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Motivation to Study from Home: Balancing Alderfer's Theory

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Abstract

Motivation is a key element in learning. It plays a pivotal role in the educational journey of students, contributing significantly to their academic accomplishments and self-empowerment. With abrupt stay-at-home order due to COVID-19, learning physically at the university has transition to learning online. Due to the transition, it is imperative to understand the students' motivation when they are studying from home for effective teaching and learning. So, this study was conducted with the purpose to explore students' motivation when studying from home according to Alderder's ERG theory (1969), ecompassing existence (E), relatedness (R), and growth (G). This study interpretes existence through the lens of flexibilty, relatedness by achieving a balance between study and personal life, and growth via enhanced learning performance. The research design of this study was a survey descriptive research. An online survey was employed to gather data, comprising four sections with a total of 32 items. The survey was completed by 100 undergraduate students enrolled in the Mechanical Engineering programme at a public university in Malaysia. From the response, it is found that the students' motivation to learn online is positive and they sucessfuly meet all of the needs. Students are motivated to learn online because it offers flexibility to study, regardless of the time and location. They can also manage their time effectively between study commitments and family responsibilities. This study suggest implications such as reducing assigned classwork and ensuring a conducive learning environment to enhance the students' learning experiences.

Keywords: Adults' Learner, Online, Motivation, Alderfer's Theory, COVID-19

Introduction

Background of Study

Identifying and fulfilling adult learners' needs is critical to enhancing their achievement and self-empowerment in education. In outlining peculiar theories and perspectives on online

and blended learning, it is noteworthy that there is yet a compendious framework to guide the design of online learning environments that meet learners' needs. In this respect, the theory of existence, relatedness, and growth (ERG) Alderfer (1969) is relevant to interpreting the different types of needs to assist the learning motivation of online distance learning.

The term "online distance learning" or ODL refers to using various technologies to deliver education or information via computer networks and learning remotely (Ahmad et al., 2022). In Malaysia, it was found that internet literacy among undergraduate students is prominent, but self-learning motivation was reportedly at low levels (Allam et al., 2020). A study conducted by Ismail et al (2021) jointly revealed that the readiness of students in two Malaysian universities was the highest, meaning that students were ready for full-scale online learning, but lacked self-control as they were easily distracted by other online attractions, such as gaming.

Statement of Problem

The situation of alarm generated by COVID-19 has turned into a crisis with unprecedented consequences throughout the world. Following the outbreak of the COVID-19 pandemic, many governments worldwide introduced a lockdown to contain it. This entailed closing most non-essential businesses and venues, and ordering people to stay at home, with educational institutions being no exception. Such a prompt decision resulted in shifting the lectures and other academic activities from physical classrooms to online environment learning. Students had to adapt in a short amount of time to a drastically changed situation. They could not attend physical lectures or study and interact on campus.

It is not a surprise that the sudden stay-at-home orders put a strain on students' mental health, leading to one's anxiety, depression, financial crisis, and post-traumatic stress disorders (Tull et al., 2020; González-Sanguino et al., 2020). The pandemic and stay-at-home orders affected not only the students but among the peer and faculty members' interaction. Goodenow (1993) addressed that a sense of classroom belonging/existing and instructor support is linked to motivation in early learning. This makes it plausible that the consequences of COVID-19 and stay-at-home orders affected the student's motivation and results. However, a recent study conducted by Ahmad et al (2022) which investigated the students' motivation for studying from home agreed that the advantages of learning from home outweigh the disadvantages. To date, no study has been conducted on the motivation of online learning among engineering students at Universiti Teknologi MARA (UiTM), albeit the largest university in Malaysia and one of the faculties with the largest number of students.

This study aims to explore the relation between the abrupt stay-at-home order on UiTM engineering students' motivation, adapting Alderfer's theory (1969). The theory revealed that students feel a sense of existence, relatedness, and growth (ERG) while studying from home. Hence, this study is conducted to answer the following questions;

- RQ1 - How does studying from home influence existence?
- RQ2 - How does studying from home influence relatedness?
- RQ3 - How does studying from home influence growth?

Literature Review

Advantages of Studying from Home

The motivation of learners can be discerned by employing Alderfer's (1969) motivation theory which was originally constructed for working conditions. The ERG theory suggests that there are three groups of core needs: existence (E), relatedness (R), and growth (G). The most

basic need is existence, which relates to the person's feeling that what he/she does matters to the people around. Next, is the feeling of relatedness, the state or fact of being related or connected. Finally, when the feelings of existence and relatedness are met, then only can the person proceed to growth.

