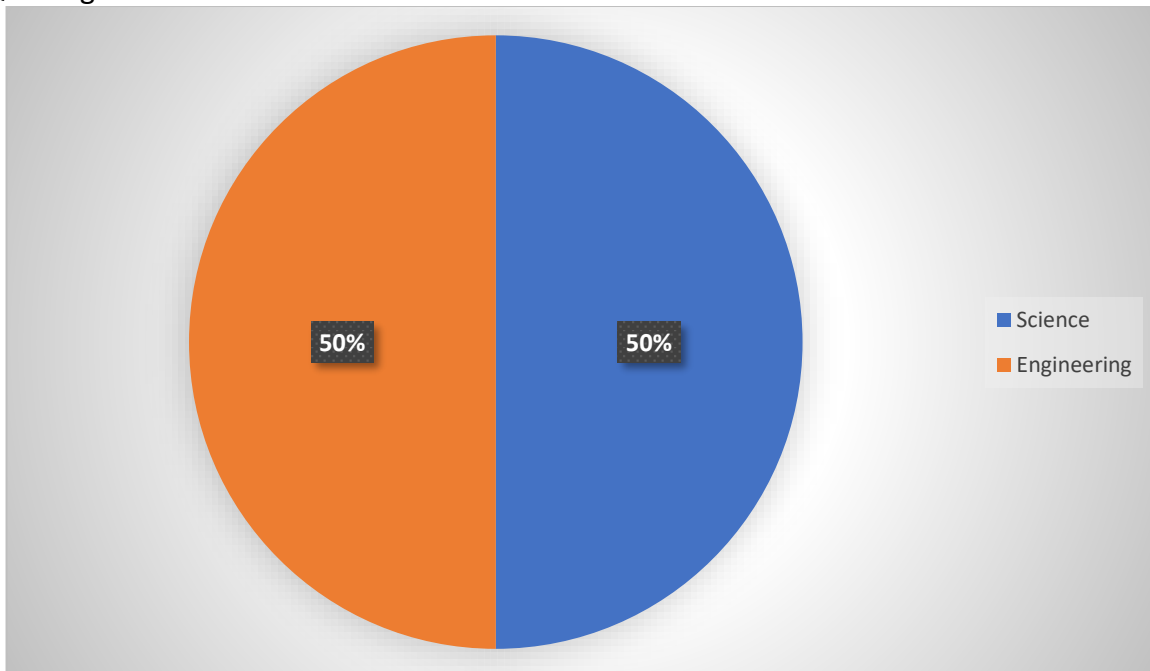
Q2. Programme

Figure 3- Percentage for Programme

The program is related to a survey conducted among students who are enrolled in Foundation in Science and Engineering programs. Figure 3 shows the percentage of students who participated in the survey based on their program. The table indicates that 50% of the students who participated in the survey were from the Science program, while the other 50%

were from the Engineering program. This means that the survey had an equal representation of students from both programs.
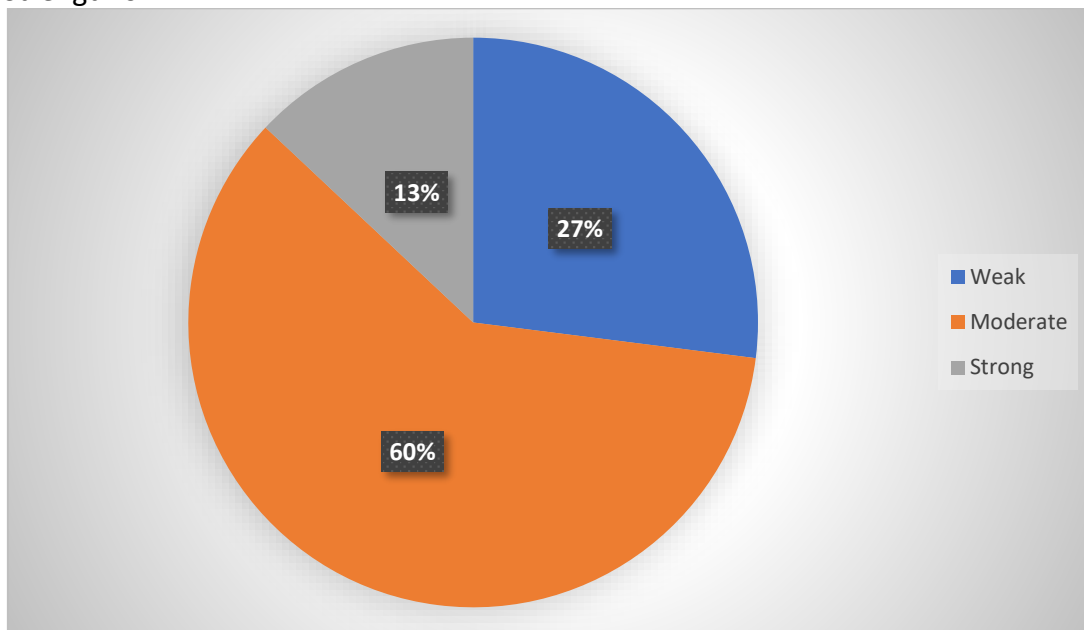
Q3. Strength of Wifi

Figure 4- Percentage for Strength of Wifi

Figure 4 shows that 27% of the respondents reported having weak Wifi signal strength, while 60% reported having moderate signal strength, and only 13% reported having strong signal strength. Weak Wifi signal strength can result in slow internet speeds, dropped connections, and difficulty connecting to the internet, while strong signal strength can result in fast internet speeds and reliable connections. The findings of this study suggest that a significant proportion of respondents may be experiencing issues with their Wifi signal strength, which could be impacting their internet experience. The implications of this study are that Wifi signal strength is an important factor to consider when setting up a wireless network, and that measures should be taken to ensure that signal strength is strong and reliable for all users.

