# Investigating The Motivations For Hybrid Learning in Egypt: A Focus on Self-Determination Theory

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#### **ABSTRACT:**

This paper seeks to gain familiarity with how blended learning lectures are conducted in Egypt during post-COVID-19 era. The focus will be assessing the Self-Determination Theory (SDT) to determine the motivations for using hybrid learning in higher education. It uses qualitative research approach to gain insights from instructors on their approaches to teaching students during the post COVID-19 era. A structured face-to-face interview was undertaken with 55 interviewees across all faculty positions. Once the needed data was collected, content analysis was conducted with the software Nvivo<sup>12</sup> to determine the themes and ideas. This study suggests that universities should focus on the self-determination theory to motivate faculty. Finally, this present study adds insightful to the literature focusing on various motivation can be triggered to encourage

hybrid learning usages among faculty. This study also supports the theory of self-determination of motivation in the higher education field in Egypt and among the post-COVID-19 era.

**Keywords-** Intrinsic Motivation, Extrinsic Motivation, Amotivation, Self-Determination Theory and Hybrid Learning.

# دراسة دوافع التعلم الهجين في مصر: التركيز على نظرية تقرير المصير

### الملخص:

تسعى هذه الورقة إلى التعرف على كيفية إجراء محاضرات التعلم المدمج في مصر خلال فترة ما بعد كوفيد .19-سيتم التركيز على تقييم نظرية تقرير المصير (SDT)اتحديد دوافع استخدام التعلم المختلط في التعليم العالي ويستخدم منهج البحث النوعي للحصول على رؤى من المعلمين حول أساليبهم في تدريس الطلاب خلال حقبة ما بعد كوفيد .19-تم إجراء مقابلة منظمة وجهًا لوجه مع 55 شخصًا من جميع وظائف أعضاء هيئة التدريس وبمجرد جمع البيانات المطلوبة، تم إجراء تحليل المحتوى باستخدام برنامج Nvivo12 لتحديد المواضيع والأفكار وتقترح هذه الدراسة أن الجامعات يجب أن تركز على نظرية تقرير المصير لتحفيز أعضاء هيئة التدريس أخيرًا، تضيف هذه الدراسة الحالية أفكارًا ثاقبة للأدبيات التي تركز على الدوافع المختلفة التي يمكن تحفيزها لتشجيع استخدامات التعلم المختلط بين أعضاء هيئة التدريس كما تدعم هذه الدراسة نظرية تقرير المصير للتحفيز في مجال التعليم العالى في مصر وفي فترة ما بعد كوفيد .19-

الكلمات المفتاحة :الدافع الجوهري، الدافع الخارجي، التحفيز، نظرية تقرير المصير والتعلم الهجين

#### 1- Introduction

In the present time, after COVID-19 pandemic, higher education has been transformed by technology to better meet students' unique learning needs and styles, especially if forced to stay at home due to any reason such as social distancing, climate crisis, or war situations (García-Morales et al., 2021; Bashir et al., 2021). These advanced technologies and innovations have changed how and where faculty and students study, from learning management systems (LMS) to adaptive learning software and video conferencing (Haleem et al., 2022). It has created Bended-Learning initiatives... to be an effective innovation in teaching and learning (Kintu et al., 2017, p.1). The term "blend" means a homogenous a mix is more lumpy and more chunky fruit salad than a blended smoothie; and it becomes a routine for campus-based online/virtual learning environment to be used to provide additional notes and materials supporting Traditional Face-to-Face (TF2F) lectures (Fleck, 2012, p.399).

For more than a decade, many higher education institutions have successfully integrated virtual environment and educational technology into their curricula in the past. Furthermore during the pandemic, all higher education institutions were forced to use Information Communication Technology (ICT) in order to continue and sustain education during the crisis (Wahab, 2020; Aristovnik *et al.*, 2023). During that time, much higher education institution adopted various technologies and online techniques for teaching; however, it was done all of a sudden, without previous

training and orientation among staff. Staff were not ready, yet were required to apply the technology. Nowadays, virtual learning environment is important for higher education institutions to allow students to continue learning regardless of the situation is a safe manner during periods of disasters or instability. According to a global research survey, almost nine out of ten higher education institutions used a blended learning model in the fall of 2020 (Thomas *et al.*, 2021). Salman and Soliman (2023) pointed out that virtual teaching was implemented, improved, adjusted and enhanced in Egypt during the experience the acceleration to online caused by the pandemic disrupted of COVID-19, the physical classroom setting overnight forcing the entire sector at all educational levels to shift to virtual learning.

