

## The Implication of Online Learning on the Motivation of Students: (Students of Mohammed First University as a Case Study).

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### ARTICLE HISTORY

Received: 16 /06/2021

Accepted: 25 /07/2021

### KEYWORDS

E-learning, higher education, motivation; Implication.

### Abstract

*Corona virus, a global phenomenon, is considered as a nightmare that has affected people's lives. Covid-19 pandemic has changed the way we live, interact, work, and learn. Many preventions measures come into existence. Indeed, the epidemic of the virus has led to social distancing, quarantine measures, temporary home confinement measures, travel cancellations, and schools closure. In fact, the process of education obviously aims to facilitate learning. The latter has been affected by Covid-19; it influenced the learning process of students and e-learning has become salient; therefore, it has played a vital role in the instruction of students. Thus, the aim of this paper is to investigate the implication of online learning on the motivation of students, precisely the ones belonging to higher education. It takes the students of English department at the Faculty of Letters and Human Sciences of University Mohammed First as a case study. The quantitative research design for the present study is based on an online questionnaire that was used to collect data from fifty one respondents, and eventually analyze the set of data by using SPSS, to examine their mode of motivation throughout the use of e-learning. The findings of the study showed that students favor the authentic traditional mode of learning rather than the unsatisfactory experienced virtual learning; which entails the negative degree of motivation that was, unfortunately, decreased in the e-learning process. Thereupon, e-learning should be used vigilantly and cautiously and its conduct of pedagogies should be advanced and improved more by stakeholders.*

### 1. INTRODUCTION

Throughout the years, encouragement to encompass ICT (Information and Communication Technologies) in the learning experience increases, also due to the flare-up of COVID, an escalating demand for ICT is brought up; neither students nor teachers could be part of the traditional ordinary classes and online learning has become the main part to deliver the new virtual mode of learning<sup>1</sup>. Such change in the learning process affects the involvement

<sup>1</sup> <https://www.ictesolutions.com.au/blog/why-schools-should-invest-in-ict/> Accessed in 20<sup>th</sup> April, 2021.

and the motivation of learners. Motivation is pivotal; it implies the way whereby learners learn. As a matter of fact, a productive instruction or education is the result of a supported motivation, and the more motivated a learner is, the greater their outcome will be<sup>2</sup>. This raises the question about the way in which e-learning, which is of great importance in instructing students in the higher education model, affects the motivation of students towards the process of learning. Does the implementation of e-learning in higher education give learners the chance to be more motivated and progressing positively in the learning experience? Thus, the purpose of this paper is to investigate the correlative and fateful relationship between e-learning and the motivation of learners, precisely University Mohammed First' students by analyzing the adjustment of the learning behavior before and after the implementation online learning. The structure of this paper is as follows. The second section describes the literature reviewed on both e-learning and motivation; eventually, the third section portrays the methodology of gathering the data; then, the fourth section deals with the discussion of the quantitative analysis. Finally, the last section offers a conclusion about the finding of the study.

## **2. LITERATURE REVIEW**

### **2.1. E-learning**

In today's educational system, online learning has become a main topic in education and takes a vital place in the process of learning. Modern techniques and new methods are being used; the shift from the traditional method of learning to the virtual learning. Indeed, e-learning is one of the major technology-based innovations influencing the domain of education<sup>3</sup>. It is believed that e-learning, an advantage is beneficial for both teachers and learners. Though there is a physical separation of the two during the mode of instruction, chemistry exists at a distance<sup>4</sup>. E-learning has been defined from a number of angles over the decades (Sangrà, Vlachopoulos, & Cabrera, 2012; Salayo et al., 2020); the following definitions were given to this concept.

- “E-learning is to take a course online using a modem, wireless, or cable connection to access academic course material from a computer, phone, or handheld device” (Governors State University, 2008).
- “E-learning is the delivery of education (all activities relevant to instructing, teaching, and learning) through various electronic media” (Koohang & Harman, 2005).
- “E-learning is learning based on information and communication technologies with pedagogical interaction between students and the content, students and the instructors or among students through the web” (González-Videgaray, 2007).