Findings for Existence
This section presents data to answer research question 1- How does existence influence learners' motivation? In the context of this study, existence is measured by value and value is sub-divided into (i) intrinsic value orientation, (ii) extrinsic goal orientation, and (iii) task value. VALUE (V)
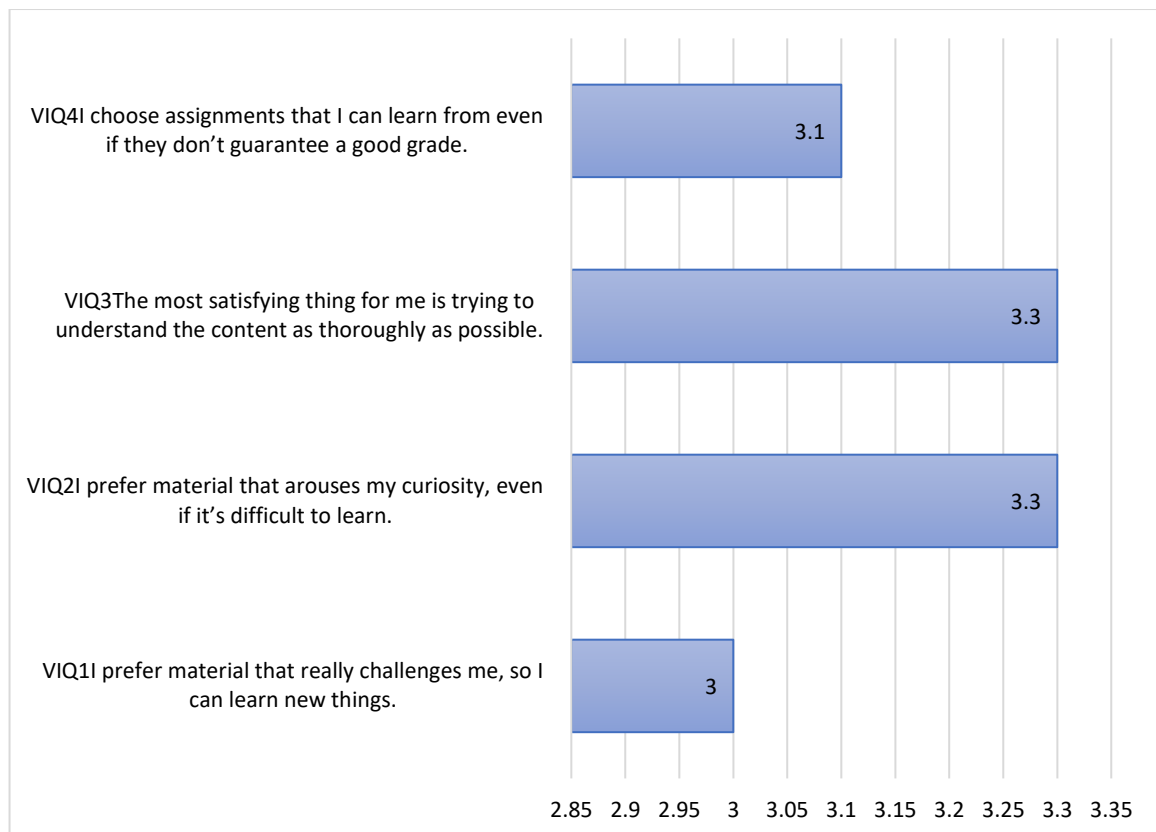
(i)   Intrinsic Goal Orientation (VI)