Studying from home offers alternatives for students who are unable to take real courses or attend physical lessons. According to Mukhtar et al. (2020), the advantages of online learning include remote learning, without having to physically attend the class or courses, comfort, and diverse accessibility. Online learning stimulates student-centred learning and is easy to control during the lockdown period of the pandemic. Fatoni et al. (2020) state that the advantage of virtual learning enables students to learn remotely, hence reducing the need for accessibility to professional teachers across the globe.

Challenges of Studying from Home

Though the advantages may outweigh the disadvantages of remote learning, one cannot simply ignore the downsides of learning from home. Sadeghi (2019) reported that distractions are the most concerning issue when it comes to online learning. Youngsters are mostly distracted by the Internet of things and online gaming, thus leading to a lack of attention during online learning. Physically attending school helps students socialise by spending time with their peers. With the shift to virtual classes, introverts are not getting the proper exposure they need to thrive. Overall, the educational experience might suffer if one is not around fellow students.

Students, as well as teachers, might face technological glitches such as internet breakdowns or power cuts. This fleeting error in the system makes it difficult to impart quality education. Additionally, some students and teachers, especially in rural areas, might not be well-versed in technology, thus reaching out to them during online distance learning is quite challenging (Sadeghi, 2019).

Although most of the subjects are theoretical and easy to learn online, some subjects might require practical application. Reading about science experiments will not give as much understanding or exposure as a practical experience can deliver (Serhan, 2020). Besides, engineering students will not be fully immersed themselves in the lab setting as they will not experience it hands-on with the equipment (May et al., 2022).

Past Studies of Effectiveness of Studying from Home

During the pandemic, online learning has been carried out all over the world for the learning process to continue even when schools and universities are closed. After two years of distance learning, the accessible technology permits the instructors to diversify their online teaching delivery. Thus, it is vital to consider the student's preferences while designing the online content to ensure effective and productive learning. Many studies have been done to investigate the effectiveness of learning online. Manjeese (2022) proposed a model to describe the critical factors to govern the success of e-learning in higher institutions in Zimbabwe. In the qualitative study, 50 students wrote an essay about their experience in e-learning, and their responses were analysed using R qualitative data analysis (RQDA) software. The author deduced that the efficacy of e-learning is highly dependent on the collaboration of organisational support, technological availability, environmental and behavioural motivation, and adaptation. The author may provide a perspective from a third-world country, however, the deduced model will be promising to be employed in our country to ensure successful e-learning in higher institutions.

In addition, the student's perception is worth being understood to reinforce advantageous online learning at home or any other area. Mushtaha et al (2022) reported the outcome of enforcing e-learning in the teaching and learning process in University of Sharjah, UAE. The author also recorded the perception of engineering students in that matter and compared their performances with other colleges. The quantitative study includes distributing surveys to 1486 students and 227 full-time faculty members. The research revealed that engineering, medicine, and fine arts students and teachers performed poorly, with reduced productivity and motivation compared to theoretical colleges such as business and law. However, most of the respondents agreed that the major advantage of online learning is its flexibility in terms of time and place. Besides, the survey also revealed 80.3% positive responses that users were able to adapt swiftly to online learning experiences regardless of college. These important findings clearly suggested that the teaching and learning process for engineering lessons will be better designed to be online and in traditional classroom learning. Furthermore, as this generation is digitally driven, it will be more likely to adapt to blended learning.

Past Studies of Challenges of Studying from Home

Despite the better experiences in online learning reported in the literature, the researchers at the University of Sharjah also reported in the same literature Mushtaha et al (2022) that 55.6% of the respondents agreed that their mental health and socialisation were negatively impacted. However, the negative responses might be influenced by the pandemic situation where the whole world was in lockdown and socialisation was also restricted.

Hussein et al (2020) investigated the experiences of undergraduate students of Al Ain University regarding emergency online learning during the first wave of COVID-19. The data was collected through 45 samples of written semi-guided essays about the student's reflections on online learning during the pandemic. Open coding was then used to analyse data to identify the positive and negative qualities of emergency online learning from the student's perspective. The authors reported that the respondents claimed that being easily distracted and unable to focus were primarily the recurrent negative attributes of online learning. Besides, some of the respondents viewed that the drawbacks of online learning include heavy workload, internet and connectivity problems, and insufficient support from instructors and colleagues. Since this survey was conducted during the first wave of COVID-19, the negative responses showed that the abrupt shift from conventional classroom teaching and learning to online mode put significant pressure on the students and instructors.