However, the definition of e-learning ‘should include four main elements: institutional based, separation of teacher and student, interactive telecommunications, and learning

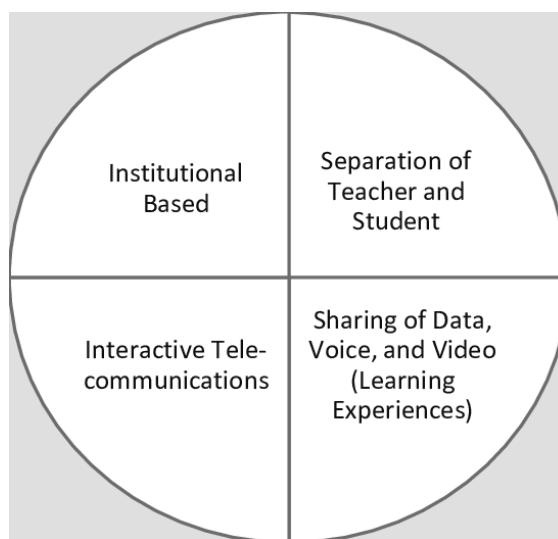
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<sup>2</sup><https://pivotaleducation.com/hidden-trainer-area/training-online-resources/why-is-motivation-so-important-for-learning-success/#:~:text=drives%20behavior%2D%20motivation.-,Why%20is%20motivation%20so%20important%20for%20learning%20success%3F,ands%20to%20learning%20that%20lasts.&text=A%20student%20who%20is%20intrinsically,290>). Accessed in 20th April, 2021.

<sup>3</sup> <https://files.eric.ed.gov/fulltext/EJ1105224.pdf> Accessed in 20<sup>th</sup> April, 2021.

<sup>4</sup> [https://www.jstor.org/stable/25068081?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/25068081?seq=1#metadata_info_tab_contents) Accessed in 21<sup>st</sup> April, 2021.

experiences. If one or more are missing, then the event is different than distance learning.' (Simonson, Smaldino, & Zvacek, 2012, p. 33).



**Figure1.** *The Four Components of E-learning (Simonson et al., 2012, p. 55)*

1. Institutional based: refers to an institution (e.g. a traditional educational school or college) that offer education/instruction to students at a distance. (Simonson et al., 2012, p. 55)
2. Separation of teacher and student: teachers are in one place and students are in another. (Simonson et al., 2012, p. 55)
3. Interactive telecommunications: interaction can be synchronous (at the same time), or asynchronous (at different times). Interaction is crucial; learners should interact with each other, with resources of instruction, and with their instructor. Telecommunications systems refer to the electronic media used, so that learners and their instructor communicate at a distance. (Simonson et al., 2012, p. 55)
4. Connecting learners, resources, and instructors: instructors communicate and interact with learners, and resources are accessible to boost the learning process. Resources should meet the learning objectives. (Simonson et al., 2012, p. 55)

## **2.2. Motivation**

Research about motivation has been always protracted. Investigating and examining motivation is tough due to its correlation with multidisciplinary approaches; a melting pot that is made of different theories and concepts from different angles and perspectives to, hopefully, explain its various aspects<sup>5</sup>.

Actually, the learning progress involves the process of motivation. The latter is part of self-regulated learning; to think whether or not to be successful in the learning process. Motivation that has to do with task involvement is considered a form of engagement (Pekrun & Linnenbrink-Garcia, 2012). Motivation is goal directed (Seo, Barrett, & Bartunek, 2004). One of the influential figures who contributed to the study of motivation is the American educational psychologist John Keller. He is well known for his famous motivational model

<sup>5</sup> <https://www.apa.org/science/about/psa/2018/06/motivation> Accessed in 21<sup>st</sup> April, 2021.

(ARCS) ("Attention, Relevance, Confidence and Satisfaction") (Keller, 1979). According to him (2010), motivation refers "broadly" to "what people desire, what they choose to do, and what they commit to do" (p. 3). It is goal directed (Seo et al., 2004). That is to say, motivation is mainly about what goals persons select to achieve, in addition to the pursuit of these goals. The non-cognitive, or the affective side exists when dealing with motivation. Motivation goes hand in hand with various emotions such as anxiety, allure, attraction, disappointment, inspiration, encouragement, etc.