Today, though, many of the institutions applied physical learning again with virtual as mixed education approaches; other staff, stopped using virtual approaches; and others are staying away from traditional approaches (as it is easier, faster, reaches wide number of students and enriches education). Thus, this study seeks to understand what are the motives for staff in developing specific educational approaches, especially the usage of digitalization. This study seeks to determine the factors and sub factors that lead to intrinsic and extrinsic motivation. Accordingly, it is important to recognize the concepts of mixed learning and be prepared to adopt and refine these frameworks to achieve learning outcomes as reopening guidelines for higher education institutions continue to

develop in progressing the education experience.

The study investigated the motivations of Hybrid Learning (HL) context using the Self-Determination Theory (SDT) framework of motivation, which was first established by Deci and Ryan in 1985. SDT was exponentially increased in creating a need to examine instructors' teaching motivation according to the motivations of HL. Much of this research also focused on instructors' motivation in higher education using the HL method (Thanasi-Boçe, 2021; Harlen & Crick, 2003). There is no available research on the motivations of hybrid learning in higher education with no research model exists (Ibrahim & Nat, 2019). Therefore, the research study has examined the process by which the acceptance of hybrid learning on specific teaching behavior could influence instructors' motivation in higher education.

#### 2- Literature Review

Nowadays, the advanced development of Information Communication and Technology (ICT) has been accompanied by a significant increase of the number of virtual learning course offerings available for instructors' and learners' motivation in Higher Education (HE). Past educational literature has examined instructors' and learners' behaviors that might be effective in promoting virtual learning through the use of motivation. Motivation plays a role in the virtual learning environment. Virtual learning environment has great potential in motivating instructors in multiple learning environment contexts.

Furthermore, Lim (2004) pointed out, motivation has been a critical factor that affects learning environment. On the other hand, Jones & Issroff (2005) stated that virtual learning has not received commensurate attention regarding of motivation. Motivation should be taken seriously in the Hybird Learning (HL) environment. The following paragraphs seek to explain how motivation occurs with the use of the self-determination concept. The literature applies this concept on hybrid learning, which is explained below.

# **2.1 Self-Determination Theory (SDT)**

SDT is meta theory of motivation that assumes an individual's behavior is an active organism which is determined by three universal basic physiological human innate needs (Deci & Ryan, 1985). First, the need for autonomy is defined as an individual's free will to engage in activities, and be the agent of his/her actions (Koka & Hagger, 2010). For example, instructors who are using virtual classroom tasks are experiencing of enjoyment and pleasure to watch and monitor their learners' accomplishment for better results. Secondly, the need for competence refers to the desire to feel efficacious and capable of achieving desired outcomes activity, and it is not necessarily defined as an innate need (Verstuyf et al., 2012). Fischer & Rustemeyers (2007) highlighted that instructors can promote competence when they focus on learners' effort and rely on an individual's human own abilities and past performance in evaluating learners' work/outcome. Thirdly, the need for

relatedness is when individual behavior has a desire to feel connected to other people when engaging in activities (Koka & Hagger, 2010). For instance, relatedness is when instructors are feeling the experience of a good relationship with their learner; it means providing acceptance and having mutual respect. An increase in the satisfaction of autonomy, competence and relatedness shows an increase in the self-determination of tasks. It also underlines the concept of Intrinsic Motivation (IM), Extrinsic Motivation (EM) and Amotivation (AM) (Deci & Ryan, 1985; 2000).

Many individuals experience lack of motivation. AM is defined as lack of motivation or intention to act in activities. AM refers to non-self determination, and it results from not valuing a task (Ryan *et al.*, 2006). Ryan & Deci (2002) mentioned that amotivation is an individual behavior acting through the motions with no intention to do what one does. For example, instructors who are suffering lack of intention to teach could be affected by lack of teaching materials or resources. Nevertheless, this is not common among humans. Usually people develop a higher percentage of motivation then it lacks of existence.

