

EFL Students' Perception towards the Effects of Online Learning on their Motivation

¹Soheil Atashian, Lecturer, Department of Foreign Languages, College of Arts & Sciences
University of Nizwa, Oman.

²Ibrahim Al-Rawahi, Instructor, Foundation Institute, University of Nizwa, Oman.

Abstract:

Since online learning gained absolute significance throughout the Pandemic, the effects of this mode of learning and teaching has been in the limelight. Employing a quantitative research method, an online questionnaire was used along with in-depth interviews via Google Meet. This study aims at investigating University of Nizwa (UoN) English as a Foreign Language (EFL) students' perception of their motivation upon being exposed to the online mode of teaching and learning. Fifty English Education and Translation students of various academic years at the UoN have responded to a questionnaire conducted online via Google Forms using ARCS model by Keller (2000) in order to examine their motivation during online learning. This model evaluates students' motivation from different dimensions: cognitive and behavioral, and it is linked to the learning content, teaching approaches, learning environment, and the cognition of the students. Furthermore, six EFL learners were interviewed to deeply discuss their motivation when experiencing online learning. The findings of this result have depicted that students' motivation has been relatively negative, i.e. students have shown lack of attention, relevance, confidence and satisfaction toward online learning. Moreover, the study illustrates that the conditions of internet have played a role in making online learning demotivating.

Keywords: EFL students, online learning, motivation, perception

Introduction

1.1 Introduction

Due to the rapid growth of technology and COVID-19 health epidemic, educational institutions have had to quickly adjust to continuing and ever-changing situations. The two former factors have forced educational institutions to transform education to be online through Moodle, Google Meet, Zoom, and other online learning platforms. The term e-learning or online learning as defined by Fee (2005) is learning through internet or intranet. The popularity of internet and smartphone has aroused the question of whether online learning can be a replacement of traditional learning or not (Lin & Chen, 2017) as well as the necessity of online learning in the time of such a pandemic has reconsidered the former question. Therefore, studying online

learning from its different dimensions including its effect on students' motivation is a crucial research question.

1.2 Theoretical Framework

One of the issues during online learning is students' motivation under the effect of online learning which is an essential factor for all teachers. Motivation is a complex term with a plenty of theories constructed to approach it and provoked some debates in the psychological field. The model employed in the current paper is ARCS model by John Keller (2000) which stands for attention, relevance, confidence and satisfaction as the following table shows in Figure 1. Choosing this model as a theoretical framework is because it has been considered as one of the best models that combined behavioral as well as cognitive theories integrated in the learning process (Moller, 1993).

Review of Literature

2.1 Motivation

Merisotis and Phipps (1999) have accentuated the importance of motivation in progressing in online learning, as the latter requires the skills of self-control, maturity and self-direction so that the learning process is more dependent on the learners to direct themselves. Ryan and Deci (2000) have distributed motivation into two types: Intrinsic and Extrinsic. The former is the motivation originating from the inner feeling of pleasantness toward a certain goal, while the latter is the motivation that is directed to a certain outcome. Gardner and Lambert (1972), on the other hand, have divided motivation into Integrative and Instrumental, as the former is the motivation that directs people to engage in different cultures and languages, whereas the latter is the motivation that pushes people to get into a job or a good level of performance. Cook (2000) has claimed that the latter types of motivation are more needed for learners of foreign or a second language.

2.2 Motivation and Learning

As Skinner and Belmont (1993) have maintained, the learners who are highly motivated are more likely to get involved and engaged in the learning process. Currently, the main aim of teaching is not only improving learners' cognition, but also boosting their learning motivation through seven elements that are listed by Malone and Lepper (1987) which are curiosity, challenge, competition, control, fantasy, recognition and corporation.

In the context of second language learning specifically, the learners' age, personality and motivation are the three factors affecting their learning process according to Cook (2000). Lucas (2020) has claimed that second language learners succeed in learning as they are intrinsically motivated, while Chang (2010) believes that the environment contributes to motivating them to learn.