Figure 5- Mean for Intrinsic Goal Orientation

Figure 5 presents the mean scores for four statements (VIQ1-4) that assess an individual's level of intrinsic goal orientation, based on their responses to a survey or questionnaire have been conducted with 99 respondents. Intrinsic goal orientation refers to the motivation to engage in an activity for the sake of personal growth and development, rather than external rewards or pressures. The second statement (VIQ2) is "I prefer material that arouses my curiosity, even if it's difficult to learn." The mean score for this statement is 3.3, which suggests that participants were slightly more in agreement with this statement than with the first statement. The third statement (VIQ3) is "The most satisfying thing for me is trying to understand the content as thoroughly as possible." The mean score for this statement is also 3.3, which suggests that participants were equally in agreement with this statement as with the second statement. Overall, the mean scores suggest that participants had a moderate level of intrinsic goal orientation, with a slight preference for challenging and curious material, and a focus on understanding content rather than achieving good grades.
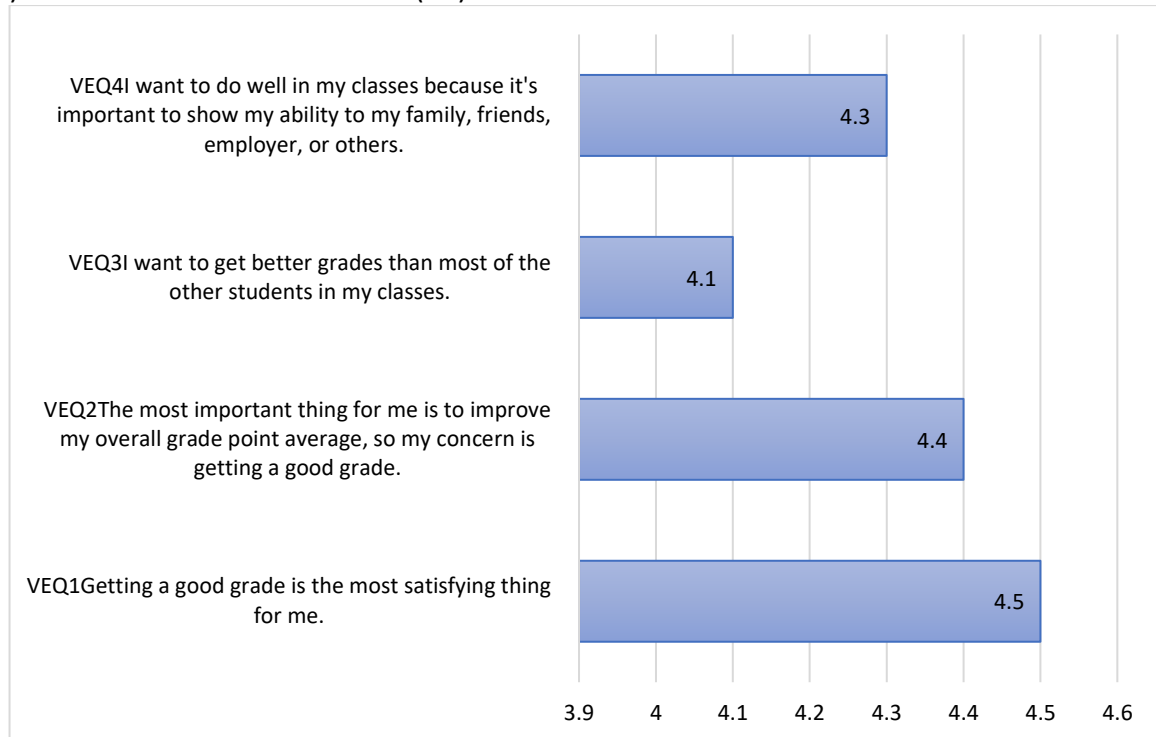
(ii)   Extrinsic Goal Orientation(VE)

Figure 6- Mean for Extrinsic Goal Orientation

Figure 6 shows the mean scores for four statements that measure VE. Extrinsic Goal Orientation (VE) is a type of goal orientation where individuals are motivated by external factors such as rewards, recognition, and social status. The first statement (VEQ1) measures the extent to which getting a good grade is satisfying for the individual. The second statement (VEQ2) measures the importance of improving overall grade point average for the individual. The third statement (VEQ3) measures the desire to get better grades than most other students in the class.The fourth statement (VEQ4) measures the importance of doing well in classes to show one's ability to others such as family, friends, employer, or others. The mean scores for each statement range from 4.1 to 4.5, indicating that the participants in the study have a relatively high level of extrinsic goal orientation.
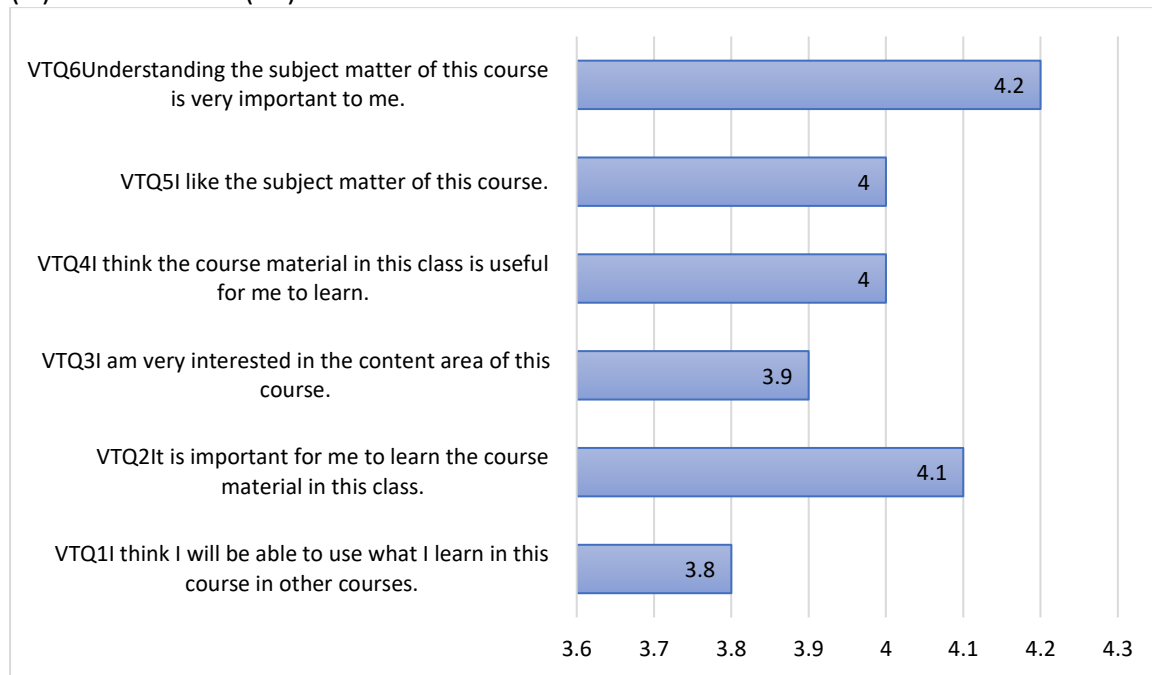
(iii)   task value (VT)