In a study by Muthuprasad et al (2021), the researchers investigated the preference and perception of online learning via an online survey distributed to 307 agricultural students from different universities from National Agricultural Research System (NARS). The study revealed that some of the challenges of online learning are technological constraints which include the internet and devices. In addition, the respondents also complained that the instructors' lack of competence tends to diminish the interest of the students during online classes. The negative responses recorded from the literature reinforce the deduction that effective online learning is an effort from the organisational and instructor's support to provide adequate resources and environment such as uninterrupted internet connection, supporting devices, accessible platforms, and recorded videos for future learning. In addition, the success of learning also depends on the motivational and ethical behaviour of the students.

Conceptual Framework

ERG theory is widely used in the study of organisational behaviour particularly within the context of a crisis situation (Yin & Zeng, 2020; Cheung et al., 2021). This study is rooted from Alderfer's ERG theory (1969) and factors for learning from home by (Abdullah et al., 2020). Figure 1 shows the framework for 'Motivation to Study from Home: Balancing Alderfer's Theory'.

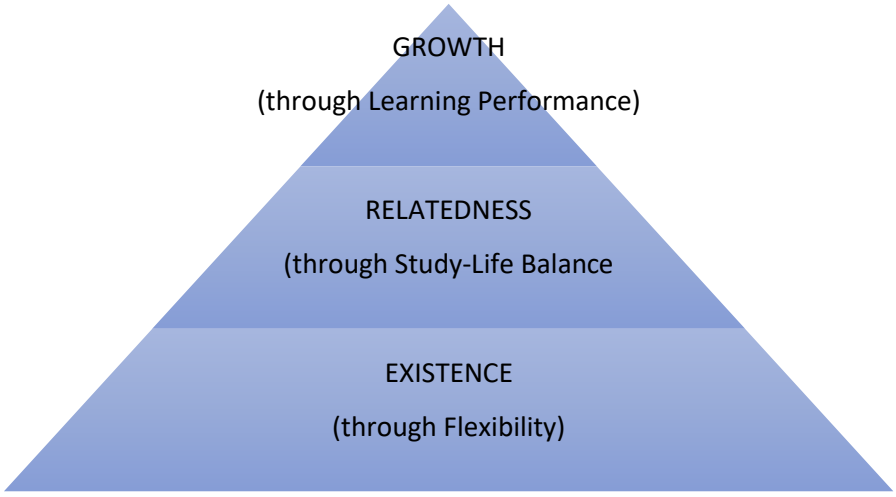

Figure 1 - Conceptual Framework: 'Motivation to Study from Home: Balancing Alderfer's Theory'

Existence (through Flexibility)

Existence refers to the need for safety from danger, threat, worry, anxiety, and other harmful feelings. Besides, existence also includes the physiological needs for survival such as sleep and rest. Lastly, an individual also desires material for existence needs such as food and clothing. In the context of learning from home, the existence needs were assessed via the flexibility of the learning mode when conducted online. Amidst the lockdown and restriction order, it is assumed that students staying with their families have sufficient resources to undergo a comfortable learning process, thus satisfying their physiological and security needs.

Relatedness (through Study-Life Balance)

Relatedness is the need to maintain positive interpersonal relationships including respect, trust, and a sense of belonging with significant other people such as families, friends, and superiors. These feelings can be established by creating mutual trust, being recognised, and giving a sense of value to others. A study by Poulou & Norwich (2019) reported surprising findings on relatedness to teachers contributing to the increase in adolescent's emotional and peer problems. This finding suggests that relatedness needs to be taken into consideration in exploring the student's perspective of learning from home. In this study, the relatedness was assessed through the student's study-life balance.

Growth (through Learning Performance)

Growth is the opportunities for personal development such as self-esteem which encompasses worthiness and self-emotional states, and self-actualization which refers to achievement of goals, developing individual character, recognizing self- potential, and ability to self-grow. These attributes include knowledge seeking, building confidence, becoming

independent, and feeling in control. In the context of learning from home, the growth of the students was evaluated by their satisfaction with learning performance.

Methodology

The research design of this study was a survey descriptive research. A total of 100 undergraduate students of Mechanical Engineering programme at Universiti Teknologi MARA (UiTM), Malaysia were purposely chosen. These participants were invited to complete an online survey focusing on the experience of studying from home.