2.3 The ARCS Model

In order for educators to motivate students, it is required to develop and meet their interest in the material they are learning. One of the best models that can be incorporated in the learning process is ARCS model which stands for Attention, Relevance, Confidence and Satisfaction (Keller, 2008). Attention means learners being engaged in the learning process; relevance is the learners and their experiences being related to what and how they are learning; confidence indicates their expectancy met in the process, and satisfaction is the positive impact the process has on the learners (Ibid). This model as Moller (1993) stated combined behavioral and cognitive theories, thus Keller's aim of establishing such a model is to facilitate coming up with theories and approaches that target learners' cognitive and behavioral abilities through which the four mentioned components are the framework of any instructional design. Moller also indicated that this model considers the learners as being affected by the external and internal rewards in order to maintain their motivation.

2.3.1 Attention

Keller (2010), concerning the first component of the model, has stated that attention is the most significant element among the other three elements of the model. Through attention, learners are concentrating and their curiosity is caught. He has divided attention into three categories: perceptual arousal, inquiry arousal, and variability. As the first one is associated with the change of the environment, the second is related to deepening into learners' knowledge, and the third is related to the variations in the class.

2.3.2 Relevance

Keller (2010) elaborated on this element as the connection of learners' expectations with the learning experience which they should feel familiar with. In order for learners to feel familiar and related, their personal beliefs, interests and personalities must be recognized and their needs be met.

2.3.3 Confidence

Keller (1987) has perceived confidence as learners believing that they are able to accomplish their goals with the help of the instructors in boosting their confidence. He has divided confidence into three sub categories: learning requirements, success opportunities and personal control that mean providing learners with various learning opportunities, challenging them, raising their achievement levels and boosting their self-esteem while giving students self-control over their learning experience.

2.3.4 Satisfaction

Gabrielle (2003) defined satisfaction as being confirmed about the learning experience that can enhance the learners' learning capabilities. Keller (1987) has divided satisfaction into three sub categories which are natural consequences, positive consequences and equity. Learners should be given the opportunities to involve them in the class, utilize their knowledge into the real world and extrinsically being motivated via rewards or verbal praise. Learners also should feel that they are treated equally and there is fairness in the class (Ibid).

2.4 Omani Context

Online learning in Oman has started originally with blended learning along the implementation of Moodle. One study regarding this matter is a quantitative study by Al-Ani (2013) examining the factors effecting Sultan Qaboos University students' achievement in blended learning using Moodle. She found that the level of students' motivation regarding the use of Moodle was around the average as students perceived Moodle as "interesting in tracking lecture notes and reading materials" (p.8). Besides, it helped them develop a positive attitude toward their courses.

Another study that investigated the dimensions of online learning at Dhofar University in Oman is by Syerina Syahrin (2020) who studied the relationship between students' preferred learning style and the implementation of Moodle in online learning. The study found a positive relationship between students' learning styles and technologies used in online learning which consequently affected their motivation toward learning as the researcher concluded in the implications of the research.

Methodology

3.1 Data Collection

- Instruments:

This research considers a quantitative research method.

1. Questionnaire:

A questionnaire via Google Forms, that examines students' motivation, has been formed and sent online via social media.

2. In-depth Interviews:

Students were interviewed individually via Google Meet to be in-depth asked about their motivation during online classes. The interviews were held individually with six students from different academic years to consider the difference in the courses, the professors, and the timing of their classes. Moreover, the six students were from six different governorates in Oman to take into account the difference in accessibility to online classes. Each interview took more than one session of an hour to study their whole learning process and how their motivation were affected by it. As the interviews went deeply into the participants' motivation toward learning online, the questions were semi-structured. There were four main questions examining students' attention, relevance, confidence and satisfaction of their online learning experience. However, the interview was discussion-based with spontaneous sub-questions as interviewees were given the chance to openly talk about the details of their experience without limiting them with a structured interview of limited answers. At the beginning of the interview, interviewees's consent was thought in order to record the interview.

3.2 Participants

The participants of the study include male and female EFL students at the University of Nizwa who have taken online courses during COVID pandemic (2020-2021) or post-COVID (2022) and they are from different governorates in Oman.