Figure 7- Mean for Task Value

Task Value (VT) is a construct that measures the importance and usefulness of a task or course material to the learner. Table 8 shows the mean scores for six statements related to Task Value, as rated by the learners. The mean values range from 3.8 to 4.2, with the highest mean value being for statement VTQ6, which indicates that understanding the subject matter of the course is very important to the participants. Figure 7 is useful for understanding the participants' perceptions of the value of the course, which can be important for evaluating the effectiveness of the course and making improvements if necessary.

Findings for Relatedness
This section presents data to answer research question 2- How does relatedness influence learners' motivation? In the context of this study, relatedness is measured by social support. Social support is sub-divided into (i) social engagement, and (ii)instructor support.

SOCIAL SUPPORT (S)
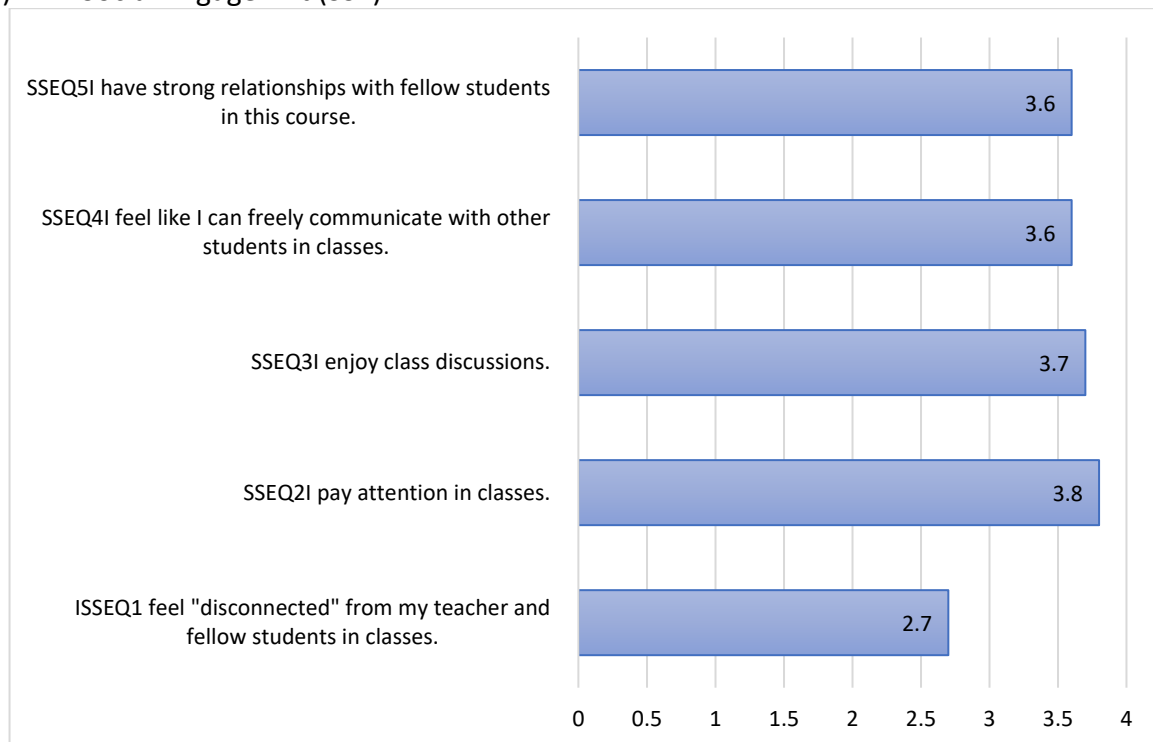(i)   Social Engagemnt (SSE)