Motivation can be distinguished into intrinsic motivation (IM) and extrinsic motivation (EM). Motivation is to perform an activity for its own sake, which refers to the individual in experiencing the pleasure, interest, enjoyment and satisfaction inherent in the tasks, is called intrinsic motivation (Deci *et al.*,

1989). The three universal basic needs are satisfied by intrinsically motivated behavior (Wilkesmann & Schmid, 2014), which means that individual who feels intrinsically motivated must be satisfied by these three universal needs. For instance, learners study history for the reason of knowing information about the past history (Breen & Lindsay, 1999).

# 2-1-1 Self-Determination Theory: Intrinsic Motivation

Intrinsic motivation may be divided into three subtypes: intrinsic motivation to know, intrinsic motivation toward accomplishment and intrinsic motivation to experience stimulation. Pelletier *et al.*, (1995) classified that intrinsic motivation to know is performing an activity for pleasure and the satisfaction of learning, exploring, or trying to understand something new. Intrinsic motivation toward accomplishment is engaging in an activity for the pleasure and satisfaction experienced when one attempts to accomplish or create something. Intrinsic motivation to experience stimulation occurs when someone engages in an activity in order to experience stimulating sensations derived from one's engagement in activity.

# 2-1-2 Self-Determination Theory: Extrinsic Motivation

Extrinsic motivation can be defined as the motivation to perform an activity undertaken for reasons other than inherent interest in the activity (Deci & Ryan, 1985). For example, learners are willing to acquire information and knowledge in order to obtain higher or better reward, as grades (Breen & Lindsay, 1999).

Extrinsic motivation is broken into four subtypes: integrated, introjected and external regulations. identified. Integrated regulation refers to a behavior which involves not only valuing the behavior, but also bringing it in to harmony with one's other goals and values (Verstufy et al., 2012). Sometimes, integrated regulation is not mentioned in the literature, as it may be more related to IM. Identified regulation refers to the process through which individual behavior recognizes and accepts the underlying value of a behavior or activity (Deci & Ryan, 2000). Introjected regulation refers to individual behavior resulting from internal pressures, as the pursuit of contingent self-worth or feelings of guilt and shame (Ntoumanis & Standage, 2009). External regulation means the individual behavior to perform a task in order to obtain rewards or to avoid negative consequences, such as punishment (Levesque et al., 2007). External and introjected regulations are forms of non-self determined EM, while identified and integrated regulations are forms of self determined EM (Vlachopoulos et al., 2011). Extrinsic and introjected regulations are low degrees of self-determination and are called controlled motivation (Ntoumanis & Standage, 2009), while integrated and identified regulations are levels of high self-determination, and are referred to as autonomous regulation (Levesque et al., 2007). For example, individuals with lesser degrees of self-determination tend to be oriented more toward pressure and social expectations in their environment (Vansteenkiste et al., 2010).

# 2.2 Definition of Hybrid Learning

HL is a term frequently used in the literature, but as to data, there is no consensus about a standard definition. In the current study blended learning (BL) took the form of a mixture of traditional face-to-face classroom environment and e-Learning, including asynchronous (non-real time interaction) and synchronous (real-time interaction) learning environments. In the virtual learning environment, Gerbic (2011) refers to BL method as simple and complex concepts: the simple concept is the mixture of traditional learning with virtual learning experience, while the complex concept is when instructor uses the blended learning method within several educational settings, including learners, regulations, outcomes and local conditions.

The study of Makhdoom *et al.* (2013) underlined the benefits of hybrid learning, which are enhancing perceptions of educational environment, problem solving, critical thinking, decision-making skills and clinical skills, and knowledge gain by standardizing. Wu & Huang (2013) pointed out that the uses of virtual learning tools' advantages are improvements in learners' attitude, instructor-learner interaction, learner learning experience, and individual learner's learning flexibility. In addition, Osguthorpe & Graham (2003, p.231) stated six opportunities for designing hybrid learning method, including pedagogical richness, access to knowledge, social interaction, personal agency, cost effectiveness and ease of revision.