3.3 Procedure

In order to investigate EFL students' perceptions on how online learning has affected their motivation toward learning, a questionnaire by Google Forms was randomly distributed online among EFL students as well as some in-depth semi-structured interviews via Google Meet with some of them. The questionnaire provided the general status of students' attitude toward online learning based on their personal experience, yet interviews of open and deep questions will

provide more details and dimensions of the case. Therefore, quantitative research methods used in this paper resulted in findings that are more valid. The standards of motivation incorporated in the questionnaire, as well as the interviews, were based on ARCS model by John Keller (2000).

3.4 Data Analysis

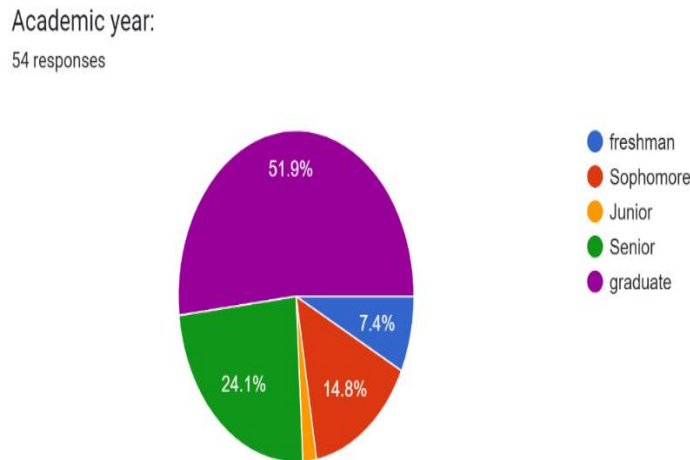
After collecting data from the two indicated instruments, the methodology used to analyze data is content analysis. Thus, the findings from data collection were summarized and then organized into patterns or main points. The findings of the questionnaire were separated from the findings of the interviews and each section was arranged in a content-based manner. However, in the discussion section, the results are discussed according to the ARCS model of motivation.

Findings

4.1 Demographic Data

Questionnaire's Results

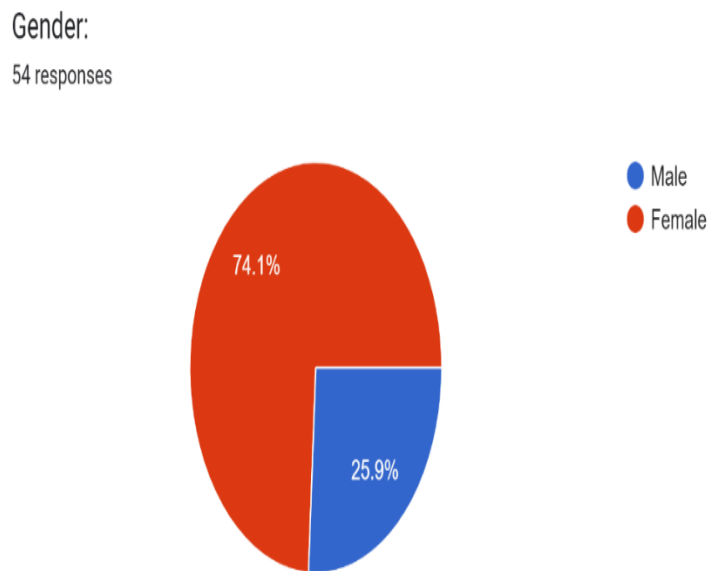
Figure A



Participation based on the cademic Year

Figure A shows that graduating students participated the most with 51.9 percent, which is more than half of the all participants while juniors are the less with 1.9 percent. Seniors come after the graduates with 24.1 percent of the participation which make 27.8 percent difference between the first and the second. 14.8 percent comes the third for sophomores and the forth are freshmen by 7.4 percent.

Figure B



Participants' Gender Distribution

Figure B illustrates the gender of the participants and as it appears in the chart there is a huge difference in the numbers. 48.2 percent is the gap between the two genders as it shows the majority to females by 74.1 percent over the males.

Interviews' Results:

Six online interviews were held via Google Meet with four female students and two male students. Choosing six students out of fifty from different academic years, various regions, and both genders was meant to consider the different factors that can affect the results of how online learning has affected their motivation. There has been more than one session of one hour for

each interviewee to deeply understand the environment they are surrounded by, during online learning.