Figure 8- Mean for Social Engagement

Figure 8 presents the mean scores for different statements related to SSE, as rated by the respondents. The mean score for SSEQ2 is the highest (3.8). This can be suggested that the respondents may paying attention fairly well in online class. Respondents also enjoyed online class discussion, felt they could communicate freely with other students and had strong relationships with their peers during the online class since the mean scores for SSEQ3 (3.7), SSEQ4 (3.6) and SSEQ5 (3.6) shows the moderate score. The mean score for SSEQ1 is the lowest score (2.7). Meaning that, on average, respondents felt somewhat disconnected from their peers and instructors.
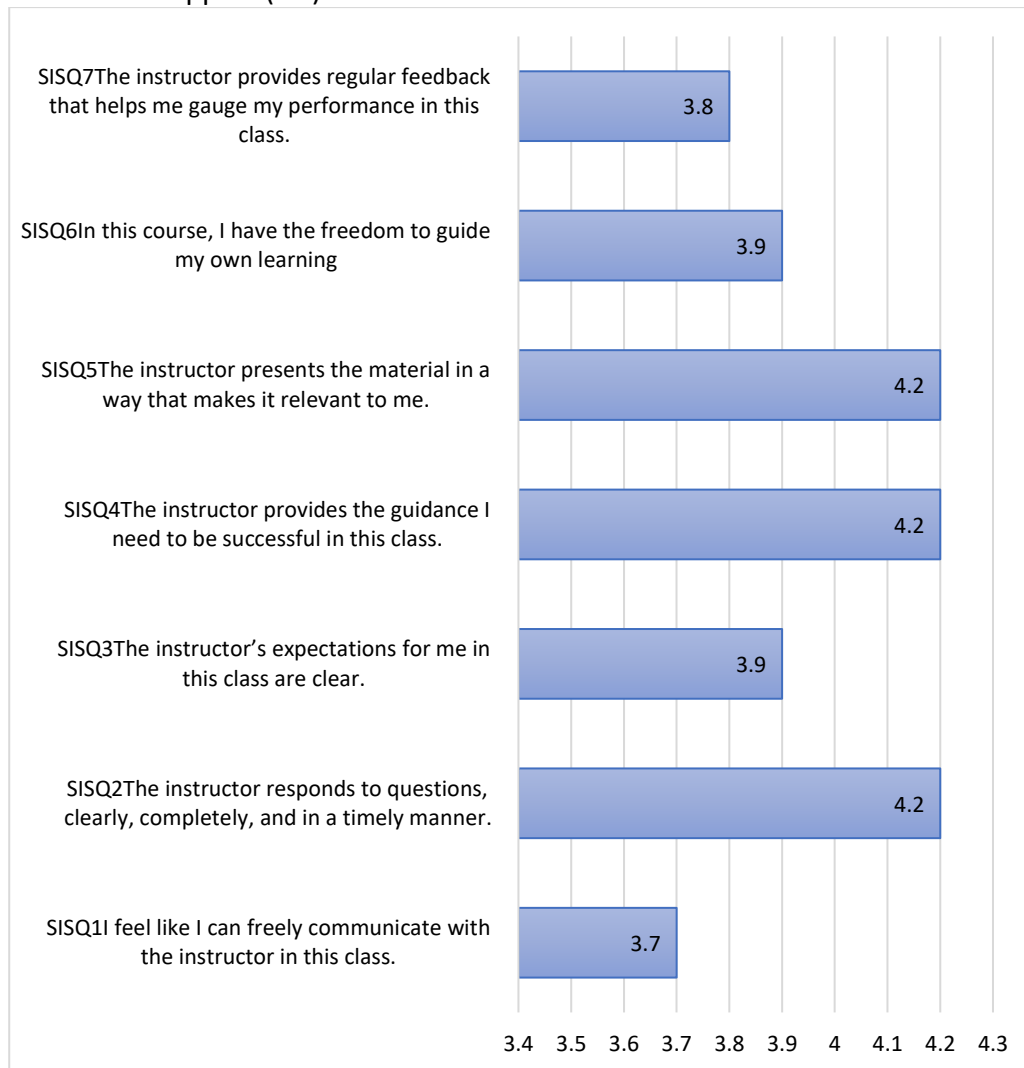
(ii)   Instructor Support (SIS)

Figure 9- Mean for Instructor Support

In figure 9, mean scores for different statements related to instructor support (SIS) are shown. SISQ2, SISQ4 and SISQ5 with mean score 4.2 indicate that most respondents feel that their instructor responds to question clearly and completely, provides the necessary guidance for success and presents the material in a way that makes it relevant to them. Respondents also feel that the instructor's expectations are clear reflected by the mean score of 3.9. The same mean score of 3.9 was also shown in SISQ6 which look that the respondents feel that they have some degree of freedom in guiding their own learning. The feel that the instructor provides regular feedback to help respondent gauge their performance reflected by the mean score of 3.8. The lowest mean score of 3.7 suggested that most respondents feel they can freely communicate with their instructor.