Another concept that is worth mentioning in this vein is volition, which is intertwined with motivation. Basically, volition is all about the actions that people take in order to achieve a particular goal (Keller, 2010), and includes two phases (Gollwitzer, 1993). Pre-action planning or commitment is the first phase that is portrayed with an initial attraction to the goal, intentions to commitment to the goal, and intentions for action; i.e., planning for action. A strong intention contains both commitment to a certain goal and the plan to achieve it. Self-regulation, or what Kuhl (1984) calls action control theory is the second phase and is made of six strategies: selective attention, encoding control, emotion control, motivation control, environment control, and parsimonious information processing (Kuhl, 1984, p. 125), all of which attempt to protect a person's intentions, staying focused and neglecting distractions.

### 2.2.1. Motivational Model ARCS of John M. Keller



**Figure2.** ARCS Motivational Model of John M. Keller<sup>6</sup>

The figure above represents the ARCS Motivational Model of Keller (1983), which consists of four main elements that are based on a general theory of motivation in relation to learning: Attention, Relevance, Confidence, and Satisfaction. According to him (1983), attention refers to the way whereby the instructor attempts to grasp, conduct, control, and guide the attention of the learner, and this is done through the utilization of clues and instruction to make learners being focused on the curriculum or the stimuli that meets the learning objectives. Being sure that the process of learning is personally relevant and appropriate for students also matters; learners should be "convinced that they can learn the content and experience actual success on an assignment" (Keller, 2010, p. 46). There should be a plan for the materials of the

<sup>6</sup> The figure is retrieved from <https://educraft.tech/arcs/>. Accessed in 21<sup>st</sup> April, 2021.

learning process<sup>7</sup>, in addition to a positive atmosphere that involves a valuable demeanor and performance of the instructor in order to make learners aware of the instructive content that is fruitful and contains an added value. Experiencing the success is part of the third motivational element, confidence. Learners should climb up the ladder of success. If the instructor accomplishes these first three motivational elements, students will, for sure, be excited and have the motivation to learn. To do so, learners “must have feelings of satisfaction with the process or results of the learning experience” (Keller, 2010, p. 46). Satisfaction is associated with extrinsic and intrinsic factors. The former refers to grades, certificates, and other material rewards. The latter refers to the developed feeling of self-satisfaction, expertise, and capability.

The following table summarizes the function of the four motivational components.

Major Categories	Definitions	Process Questions
Attention	Capturing the interest of learners; stimulating the curiosity to learn	How can I make this learning experience stimulating and interesting?
Relevance	Meeting the personal needs/ goals of the learner to effect a positive attitude	In what ways will this learning experience be valuable for my students?
Confidence	Helping the learners believe/ feel that they will succeed and control their success	How can I via instruction help the students succeed and allow them to control their success?
Satisfaction	Reinforcing accomplishment with rewards (internal and external)	What can I do to help the students feel good about their experience and desire to continue learning?

**Table1.** ARCS Model Categories, Definitions, and Process Questions. Adapted from Keller (2010: 45).

### **3. METHODOLOGY**

As an attempt to answer the beforehand notes, from 51 respondents, the data were collected, and eventually analyzed, by means of a questionnaire. It is preferred to rely on the latter due to the nature of the questions asked. Questionnaire is considered as one of the best quantitative tools for collecting data related to some aspects such as attitudes and perceptions of individuals, which basically are not easy to observe (Selinger & Shohamy, 1989; Alan Bryman, 1989). Eliciting data from participants with an instrument where their identities will be invisible, guaranteed gathering honest and reliable data. The questionnaire contained 10 questions all of which can be considered as complementing one another. The questionnaire was written in English and distributed in online form to Mohammed First University students (English department).