4.2 Accessibility to Internet

Questionnaire's Results:

Figure C

Internet access at home (type of internet)

54 responses

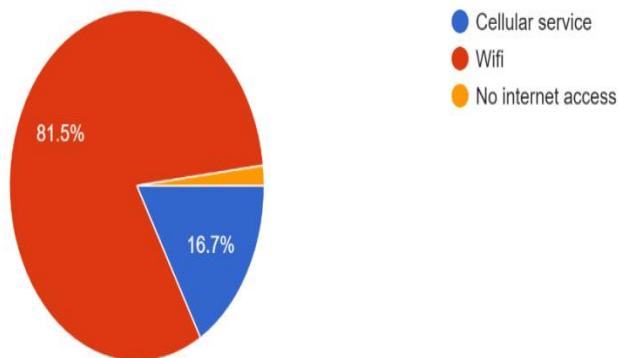


Figure D

The internet speed in your region

54 responses

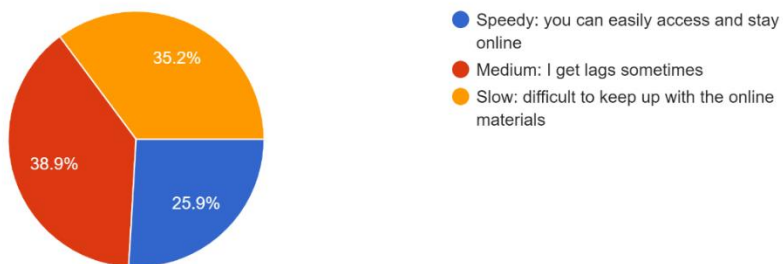


Figure C and Figure D illustrate the type and speed of internet the participants have in their home or while attending online classes. In Figure C Wi-Fi is the most frequently used internet access, 81.5 percent of the participants use Wi-Fi, and 16.7 percent of them use their personal data. Figure D shows that internet is speed in some areas and slow in the other as it shows 38.9 percent of the participants have medium speed, 35.2 percent of them have slow internet and 25.9 percent is speedy.

Interviews' Results:

After questioning their demographic data, a small discussion on their conditions of internet was going on. They have all agreed on the availability of devices through which it made online learning easier. Four of them said that they are using their smart phones to attend classes as it was easy to carry and attend the class in the most comfortable way and in the place they want. Two of them, however, said that they use their laptops as the screen is bigger and made the presented PowerPoint clearer so they are more attentive. However, regarding their accessibility to internet, five of them claimed that the speed of internet was slow to medium as they were lagging during the classes so the sound of the lecturer becomes late, the speech is interrupted and ambiguous and the quality of images is poor. Those lagging cut their attention very often and kept them lose the track of the class. Moreover, the speed of internet made it often difficult when they had to deliver their presentations or submit their exams. That, as they claim, was frustrating and demotivating leading them to stress and lack of confidence despite prior preparations. Speaking of preparation, they maintained that it was hard to come up with a plan B in case internet issues occurred because the only plan was to do it online. That was shaking their confidence as they were anticipating a problem any time during their delivery. Furthermore, the lagging occurred during the class or presentations created a distance between them and the class and in their relationship with their classmates, as they did not get the chance to interact with each other during the class. Therefore, they do not get the feeling of relevance and community in the class. Moreover, the internet issues mentioned above and their effects on their attention during the class and their confidence when delivering presentations or submitting exams were influential on their academic performance leading their GPA to remarkably decrease. Therefore, they are not satisfied with their academic performance in that sense. On the other hand, they raised the point that recorded lectures were satisfying and compensating for the lagging happening during the class and made it useful for them to go back and forth to the class to learn more. Moreover, the flexibility that online learning carries was satisfying.