Findings for Growth
This section presents data to answer research question 3- How does growth influence learners' motivation? In the context of this study, growth is measured by expectancy.
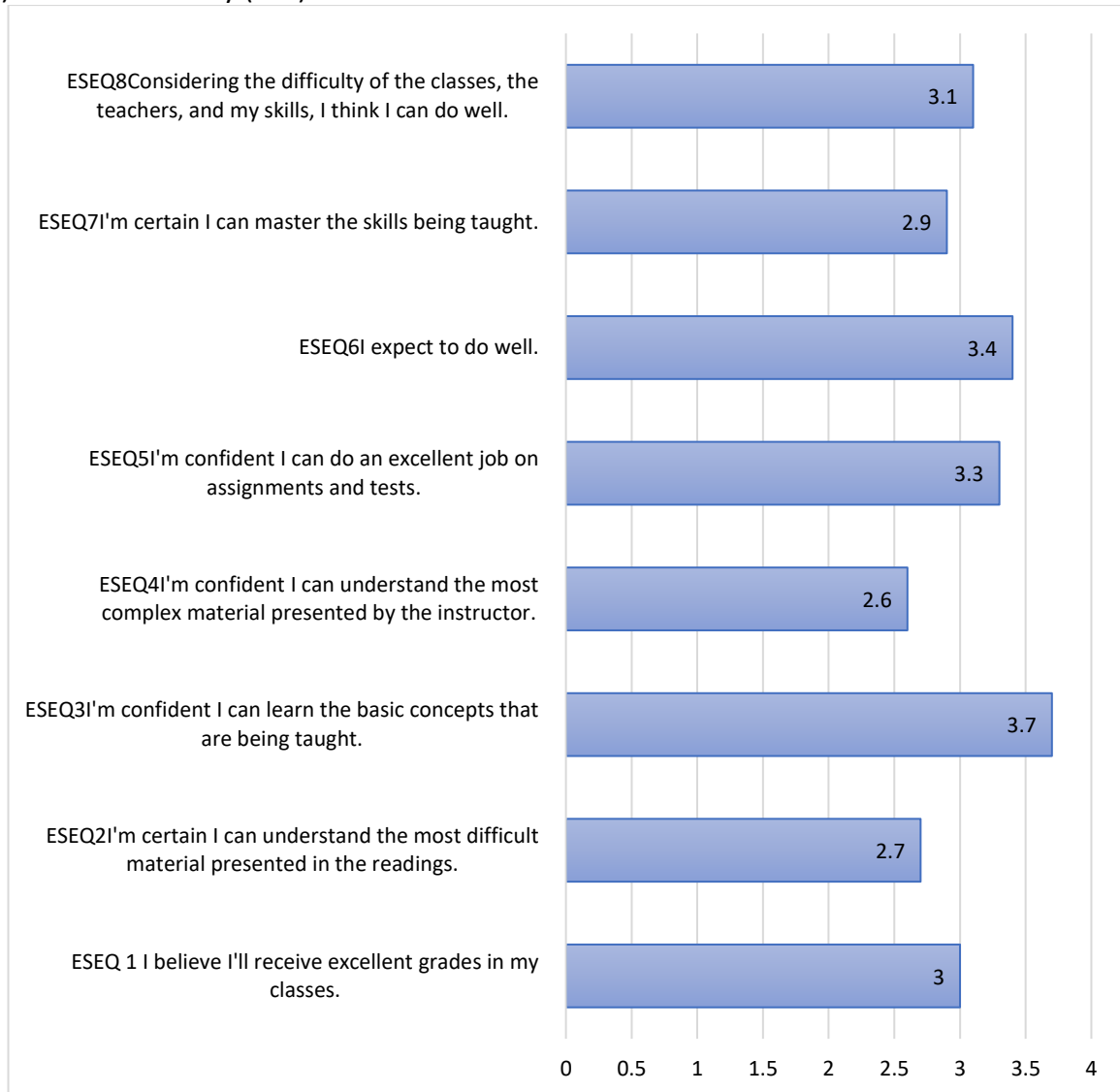EXPECTANCY(E)

(i)   Self- Efficacy (ESE)