<sup>7</sup> While designing the course, you, as an instructor, should ask yourself two main questions: “what will you do to make the instruction valuable and stimulating for your students? Second, how will you help your students succeed and feel that they were responsible for their success?” (Keller, 2010, p. 46).

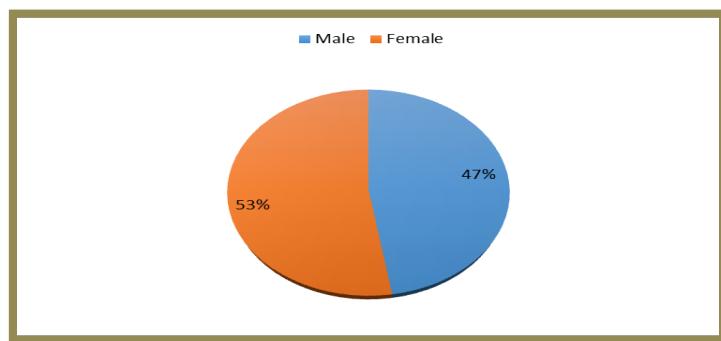
Most importantly, the participants were previously informed about the nature of the study. Furthermore, all participants were assured that the questionnaire was confidential and that no identifying or personal information would be included in the study. They were also assured that the information they provide would be used to fulfill the aims of the research only. The collected data will be analyzed and described in the following section.

#### 4. RESULTS

This study particularly focuses on university students, who belong to the English department, by analyzing their progress of motivation after implementing online learning; in addition, the four motivational components in the new mode of learning are examined, namely attention, relevance, confidence, and satisfaction.

##### 4.1. Gender

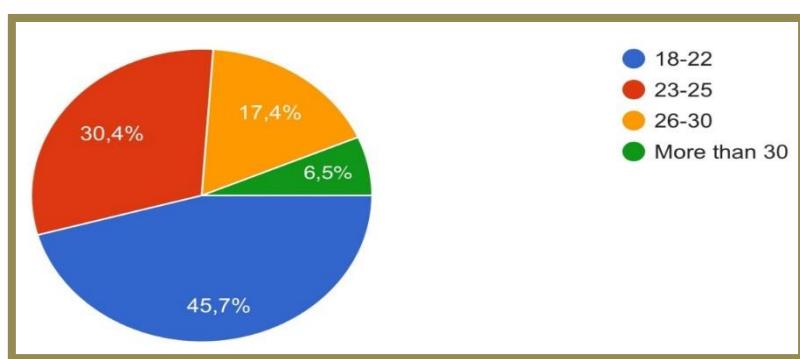
Of the 51 participants, 27 are female and 24 are male.