The survey instrument was adapted from Abdullah et al (2020) and comprised four sections with a total of 32 items (Table 1). Section A focused on Demographic Profile with two items, Section B delved into Flexibility with ten items, Section C explored Study-Life Balance with ten items, and Section D assessed Learning Performance with ten items. Respondents were required to indicate their agreement with each statement using a Likert Scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 1
Distribution of Items in Survey

SECTION	FACTORS	NO. OF ITEMS
A	Demographic Profile	2
B	Flexibility	10
C	Study-Life Balance	10
D	Learning Performance	10

The value of Cronbach's Alpha is .966 (Table 2). It indicates high internal reliability for the instrument.

Table 2
Reliability Statistics

Cronbach's Alpha	N of Items
.966	30

The data was collected via Google Form and analysed using IBM SPSS Statistics 26. Responses to the Demographic Profile questions were tabulated and converted into percentages, then visualized through pie charts. Similarly, responses addressing the research questions were tabulated, averaged, and illustrated using bar charts.

Results and Findings

Demographic Profile

Figure 2 depicts the percentage of the respondents based on gender. From a total of 100 respondents, 87% are males (87 respondents). The remaining 13% are females (13 respondents).

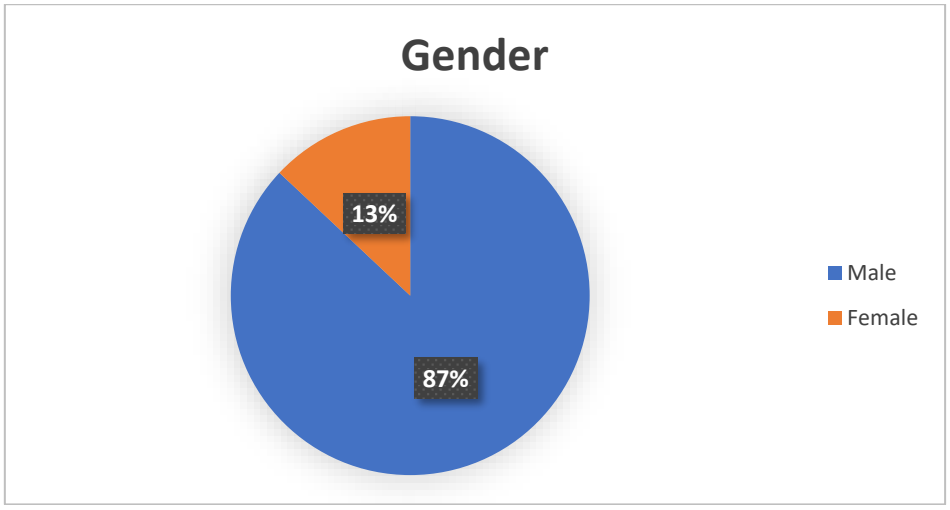

Figure 2 - Percentage for Gender

The respondents are from different semesters. From Figure 3, the majority of the respondents are from Semester 2 (85%). It is followed by Semester 6 & above (8%), Semester 4 (6%), and Semester 5 (1%).