Figure 10- Mean for Self-Efficacy

Self-efficacy (ESE) is a term used to describe an individual's belief in their ability to perform a specific task or achieve a particular goal. In the context of this study, self-efficacy refers to the participants' belief in their ability to perform well academically. Figure 10 presents the mean scores for the participants' responses to statements related to their academic self-efficacy. The table includes eight statements (ESEQ1-8) that assess different aspects of academic self-efficacy, such as the belief in receiving excellent grades, understanding difficult material, and mastering skills being taught. The mean scores for each statement range from 2.6 to 3.7, with higher scores indicating greater levels of academic self-efficacy. For example, the participants reported the highest mean score (3.7) for the statement "I'm confident I can learn the basic concepts that are being taught." On the other hand, the lowest mean score (2.6) was reported for the statement "I'm confident I can understand the most complex material presented by the instructor." Overall, the mean scores suggest that the participants had moderate to high levels of academic self-efficacy. This finding has implications for educators and policymakers, as it highlights the importance of fostering and maintaining students' academic self-efficacy to promote academic success.
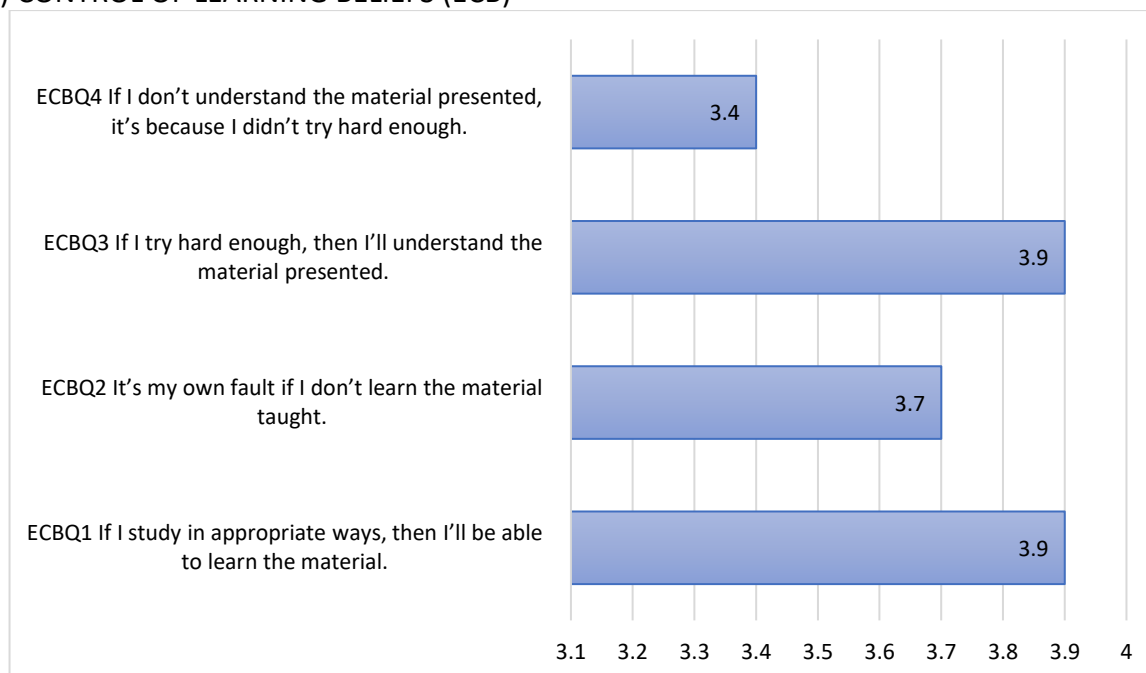
ii) CONTROL OF LEARNING BELIEFS (ECB)

Figure 11- Mean for Control of Learning Beliefs

Figure 11 presents the mean scores for four statements related to the control of learning beliefs, as rated by the respondents of a quantitative survey. It is a set of beliefs that individuals hold about their ability to control their own learning process. The mean score is a statistical measure that represents the average value of a set of data. The four statements in the table are rated on a scale of 1 to 5, where 1 represents "strongly disagree" and 5 represents "strongly agree". The first statement (ECBQ1) suggests that if an individual studies in appropriate ways, they will be able to learn the material. The mean score for this statement is 3.9, which indicates that the respondents generally agree with this statement. The second statement (ECBQ2) implies that if an individual fails to learn the material, it is their own fault. The mean score for this statement is 3.7, which suggests that the respondents somewhat agree with this statement. The third statement (ECBQ3) suggests that if an individual tries hard enough, they will understand the material presented. The mean score for this statement is 3.9, which indicates that the respondents generally agree with this statement. The fourth statement (ECBQ4) implies that if an individual fails to understand the material, it is because they did not try hard enough. The mean score for this statement is not provided in the table. The mean scores for these statements provide insights into the respondents' beliefs about their ability to control their own learning process. These findings have implications for educators and policymakers who aim to promote effective learning strategies and improve student outcomes.

Conclusion

Summary of Findings and Discussions

According to Brown 2001, motivation can be understood from both behaviouristic and cognitive perspectives. In the behaviouristic viewpoint, motivation is defined as the anticipation of reinforcement, which holds significant relevance in the classroom setting. From a cognitive perspective, Brown categorized motivation into three distinct definitions. Firstly, motivation is linked to the drive theory, which suggests that it arises from innate basic

drives. This implies that motivation is an inherent internal state that activates, guides, and sustains behaviour (Green, 2002). Secondly, motivation is viewed in terms of the hierarchy of needs, meaning that it stems from individuals' personal needs. Lastly, based on the self-control theory, motivation arises when individuals have the opportunity to make their own choices regarding what to pursue and what not to pursue (self-control). In summary, these definitions collectively highlight motivation as a powerful driving force in teaching-learning situations, compelling learners to strive towards their goals (Filgona et al., 2020).

In conclusion, the COVID-19 pandemic has led to the closure of schools worldwide, giving rise to unprecedented challenges for education systems. The effects on global education, especially concerning online learning, will have a long-lasting and enduring impact. Clearly, the pandemic necessitates a re-evaluation of the future of education in various aspects. Based on the theory laid out by Alderfers have portray an understanding and addressing students' underlying needs in the context of online learning can lead to a more motivated and successful virtual learning experience. Educational institutions and instructors can design online courses and learning platforms that consider these needs and create a supportive and engaging environment for their students.