This study seeks to focus on the Egyptian context, as the country strategic plan is to be a "Digital Egypt 2030". Afifi (2011) mentioned that Egyptian universities are facing some opportunities regarding e-Learning method, which are easing off the overloaded classes in the Egyptian universities, flexibility in respect of time of learning, enhancing the students' ability regarding acquiring knowledge by themselves, improving information retention, delivering education for local students in remote areas, increasing the number of enrolled international students, reducing costs of education per student and serving students with special needs. On the other hand, there are some challenges that might be revealed in order to adapt hybrid-learning concept. Alnemrat et al. (2023) stated in their study that some academic systems are still in their early stages of implementation the virtual education especially in Jordanian schools and universities have very limited access to virtual environments. Moreover, instructors mentioned some concerns toward virtual learning that must be taken into consideration when adapting hybrid learning, such as loneliness and isolation, lack of motivation, poor communication, fear of online communication and lack of guidance (Hanisch et al., 2011; Arakawa et al., 2023).

In this study, the researcher has explored some of the above motivations of hybrid learning which are more related to the instructor's point of view. These motivations have been demonstrated form the SDT framework of Deci and Ryan. It means that the opportunities for hybrid learning from instructors' perspectives are divided into intrinsic motivation and extrinsic motivation, while the challenges include amotivation.

# 3- Research Methodology

This research study conducted structured face-to-face interviews. A structured interview is when all the interviewees are asked the same questions in the same order with the aid of a formal interview schedule (Bryman, 2008). The sampling of the interviews was convenience sampling; the researcher visited various private universities (as they have the infrastructure and capabilities to provide digital education) to ask teaching staff about their experiences using technology- mixed learning or pure virtual learning.

The data collection was conducted in Spring Semester between February to November 2021 (after the COVID-19 era as education was then turned optional to be conducted purely online). Participants received brief information about the interview topic before hand. They were invited to participate in the interview to express their own thoughts and work experience about the BL method. Interviewing was used to measure demographic information, intrinsic motivation, extrinsic motivation and amotivation along with basic psychological human needs believed to influence the instructors to accept the motivations of hybrid learning. The interview schedule was based on the participants.

The interview transcripts were standardized for NVivo<sup>10</sup> software format package: the questions were in bold text and the

response in normal text according to the software design. This study used the NVivo<sup>10</sup> to analyze the qualitative data method for four purposes, according to Hoover & Koerber (2011). First, it provides the best balance of ease of use and power. Second, it provides the user with handling multi-media. Third, it provides the user with better support of PDF documents. Fourth, it is easier to learn than ATLAS.ti. MAXQDA is a cheaper software package than Nvivo<sup>10</sup>. In content analysis, similar data were unified around specific terms and themes and were arranged and interpreted, for the readers to understand (Ural & Kılıç, 2006).

55 instructors agreed to be interviewed. respondents who participated in this survey, 73% (n=40) of them were from Greater Cairo, 27% (n=15) were from Alexandria as shown in Table 1. Gender was distributed fairly and evenly among the respondents of this survey: 62% (n=34) were male and 38% (n=21) were female. In the terms of age range, approximately 9% (n=5) of the respondents were below 21-30 years, 18% (n=10) were 31-40 years of age, 55% (n=30) were 41-50 years of age, 13% (n=7) were 51-60 years of age and 5% (n= 3) were 61 or older. In addition, the faculty positions were divided into Professors 7% (n=4), Associate Professors 11% (n= 6), Assistant Professors 73% (n=40) and Teaching Assistants Finally, it also displays the number of years of 9%(n=5). teaching experience for the study sample, revealed that 9% (n=5) of the study samples were less than 2 years of teaching experience at the University. Moreover, 2% (n=1) of faculty members were 2 to 4 years of experience, 73% (40) of faculty members were 5 to 7 years of experience and 16%(n=9) were 7–10 years of experience