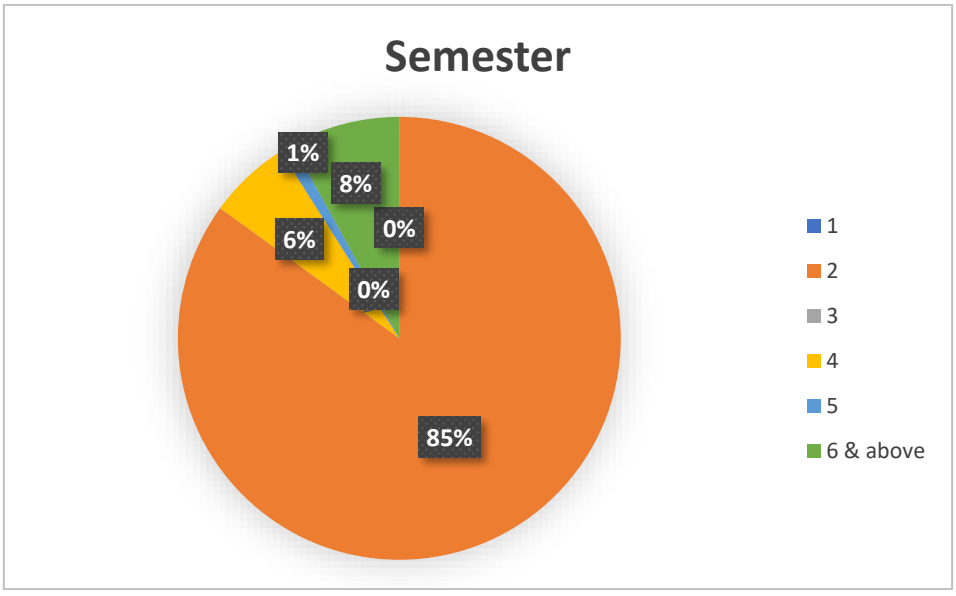

Figure 3 - Percentage for Semester

Existence

This section presents data to answer research question 1 - How does studying from home influence existence? In the context of this study, existence is felt through flexibility.

Figure 4 illustrates the mean score for flexibility. The item that received the highest mean score is Item 4 "I can immediately attend the class upon waking up every day while doing ODL" with the mean score of 4.00. The second highest mean score at 3.98 is Item 3 "I can save on commuting expenses while doing ODL." It is followed by Item 5 "I am comfortable to study anytime" (M-3.76), Item 6 "I can focus on my studies by managing my schedule" (M-3.66), Item 10 "I can manage my study responsibilities alongside my personal and family needs" (M-3.57), Item 7 "I can enjoy a healthier lifestyle while doing ODL" (M-3.43), Item 8 "I face less stress doing classwork at home" (M-3.41), and Item 2 "I cherish not having to spend

time commuting to the university daily" (M-3.40). Item 9 "My productivity increases because I feel less stressed while doing ODL" has the second lowest mean score at 3.37 and Item 1 "I take less time to complete my tasks when I am doing ODL" has the lowest mean score at 3.14. According to the data, the majority of students concur that they can promptly join their classes upon waking up each day while engaging in ODL.

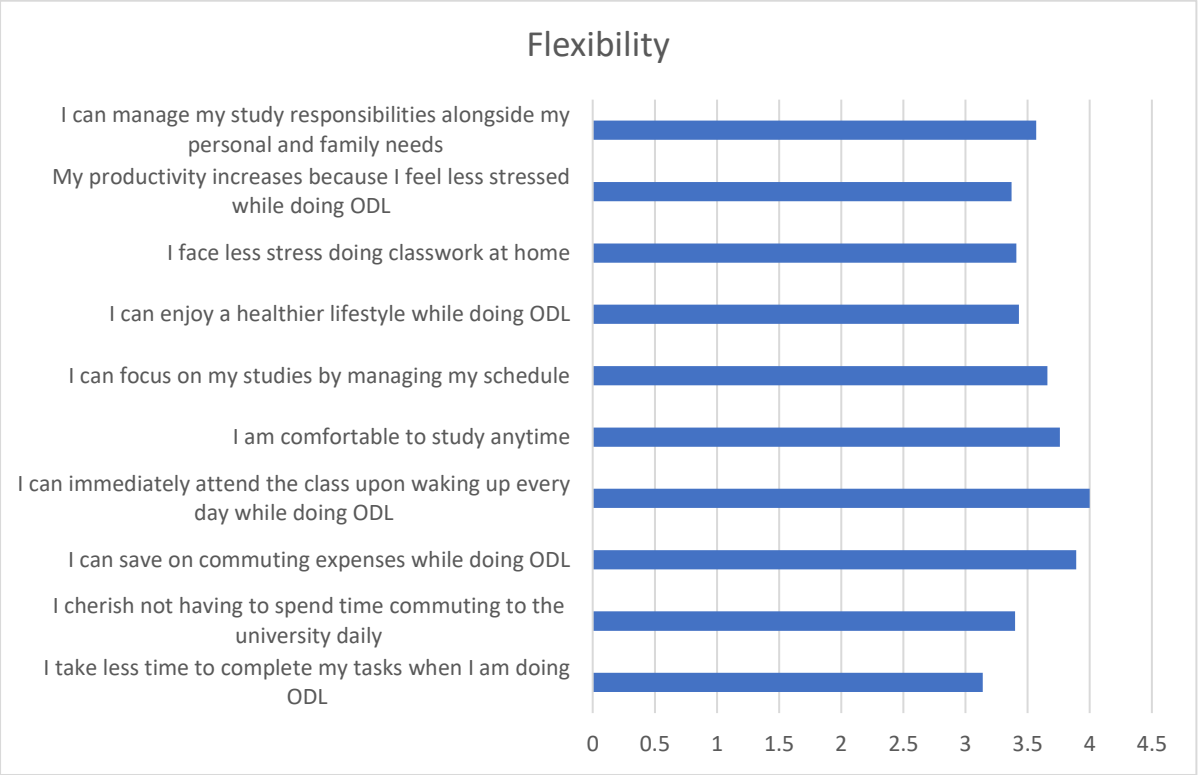

Figure 4 - Mean for Flexibility

Relatedness

This section presents data to answer research question 2 - How does studying from home influence relatedness? In the context of this study, relatedness is displayed through study-life balance.