4.3 Learners' Motivation

Questionnaire's Results:

Attention:

Table: 1

Students' opinion on Attention

No.	Item	Frequency/ Percentage					Mean	Mode	Standard Deviation
		SD	D	N	A	SA			
1.	I really enjoy the class.	8 14.81%	24 44.4%	7 12.9%	12 22.22%	3 5.5%	10.8	#N/A	8.043631
2.	The teacher changes in teaching styles	7 12.9%	21 38.88%	10 18.51%	15 27.77%	1 1.85%	10.8	#N/A	7.628892
3.	There is always change in the class's setting that catches my eyes.	8 14.81%	19 35.18%	13 24.07%	13 24.07%	1 1.85%	10.8	13	6.723095
4.	The class arouse my curiosity.	8 14.81%	23 42.59%	11 20.73%	12 22.22%	1 1.85%	10.8	#N/A	7.968689

According to Table 1 22.22 percent have agreed that online learning is enjoyable and 5.5 percent of them have strongly agreed so if we combined the two of them, it will make 27.72 percent which is 15 learners out of 54 thinks that online classes are enjoyable. On the other hand, the majority of learners disagreed with 44.4 percent, which is more than agree and strongly agree combined. As the same goes for the remaining three statements the majority the learners disagree, 42.59 percent cannot pay attention during online classes and 38.88% of students' perceptual, inquiry arousal and variation is not met. Thus, this leads to no engaging as it shows in the table with 35.18 percent disagree.

Interviews' Results:

In deeply questioning their motivation during online learning, there was a very slight difference between their answers. Beside the internet conditions and their effect on their motivation, there are other factors playing some roles and affecting their motivation too. They have all agreed that their attention was distracted during the class as there was a difficulty on paying their attention only to the meeting when getting notifications from other social media applications, and even when not getting any, they keep opening other platforms while the class meeting is on. Another point is that it was hard to keep attentive as the class was mostly lecture-based rather than interactive and communicative, so there was not much to do except listening to the lecture. Moreover, they were keeping an eye on the microphone and the camera fearing they suddenly open up which was also a distraction from the class. Briefly, the class was boring, there is no scaffolding or questioning by the instructor, there is no change in the perceptual sense.

Relevance:

Table: 2

Students' opinion on Relevance

No.	Item	Frequency/ Percentage					Mean	Mode	Standard Deviation
		SD	D	N	A	SA			
5.	I feel related to the materials covered on online classes.	8 14.81%	23 42.59%	11 20.73%	11 20.73%	1 1.85%	10.8	11	7.949843
6.	I learn the content well from the online classes.	10 18.51%	20 37.03%	12 22.22%	11 20.73%	1 1.85%	10.8	#N/A	6.760178
7.	The class meets my interests.	7 12.9%	21 38.88%	14 25.92%	11 20.73%	1 1.85%	10.8	#N/A	7.496666

8.	Classes consider our different learning styles.	8 14.81%	19 35.18%	7 12.9%	19 35.18%	1 1.85%	10.8	19	7.949843
9.	I communicate with my fellow students	8 14.81%	20 37.03%	7 12.9%	17 31.48%	2 3.7%	10.8	#N/A	7.463243

Table 2 shows that 42.59 percent of the learners do not feel related to the material covered by teachers during online classes and 37.03 percent disagree on learning the content well from the online classes and 18.51 percent strongly disagree. 25.92 percent of the learners agree that the class meets my interests while 38.88 percent disagree. Classes are considered different learning styles: 35.18 percent agree and disagree on this statement 14.81 percent strongly disagree and 1.85 percent strongly agree. 37.03 percent do not communicate with their classmates while 31.48 percent of them agreed that they communicate with their classmates.

Interviews' Results:

Regarding their relevance, as it has been mentioned above, the lecture-based classes created a distance between learners and the class. As a result of not interacting with each other and the lecturer, learners do not feel engaged and related to the class. Furthermore, as the classes are more theoretical, it led to a lack of relevance that learners do not see themselves there and their presence and personalities are not completely acknowledged. Moreover, the content either was on linguistics or literature did not shed a light on the Omani cultures that they can related to.