Pedagogical Implications and Suggestions for Future Research
Online learning has become increasingly prevalent, and educators face the challenge of maintaining student motivation in the virtual classroom. To overcome this obstacle, effective pedagogical techniques need to be employed. This research explores various strategies that educators can implement to increase online learning motivation and engagement. Clearly communicate learning objectives and expectations to students. When students understand what they are working towards, it provides a sense of purpose and direction, enhancing their motivation to engage in the learning process (Pintrich, 2003). Incorporate a variety of teaching methods, such as multimedia resources, interactive simulations, and gamified elements. Diverse instructional approaches cater to different learning preferences and promote student engagement by adding novelty and excitement to the learning experience (Kebritchi et al., 2017). Regularly assess student progress and provide timely feedback. Constructive feedback helps students monitor their performance, set goals, and make improvements. It fosters competence and growth mindset, promoting intrinsic motivation (Hattie and Timperley, 2007). Enhancing online learning motivation requires intentional pedagogical techniques. By establishing clear goals, fostering a supportive community, personalizing learning, utilizing varied instructional strategies, providing feedback, and connecting learning to real-world contexts, educators can create engaging online learning experiences. These techniques promote students' intrinsic motivation, leading to increased engagement, improved learning outcomes, and a positive online learning environment.

References

Ahmad, N., Rashid, N. R. A., Abdullah, N. A. T., Yean, C. P., Sharif, S., & Rahmat, N. H. (2022). Exploring learners' motivations for studying from home. *International Journal of Academic Research in Business and Social Sciences*, 12(1), 2210-2243.

Alawamleh, M., Al-Twait, L. M., and Al-Saht, G. R. (2020). The effect of online learning on communication between instructors and students during Covid-19 pandemic. *Asian Education and Development Studies*, 11(2), pp.380-400. https://doi.org/10.1108/AEDS-06-2020-0131

Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior & Human Performance, 4*(2), 142–175. https://doi.org/10.1016/0030-5073(69)90004-X

Brown, H. D. (2001). *Teaching by principles: An integrative approach to language pedagogy*. White Plains, NY. Longman; .

Fırat, M., Kilinc, H., & Yuzer, T. V. (2018). Level of intrinsic motivation of distance education students in e-learning environments. *Journal of Computer Assisted Learning*, 34(1), 63-70.

Fowler,S. (2018) *The Motivation to learn Online Questionnaire*. Doctor of Philosophy Dissertation. Graduate Faculty, The University of Georgia. Retrieved from https://getd.libs.uga.edu/pdfs/fowler_kevin_s_201805_phd.pdf

Ghazali, F. (2020). Challenges and Opportunities of Fostering Learner Autonomy and Self-Access Learning during the COVID-19 Pandemic. *Studies in Self-Access Learning Journal*. 11. 114-127. 10.37237/110302.

Green, S. K. (2002) Using an expectancy-value approach to examine teachers' motivational strategies. *Teaching and Teacher Education*. ;18:989-1005.

Gustiani, S. (2020). Students' motivation in online learning during Covid-19 Pandemic era: A case study. *Holistics (Hospitality and Linguistics): Jurnal Ilmiah Bahasa Inggris*, 12(2).

Hanshaw, G. O., Helm-Stevens, R., and Lopez, B. (2019). Enhancing Connectedness and Intrinsic Motivation to Learn for Online Learners: Introducing the S3 Model. *International Journal of Learning and Development*, 9(3), pp.1-24.

Hartnett, M. (2016). *The importance of motivation in online learning*. In M. Hartnett (Ed.), Motivation in online education (pp. 5–32). Springer.

Ismail, T. N. T., Vadeveloo, T., Zafifa, N., Kamarunzaman, R. Y., Aziz, F. M. M., & Rahmat, N. H. (2023). Exploring Motivation for Learning Through Aldefer's Theory.

Lin, C. Z., Zhang, Y., & Zheng, B. (2017). The roles of learning strategies and motivation in online learning: A structural equation modeling analysis. *Computers & Education*, 113, 75-85.

Paechter, M., and Maier, B. (2010), "Online or face-to-face? Students' experiences and preferences in e-learning", *The internet and higher education*, Vol. 13 (4), pp. 292-297. https://doi.org/10.1016/j.iheduc.2010.09.004

Rahmat, N. H., Sukimin, I. S., Sim, M. S., Anuar, M., & Mohandas, E. S. (2021) Online Learning Motivation and Satisfaction: A Case Study of Undergraduates vs Postgraduates. *International Journal of Asian Social Science*, Vol 11(2), pp 88097. http://dx.doi.org/10.18488/journal.1.2021.112.88.97

Salarvand, S., Mousavi, M. S., and Rahimi, M. (2023). Communication and cooperation challenges in the online classroom in the COVID-19 era: a qualitative study. *BMC Medical Education*, Vol 23(1), pp.1-12. https://doi.org/10.1186/s12909-023-04189-1