**Figure3.** *The Gender of Students*

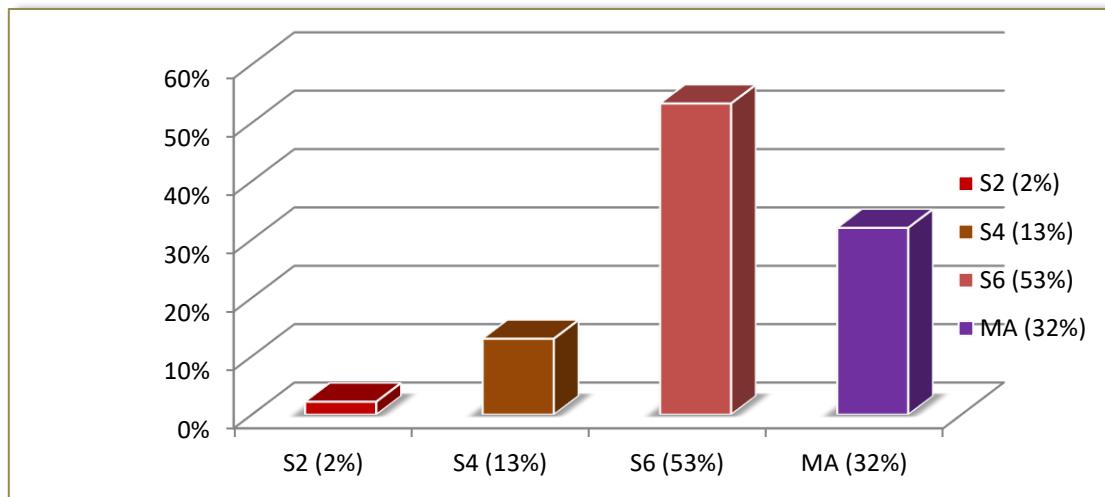
##### 4.2. Age

The participants who responded to the questionnaires are of different ages. To account for the variable of age, it was divided into four categories: the first category includes participants who are between 18 and 22 years old; the second category includes participants between 23 and 25; the third category involves participants whose age is between 26 and 30 years old; and finally the fourth category involves participants whose age is above 30. The following figure illustrates this variable in percentage.



**Figure4.** *The Age of Participants*

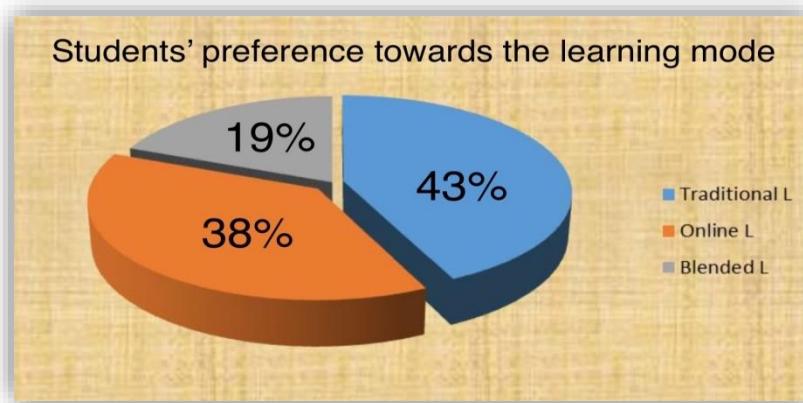
##### 4.3. Enrollment



**Figure5. Students' Enrollment**

As the figure above illustrates, most of the students (53%) are enrolled in the sixth semester; (32%) are master students; (13%) are enrolled in the fourth semester; and only (2%) belong to the second semester.

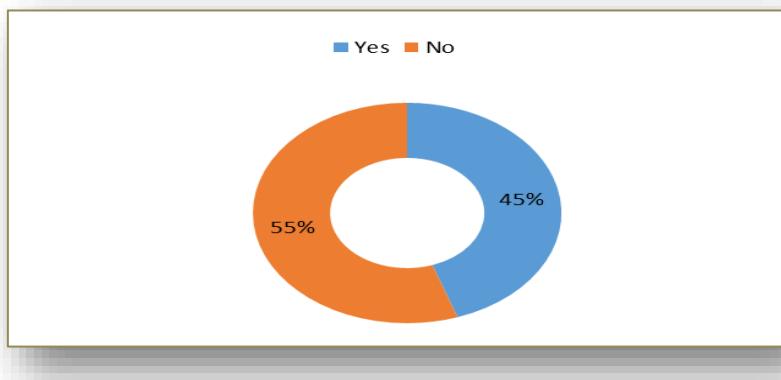
#### **4.4. E-learning vs. Face-to-Face Mode**



**Figure6. Students' Preference Towards the Learning Mode**

Throughout the figure above, there is a slight difference between the preferences of students towards the two learning modes; 43% of learners prefer the traditional manner; “Being in the class encountered by classmates makes me more focused and productive.”, “The teacher is present and active, which is helpful for me to better understand the lesson.”, “Nothing can replace the face to face learning; the interaction between students/teacher, class motivation and atmosphere...”, “It is more practical.”, and 38% of students like to opt to study virtually; “I prefer e-learning but it has to be done right!”, “I am not bounded to any specific timetable, I can study whenever and wherever I want to.”, “It is money consuming.”. In the meantime, 19% of students prefer the two; “Blended learning is much better”, “Both online and traditional learning have their perks. So, it is the best way of learning!” combining the two modes to meet the different learning styles of the students.