With a reference to Figure 5, Item 7 "I no longer have to travel to the university, therefore I can spend more time on the task at hand" records the highest mean score at 3.80. Item 4 "I find ODL beneficial for me as I can simultaneously attend to my family's needs," Item 6 "I no longer have to face traffic jams to and from the university every day," and Item 1 "I prefer flexibility for my study as I can assist my family with household chores" have the mean score of 3.79, 3.73, and 3.70 respectively. It is followed by Item 2 "The flexibility of ODL is ideal for me" (M-3.64), Item 9 "I can take care of myself better while studying from home" (M-3.61), Item 10 "I can take care of others better while studying from home" (M-3.59), Item 3 "Having a study space at home helped improve my learning satisfaction" (M-3.58), and Item 8 "I feel healthy and have better well-being when studying from home" (M-3.42). The lowest mean score at 3.14 is Item 5 "I found ODL more conducive than learning in a physical classroom. Generally, students agree that they can spend more time completing tasks when they do not have to travel to university.

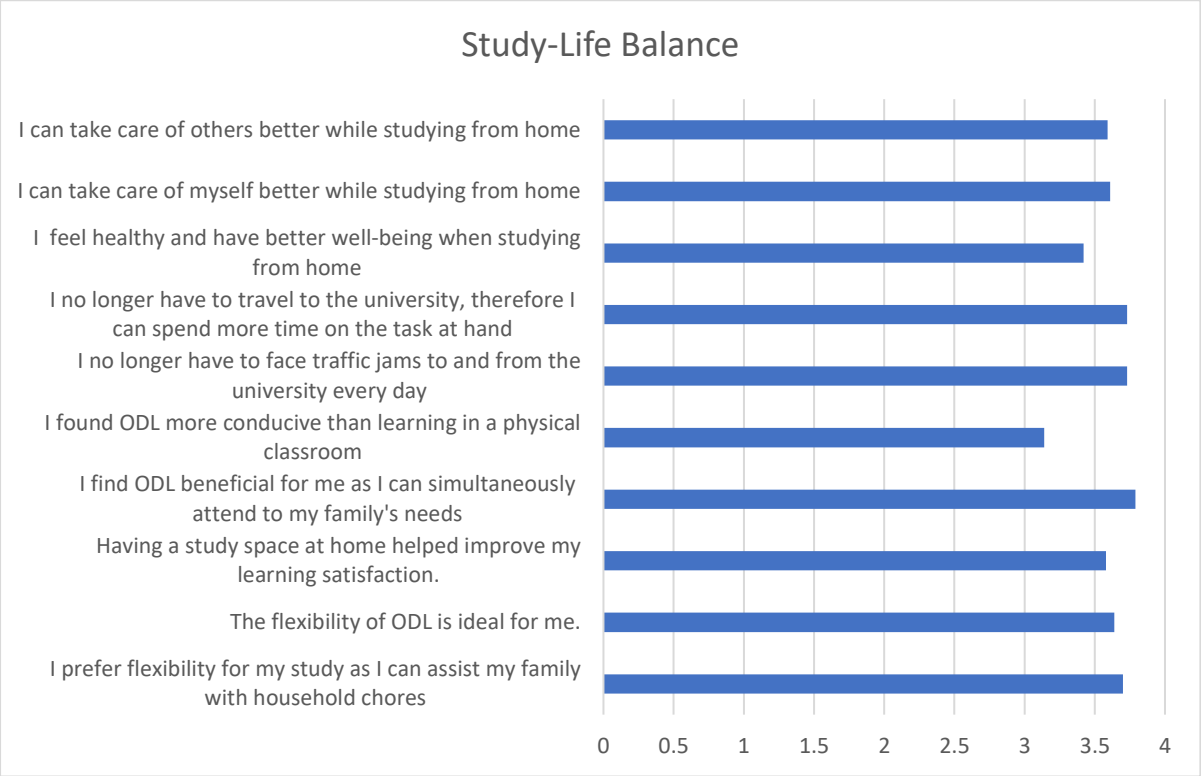

Figure 5 - Mean for Study-Life Balance

Growth

This section presents data to answer research question 3 - How does studying from home influence growth? In the context of this study, growth is achieved through learning performance.