**Table 1: Basic Demographics of Respondents** 

Characteristics	Freq.	%		Freq.	%
Location			Gender		
Greater Cairo	40	73%	Male	34	62%
Alexandria	15	27%	Female	21	38%
Major of study	Freq.	%	Age	Freq.	%
Media	10	18%	Below 21-30 Years	5	9%
Medicine	11	20%	31-40 Years	10	18%
Engineering	13	24%	41-50 Years	30	55%
Management	19	35%	51-60 Years	7	13%
Other	2	4%	61 Years and Above	3	5%
Years of experience	Freq.	%	Faculty Position	Freq.	%
Less than 2 years	5	9%	Teaching Assistant	5	9%
2 to 4 years	1	2%	Assistant Professor	40	73%
5 to 7 years	40	73%	Associate Professor	6	11%
More than 7 Years	9	16%	Professor	4	7%

**Note: Freq.=Frequency; %=Percentage** 

#### 4- Results

In the interview, the researcher began with open-ended questions related to what are the benefits of using online mechanisms for teaching. The staff all agreed that virtual learning has become an important and helpful resource to educators and classroom teachers, connecting a new model of knowledge sharing in the learning experience and providing students to possess tools to learn at their own pace, expanding teaching resources and time.

The next group of questions focused on intrinsic motivation. Based on the discussions with the instructors, being intrinsically motivated means that the staffs are going to undertake a task for its own sake, for the satisfaction it provides or for the feeling of achievement and self-actualization. Virtual learning has simplified the education process to the learners and thus, made staff motivated to use these methods of education and technology. When it comes to intrinsic motivation, the staff have mentioned and pointed out several sub-factors of intrinsic motivation. Table 2 illustrates the significant intrinsic motivation factors.

**Table 2: Intrinsic Motivation** 

Intrinsic Motivation		Ranking	NR	%
1.	Overall Learning Mood	1	54	98%
2.	Flexibility in Use	2	53	96%
3.	Time Management	3	51	93%
4.	Social Interaction	4	30	55%
5.	Ease of Use	5	23	42%
6.	Geographical Audience	6	20	36%

Note: NR=Number of Interviewee Responders; %=Percentage.

The next category of questions focused on extrinsic motivation. The interviewees mentioned that when it comes to salaries, teaching online was similar to teaching in a physical setting. However, the reward to virtual education came from teaching more classes in different geographic locations (this increased supplementary salaries). Furthermore, online education aided the staff to get more training to educate themselves further without leaving their homes. With these trainings, they registered for promotions to get higher academic ranks. Thus, the extrinsic motivation that were mentioned by the staff are illustrated in Table 3

**Table 3: Extrinsic Motivation** 

<b>Extrinsic Motivation</b>	Ranking	NR	%
1. Reward-Higher Wages and Incentives	1	44	80%
2. Reward-Higher Position	2	30	55%
3. Extra Working Hours	3	29	53%
4. Reward-Knowledge	4	20	36%

Note: NR=Number of Interviewee Responders; %=Percentage.

Based on the analysis, the Egyptian university staff in higher education was more motivated to use virtual learning due to intrinsic motivation. This supports the findings of Wilkesmann & Schmid (2014); they highlighted that instructors were considered to be highly intrinsically motivated to teach as well as to do research studies, and this for the purpose of enduring the pressures and imponderables of achieving successful academic careers. The current research assumes that this is the conclusion because during COVID-19, they needed a safe manner to do their jobs. Online approaches made them feel safer and hold inner peace with the situation. They were able to do their jobs in an environment that made them productive as much as possible in the crisis situation.

#### 5- Discussion

In this study, the findings support and build on the evidence of research in problems instructors encountered in adaptation of the hybrid learning. It also shows a significant effect of hybrid learning on many domains of instructors' motivation in the educational environment. Broadly, The respondents indicate that instructors face significant motivations in adapting and accepting the hybrid learning method. The results are in agreement with those of other studies on the motivations of hybrid learning, which showed that instructors' motivation was increased and the educational teaching environment was improved. However, there are some challenges that needed to be considered in the adaptation of hybrid learning method. Previous research studies have revealed that instructors faced significant barriers, as high levels of stress and anxiety due to the obstacles of virtual learning environment (Farikah *et al.*, 2023).