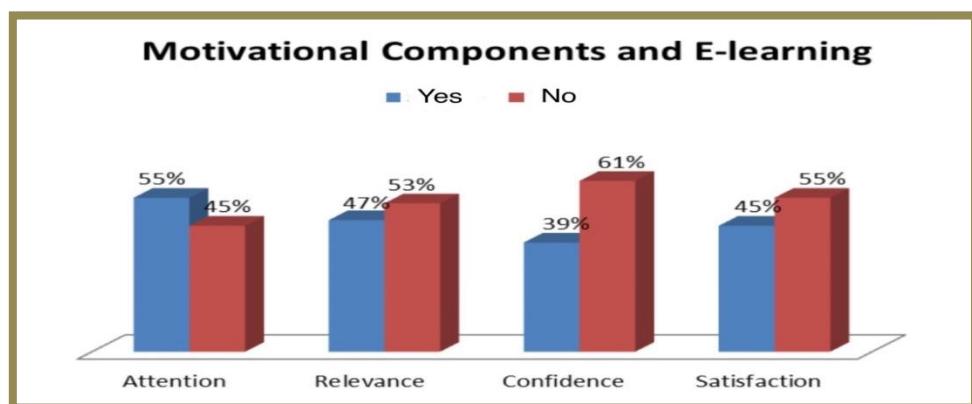
#### **4.5. The progress of motivation in the deliverance of the e-course**



**Figure7.** *The Increase of Motivation During the E-course*

As an attempt to investigate the progress of motivation, learners were asked if their motivation has changed increasingly during the e-course. Unfortunately, 55% of students have claimed that their motivation decreased; “My motivation is to look onto teachers’ eyes, discuss issues with students, sharing my work, asking, listening to develop my skills and language.” “The class’s atmosphere is irreplaceable for me since the e-learning was only via PDFs and not online meetings” “I was really bored... lot of noise.” “...network problems!” “Many hindrances, like poor connectivity and unfamiliarity of both instructors and students with ICT, didn’t allow our motivation to increase.”, while 45% of learners have stated the contrast; “I don’t waste time and energy in transportation anymore.”, “I am a shy student and thanks to e-learning I started answering every question, and that gave me the courage to do it in the future face-to-face learning.”.

#### 4.6. Attention, Relevance, Confidence, and Satisfaction



**Figure8.** *The Progress of the Four Motivational Elements in E-learning*

As it is obvious from the figure, most of students (55%) find that the e-learning experience is interesting; “It is interesting and good for the students who cannot attend to the lectures because of their circumstances. Just the website needs to be fixed; it doesn’t work sometimes.” “While studying virtually, I used to search more than in the face to face mode.” “I learn new techniques and know about different platforms.” “As a new way, it was nice to experience it!” “It is a kind of positive educational change.” so students are obsessed with the new mode of learning and curious to try it and be part of it. The rest of students (45%) admit that their attention was not grabbed “The worst experience...no lesson’s explanation, no meetings, no way to reach teachers... I was lost.” “...boring and stressful for me...I was pressed a lot.”

To investigate the students' attitudes toward relevance, they were asked if the e-learning experience is valuable for them, which allows them to have a positive attitude. As it is clearly shown in the figure, (53%) have a negative attitude towards the second motivational element; unfortunately, distance learning is irrelevant for them. "Lack of organization from the university administration.", "Teachers and students face difficulties with technological devices.", "It is less valuable, no longer relevant...it demands private zone to study, which I don't have..." "...low quality of voice and image." Still, 47% admit their positive attitude towards the relevance of the new experience; "I think every new experience is valuable!" "I appreciated the efforts teachers made and tried to explain lessons.", "I could still get information and attend e-classes."

As for the third motivational component of confidence, as the figure shows, the majority of students (61%) could not feel that they will succeed and control their success; "Lessons were uploaded a month before the exam without explanation, so it was hard to understand, learn, practice, and evaluate my progress.", "I am always worried that I am not doing enough effort.", "You can't keep track of what is being taught during the course, especially if there is no continuous interaction with the instructors.", "I had to study with no feelings.", whereas (39%) are optimistic about their results; they can pass their exams after experiencing the virtual learning.