In Figure 6, it states that Item 6 “My lecturers are concerned about students’ mental and physical health during ODL” has the highest mean score which is at 3.90. Item 4 “My lecturers provide more learning materials during ODL” and Item 2 “My lecturers have high trust in students during ODL” have the mean score of 3.87 and 3.83 respectively. It is followed by Item 5 “I have a comfortable space for my ODL” (M-3.79), Item 1 “I feel my lecturers understand my challenges while doing ODL” (M-3.77), Item 7 “I have a good internet connection to support my ODL” (M-3.74), Item 9 “I can detect a fraud email whenever I receive them in my inbox.” (M-3.58), Item 3 “I feel that ODL does have a positive impact on my study” (M-3.54), and Item 8 “My lecturers educate students on cybersecurity threats and the importance of data protection” (M-3.53). The item that has the lowest mean score is Item 10 “I freely connect with public Wi-Fi while studying at restaurants or café” at 2.95. Overall, students express consensus regarding their lecturers' attentiveness to their mental and physical health during ODL.

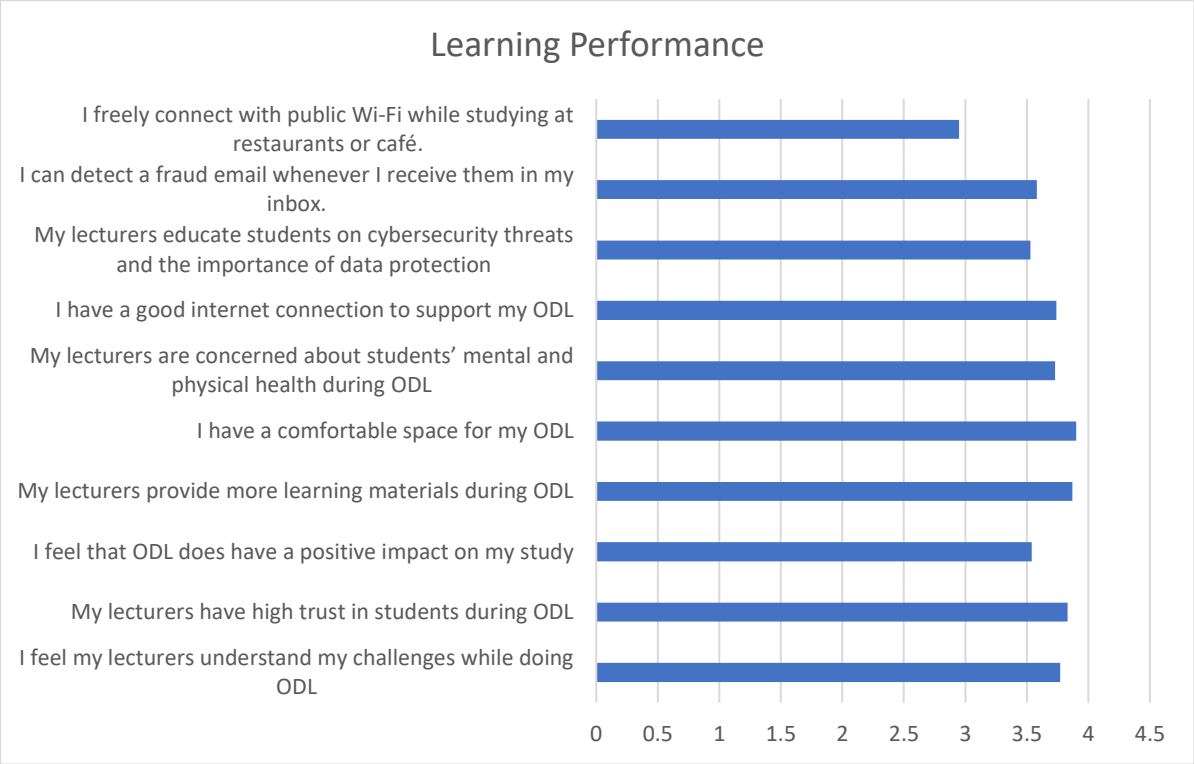

Figure 6 - Mean for Learning Performance

Conclusion

Summary of Findings and Discussion

According to Alderfer's ERG theory (1969), individuals have three fundamental sets of needs: existence, relatedness, and growth. In this study focusing on studying from home, students' motivation concerning these needs is gauged using flexibility, study-life balance, and learning performance, respectively. The findings reveal that students successfully meet all of these needs.