Confidence:

Table: 3

Students' opinion on Confidence

No.	Item	Frequency/ Percentage					Mean	Mode	Standard Deviation
		SD	D	N	A	SA			

10.	Online classes made me believe I can get good grades	7 12.9%	21 38.88%	12 22.22%	13 24.07%	1 1.85%	10.8	#N/A	7.42967
11.	When I am learning online, I am confident I can pass the course with excellence.	9 16.66%	20 37.03%	11 20.73%	13 24.07%	1 1.85%	10.8	#N/A	6.870226
12.	I take control over my learning process.	8 14.81%	20 37.03%	7 12.9%	18 33.33%	1 1.85%	10.8	#N/A	7.981228
13.	When I am learning online, I am confident I can turn the camera on.	9 16.66%	19 35.18%	12 22.22%	12 22.22%	2 3.7%	10.8	12	6.140033

Table 3 illustrates that 38.88 percent of students disagree that online classes made them believe that they can get higher grades, while 24.07 percent agree that they can get higher marks and 22.22 percent was neutral. When I am learning online, I can pass the course with excellence, 37.03 percent disagree with this statement and 16.66 percent strongly disagree. 37.03 percent disagree with I take control over my learning process but 33.33 percent agree. When it comes to turning the camera on 35.18 percent disagree with turning the camera on and 16.66 strongly disagree.

Interviews' Results:

Regarding their confidence, there was a gender difference; three females out of four have raised the point that the idea of switching their cameras on during meetings or presentations was not comfortable as they do not feel that confident to expose themselves online. Regarding their confidence, five of the interviewees get self-doubting before online exams given that some policies of online exams such as opening the cameras on, not being able to go back and forth between the questions, and the lack of time, made it stressful for them to do well in exams and shook their confidence in their ability to get good grades.

Satisfaction:

Table: 4

Students' Satisfaction

No.	Item	Frequency/ Percentage					Mean	Mode	Standard Deviation
		SD	D	N	A	SA			
14.	I am given the chance to use the knowledge I study in the real world.	7 12.9%	24 44.44%	7 12.9%	13 24.07%	3 5.5%	10.8	7	8.197561
15.	I feel that there is fairness in the class.	8 14.81%	21 38.88%	12 22.22%	13 24.07%	0	10.8	#N/A	7.661593
16.	Considering the good and the bad of online learning, I think I feel satisfied and want to keep	8 14.81%	21 38.88%	12 22.22%	13 24.07%	1 1.85%	10.8	#N/A	7.314369

learning online.									
---------------------	--	--	--	--	--	--	--	--	--

In Table 4, 44.44 percent said that they are not given the chance to use the knowledge they study in the real world. 24.07 percent of the learners believe that there is fairness in the class, but 38.88 percent disagree. Considering the good and the bad of online learning, I think I feel satisfied and want to keep learning online, 38.88 percent disagree and 14.81 percent strongly disagree.

Interviews' Results:

With all the pros and cons of online learning interviewees have raised, they show satisfaction as well as dissatisfaction on this form of learning. They tend to be more satisfied on this form of learning in regards to its easiness, flexibility and comfortability. Interviewees have claimed that, with online learning, they can attend wherever they are, in whatever circumstances they are going through, and go back to the recorded lectures whenever they needed to. However, in regards to their in-class engagement, having an in-class social life and improving academic performance, they do not feel satisfied about online learning and would prefer to go back to face-to-face classes to fix them all.

4.4 Discussion

To compare the findings of this study with the results of the literature review, it can be noticed that there is a clear difference between the two. For example, while Al Ani (2013) found out that students' motivation toward online learning helped them develop a positive attitude toward learning as they found it interesting, this study found out that only 27.6% of students who feel that online learning is enjoyable.

Moreover, the literature shows, in Syahrin's study (2020), that online learning incorporated students' different learning styles which ultimately motivated them to learn, whereas this study indicates that 49.9% of students disagree with the former statement in contrast with 37% who agreed. That being said, some students find online learning beneficial but some others disagree.

Furthermore, Kashoob1 and Attamimi (2021) showed in their study that 74% of students claimed that they are comfortable with online exams, whereas the interviews held in this study indicated that 5 out of 6 interviewees complained that the exams' policies were stressful leading them to losing grades which is also applicable to the questionnaire which shows that 51.78% slightly more than the half are not confident that they can pass the courses. The study, moreover, suggested that 58% of students preferred online learning and would like to maintain attending

them, while this study the current study demonstrated that only 25.92% of students are satisfied with the online learning.

Another comparison that has to be made is with Behforouz et al's study (2021) in which their results showed positive attitude of students toward online learning. One point their study has showed is that the interaction between the students and teachers and the students with each other have remarkably increased which contradicts with the results of this study which suggested that 51.84% think that there was a lack of communication in the online classroom.