Students were asked if they feel good about the e-learning experience also if they have the desire to continue learning and this represents the last motivational element; satisfaction. Basically, 55% are not satisfied with the implementation of the new mode of learning, they don't have the good feeling about their experience and this, in turn, reflects and affects their desire to continue learning; "Educators can't just upload Microsoft word, PowerPoint and PDF documents then put them online and expect the same or better results as the traditional learning.", "I suffered from many physical and mental illnesses that pushed me to just pray that semester ends the sooner possible.", "Studying at home makes you lose desire to study.". Meanwhile, 45% express their satisfaction towards the e-learning experience.

## **5. DISCUSSION**

Success in the learning process is linked to the extent to which the student is motivated. Still, motivation is subject to change and can be affected by a number of factors, either positively or negatively. E-learning is one of these factors, which influences the learner's level of motivation. Pursuant to the results of the quantitative study, the respondents recognize the traditional mode of learning as irreplaceable and the virtual learning as insufficient and inappropriate for the satisfaction of their performance. For this reason, the implementation of online learning influences the degree of motivation negatively, which was decreased in the e-learning process. Nevertheless, uploaded presentations that are downloaded on the platform of the faculty and the lack of teacher-student interaction, which e-learning prevents, lessen students' determination, motivation, and willingness to learn effectively, exchange ideas and information, share and build knowledge, and interact directly in an authentic environment. Thus, the switch to online learning is not well possessed and properly mastered; not to forget the category of teachers and students who don't even know how to effectively deal with online learning platforms. In such a manner, more attention should be directed to the delivery of the e-learning mode and the conduct of pedagogies should be redesigned and remodeled in the Moroccan context.

## **6. CONCLUSION AND FURTHER RESEARCH**

Covid-19 has forced rapid improvisation and adoption of online teaching. What the students have experienced is not a real e-learning. Students like to opt for the authentic traditional mode of learning rather than the unsatisfactory experienced virtual learning. According to the findings of the quantitative study, e-learning experience is displeasing for students; students have admitted their unsuitability, discontent, low level of agreement, and unfavorable feedback towards the new mode of education, which affect negatively their degree of motivation in the learning process. Such transition of teaching and learning methods should be reconsidered and retaught; policymakers have to boost and enhance the procedure and the conduct of pedagogies since online learning in the higher education model is still in its inceptive outset.

Although this study has provided insights into the concept of e-learning and its impact on the motivation of students, it has thrown up many questions in need of further investigation. Firstly, more research is needed to determine the extent to which students' perception of e-learning mirrors their practice of it. Secondly, when this research investigated students' perceptions of e-learning as well its effects, it was only for the sake of supplementing and explaining data from students. However, focusing only on data from students cannot account for all the issues of e-learning. With this in mind, a comprehensive study, incorporating a particular research design and larger sample size, to investigate the way teachers perceive online learning would be of much value. Another possible area of future research would be to investigate student self-reliance in the process of e-learning, and its effects on their performance. Finally, considerably more work will need to be done to determine the extent to which online learning needs to be controlled by pedagogical guidelines.

## 7. LIMITATIONS

Clearly, this study has come out with interesting findings about online learning and students' motivation; however, a number of important limitations need to be considered. On the one hand, the most important limitation lies in the fact that the sample size was too small for making a clear generalized statement about the status of online learning in Moroccan higher education. With a larger number of participants, it would have been possible to obtain more valuable, more certain and clearer findings. On the other hand, the research findings of this study were limited by the inherent limitations of the research instrument used to collect data. To explain, this study adopted only one instrument; namely, online questionnaire. However, while it could have been more beneficial to carry out a decent number of interviews and virtual learning observation so as to increase the possibility of generating less biased results.

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## **AUTHOR'S BIO**

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***Sanae El Hadef is a Ph.D. student in applied linguistics concentration at Mohammed First University. Her current research interests mainly lie in pragmatics, and she is working on her thesis that focuses on the pragmatic implications of speech act theory and linguistic politeness theory in the Moroccan context.***

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