ODL offers students the flexibility to study at their convenience, anytime and anywhere. They can promptly attend classes upon waking up each day while learning remotely (M-4.00), indicating that students satisfy their physiological needs by ensuring sufficient rest and sleep. Sleep is crucial for memory and learning (Sharman & Illingworth, 2020). Moreover, participants in this study highlighted that their financial needs are satisfied through ODL, as they can save on commuting expenses (M-3.98). This is particularly relevant for students in Semester 2 and beyond, many of whom live off-campus and incur commuting costs using various means of transportation. Fortunately, with the transition to online learning at home, they can reduce these expenses (Hussein et al., 2020). Conversely, they express no reduction in stress levels and report no increase in productivity when studying from home (M-3.37). They also do not feel that they take less time to complete tasks while engaging in remote learning (M-3.14). These results align with the findings of Ahmad et al. (2022), claiming that learners do not perceive studying from home as reducing stress or enhancing productivity (M-2.9), and they take longer time to complete their assignments (M-2.6).

When learning from home, students can effectively manage their study commitments alongside family responsibilities. They can save time because they do not have to travel to the university (M-3.80) and navigate through traffic congestions (M-3.73). So, they will not be late to attend classes (Hussein et al., 2020). Moreover, they perceive ODL as beneficial because

they can attend to family needs (M-3.79) and assist with household chores (M-3.70). These findings differ from what Kamaludin and Sundarasen (2023) found that students feel stressed and tired of juggling between study and family responsibilities when learning via ODL. The online learning environment of ODL is also perceived as less favourable compared to the traditional classroom settings (M-3.14). For engineering programmes, students want to be immersed in the lab environment. They want to be more hands-on and practice with the instrument (May et al., 2022).

Positive impacts on students' educational experiences stem from the interaction between students and lecturers (Xiao, Tian, & Xu, 2023). Lecturers demonstrate care for students' overall well-being, encompassing both physical and mental health aspects (M-3.90). Furthermore, lecturers who provide ample learning resources (M-3.87) empower students to engage in self-directed learning, at their own pace and convenience, thereby placing them in control of their learning journey. This promotes autonomous learning beyond the confines of the classroom (Pratiwi & Waluyo, 2023). A reliable internet connection also contributes to the feeling of being in control of the learning. Even when students study in public spaces like restaurants or cafes, they prefer to use their personal internet connections (M-3.74) rather than public Wi-Fi (M-2.95). Unlike the findings of Herwiana and Laili (2022), the students in this study do not view internet connectivity as a challenge.

Pedagogical Implications

Students are motivated to engage in ODL due to its flexibility, allowing for both synchronous (real-time) and asynchronous (non-real-time) learning. However, there are areas for improvement to ensure the efficacy of the learning process. One such area involves reducing the amount of classwork assigned outside of class sessions. Instead, tasks can be completed during scheduled class time, either individually or collaboratively. These assignments, projects, or tasks are intended to reinforce concepts introduced during lectures or readings. Furthermore, the learning environment also significantly impacts the learning experience. Both lecturers and students are crucial in shaping an environment conducive to learning. Lecturers can design diverse and interactive learning experiences to attract and motivate students, using methods ranging from traditional techniques like lectures and discussions to more innovative approaches such as group work, role-playing, and simulations. Incorporating interactive applications such as Kahoot, Quiziz, Mentimeter, Canva, and Padlet can further enhance engagement. Similarly, students also play a vital role in creating a conducive learning environment. Finding a suitable study space free from distractions is essential for maintaining focus and productivity.

Suggestions for Future Research

The current study has two items in the Demographic Profile, which are gender and semester. It is recommended that future studies expand to include additional factors like internet connectivity, type of learning device, hometown, and socioeconomic status. These inquiries could offer more comprehensive insights into the backgrounds of participants engaged in online learning. The participants in this study are undergraduate students enrolled in the Mechanical Engineering programme. In the future, diversifying the sample by including participants from other academic disciplines could yield varied responses, potentially leading to interesting findings.

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