Comparing percentages of mentioned sub dimensions, it was noticed that respondents were highly biased towards intrinsic motivation, then amotivation, while they rarely revealed any of the sub-dimensions of amotivation. This means that respondents care much about intrinsic motivation and intangible rewards over tangible rewards. The highest ranking was given to "Overall Learning Mood" which can be attributed to the desire of learners to improve their way of teaching and learning. The multi-teaching style can offer the instructor a change of teaching environment from transmission to a transformational way of learning strategy. As said by Piskurich (2004), the hybrid learning method could encourage instructors to use multi-teaching styles and strategies. In the past, instructors were the only learner source of information, but nowadays this picture has changed. Teaching strategy has changed from depending on TF2F classroom environment only, to using the advantages of technology-

learning tools such as, Videos-Audio Conferences, CDs/DVDs, Interactive White Board Systems (IWBs), and Discussion Forums (Moodle, Blackboard, Uni-learn, MobileApp). These technology learning tools help to support learners and instructors in their learning environment. These let instructors find their pleasure in teaching through coaching, monitoring, and advising students rather than just delivering information. Makhdoom *et al.*, (2013) pointed out that hybrid learning offers collaborative learning, is adaptive and transforms the role responsibility of the instructor from a disseminator of knowledge to a facilitator, and this could create a more integrated approach.

Second ranking was given to "Flexibility in Use", as instructors with different faculty titles and experience were all using virtual learning. The hybrid learning method provides instructors with new work experience through the combination of both virtual learning and traditional learning methods. As said by Bliuc *et al.*, (2011), the instructor's purpose is to provide students with a more holistic learning experience, to search and read more, reflect ideas and improve their written rhetoric. The majority of instructors also are using e-contents (Courses), such as Power Points and Word Documents within their teaching environment. In addition, all instructors have experience in using the Moodle, as required by organization strategy, which forces them to use the Moodle. This lets instructors have an adequate experience with using virtual tools. It should be

highlighted that the researcher was expecting great percentages in extrinsic motivation, which does not really happen. This result can be interpreted to the idea that "Rewards – Higher Wages and Incentives", and "Rewards – Higher Position" were considered to be lower to self-determination of zinstructors, compared with intrinsic motivation.

#### 6- Conclusion

The researcher found that instructors are more oriented towards self-determination through intrinsic motivation, rather than non self-determination, through extrinsic motivation. Also, it was found that professors were highly exploring intrinsic motivation much more than extrinsic motivation. On the other hand, assistant professors, associate professors, and graduate teaching assistants were biased towards intrinsic motivation. Researcher found that the main sub dimensions of intrinsic motivation were "Overall Learning Mood", "Flexibility in Use", and "Time Management". The latter sub dimensions could be encouraging instructors to adapt hybrid learning method.

# 7-Ethical Consideration

A consideration of ethics needs to be a critical part of the substructure of the research process from the inception of your problem to the interpretation and publishing of the research findings (Hesse-Biber & Leavy, 2011, p.59). Ethical issues are a very important aspect of social science research (Cohen et al., 2000). DiCicco-Bloom &

Crabtree (2006), and Diener & Crandall (1978) highlighted that four areas form a useful classification of ethical principles in and for social research: harm to participants, lack of informed consent, invasion of privacy and deception. This present study considered the use of ethical consideration. This research was conducted in line with AASTMT ethical guidelines. It was guided by the ethical principles on research with human participants set out by AASMT.

#### 8- Limitaiton

The researcher faced several limitations in the current study. One most important limitation was that the researcher restricted to private universities in Egypt. As this reaseach study was only conducted among the instructors who teach in the undergraude proramme. Such tools might not be present in public and governmental universities in Egypt. Finally, the researcher was limited in the study in getting data from Egypt only; this was due to geographical constraints.

# 9- Suggestion for Future Study

For further research, there are some topics that could be highlighted. One of them is to construct a comparison between developed and developing countries to be able to know different biases towards IM and EM. Future studies can discuss this topic in other countries. Future studies can discuss this topic among different universities and do a comparison study between private and public universities. Future studies also can do a comparison

study between undergraduate and graduate programs. Moreover, further research could highlight barriers of amotivation, as well as challenges facing instructors through those barriers and how to overcome such challenges.

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