Conclusion

In conclusion, the questionnaire as well as the interview reveal that online learning has negative effects on EFL students' motivation at the University of Nizwa. This study researched two questions of the effect of accessibility to internet on students' motivation as well as how the online learning procedures have affected their motivation. Although the learning conditions are mostly positive for the majority of participants in the study in terms of the fact they are able to get access to internet as well as the devices they use to attend classes are available, yet the speed of internet was negative according to them causing consistent lags. Therefore, as the questionnaire and the interviewees have claimed, the consistent lags distracted their attention, made them submit their exams late causing troubles with professors to get their excuses; thus, they are dissatisfied with this form of learning. In terms of the process of online learning, another point to conclude is that most students have indicated that motivation was negatively affected by online learning in terms of enjoying the learning experience, the lack of teacher-student interaction as well as student-student interaction, the lack of related materials and personalized content presented in the class, not considering the different learning styles, the content being mainly theoretical leading to a gap between the knowledge they are learning and the real world. However, the good side participants showed is that the availability of devices helped them learn, and it made them autonomous learners, do research and take more control over their learning.

Suggestions and Recommendations

The results of the same study may vary depending on the learners' mentality and the geographical regions. Furthermore, in order to reach the results with more precision, different types of Motivation should be investigated independently in similar studies.

References

- Al-Ani, W. T. (2013). Blended Learning Approach Using Moodle and Student's Achievement at Sultan Qaboos University in Oman. *Journal of Education and Learning*.
- Behforouz, B., Al Gaithi, A., & Fekri, N. (2021). Omani EFL Learner Perceptions and Motivation toward Online Learning. *Journal of University Teaching and Learning Practice*.
- Chang, L. Y. H. (2010). Group Processes and EFL Learners' Motivation: A Study of Group Dynamics in EFL Classrooms. *TESOL Quarterly*.
- Cook, V. (2000). *Linguistics and second language acquisition*. Beijing: Foreign Language Teaching and Research Press and Macmillan Publishers Ltd.
- Fee, K. (2005). *E-Learning: A Complete Strategy for Design Application and Assessment, London and Philadelphia: Kogan Page*.
- Gabrielle, D. (2003). The effects of technology-mediated instructional strategies on motivation, performance, and self-directed learning. *In EdMedia: World Conference*.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and Motivation in Second Language Learning*. Rowley, MA: Newbury House Publishers.
- Kashoob, M., & Attamimi, R. (2021). Exploring Omani EFL Students' Perceptions of the Newly Adopted Online Learning Platforms at the University of Technology and Applied Sciences-Salalah. *Journal of Education and Learning*.
- Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of instructional development*, 10(3), 2.
- Keller, J. M. (2000). How to integrate learner motivation planning into lesson planning: The ARCS model approach. *VII Semanario, Santiago, Cuba*.
- Keller, J. M. (2008). *First principles of motivation to learn and e3-learning*. Distance education.
- Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York: Springer.
- Lin, M. H., & Chen, H. G. (2017). A study of the effects of digital learning on learning motivation and learning outcome. *Eurasia Journal of Mathematics, Science and Technology Education*.
- Lucas, R. I. (2020). A Study on Intrinsic Motivation Factors in Second Language Learning among Selected Freshman Students. *The Philippine ESL Journal*.

Malone, T. W., & Lepper, M. R. (2021). Making learning fun: A taxonomy of intrinsic motivations for learning. *In Aptitude, learning, and instruction*. Routledge.

Merisotis, J. P., & Phipps, R. A. (1999). What's the difference?: Outcomes of distance vs. traditional classroom-based learning. *Change: The Magazine of Higher Learning*.

Moller, L. A. (1993). The effects of confidence building strategies on learner motivation and achievement. Unpublished doctoral dissertation. Purdue University, Indiana, U.S.

Syahrin, S., & Abdalla Salih, A. (2020). An ESL online classroom experience in Oman during Covid-19. *Arab World English Journal (AWEJ) Volume, 11*.

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of educational psychology*.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*.
<https://doi.org/10.1037/0003-066X.55.1.68>