

The Use of Hybrid Learning Among Educational Instructors: A Focus on the Logistic Studies in Egypt

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Abstract

Hybrid Learning (HL) is proving to be an effective pedagogical tool in many areas of business and management education, but there remains a number of barriers to overcome before its implementation. This paper seeks to analyse the views of lecturers towards HL according to Self-Determination Theory (SDT), and identifies the motivations for using HL in Logistics Education (LE) in an Egyptian higher education establishment. SDT is approached from a different perspective and the relationship between Intrinsic Motivation (IM), Extrinsic Motivation (EM) and Amotivation (AM) is analysed and related to the motivations of the integrated learning method. The case study methodology comprises of a series of interviews with lecturers employed at four Colleges of International Transport and Logistics (CITLs), the Arab Academy for Science, Technology & Maritime Transport (AAST&MT) located in Egypt. Respondents were drawn from seven branches in Greater

Cairo (Sheraton, Dokki and Smart Village Branches), Aswan (El-Wadi El-Gedid), Alexandria, Martouh (Al-Amein) and Port Said. A structured face-to-face interview was undertaken with 43 interviewees across all faculty positions: Professors, Associate Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants. The findings were based on "Content Analysis" of the interview transcripts and use of the Nvivo¹⁵ software programme. The relationship between IM, EM and AM is explored further, along with an analysis of the motivational variations within different faculty positions. The research contributes to the application of SDT within the field of HL through an analysis of the views of lecturers towards the motivations that HL offers to logistics educators in Egypt. This study suggests that the CITLs at AAST&MT should pay more attention to IM, EM and AM in the work environment. The variation in responses from different levels of the faculty indicates a need for AAST&MT to provide the staff with development opportunities in order to successfully integrate learning method into their LE programmes.

Keywords: Self-Determination Theory, Intrinsic Motivation, Extrinsic Motivation, Amotivation, and Integrated Learning.

اللوجستية الدراسات على التركيز: التربويين المعلمين بين الهجين التعلم استخدام مصر في

الملخص:

يُثبت التعلم الهجين (HL) فعاليته كأداة تربوية في العديد من مجالات تعليم

إدارة الأعمال والإدارة، إلا أنه لا يزال هناك عدد من العوائق التي يجب التغلب عليها قبل تطبيقه. تسعى هذه الورقة البحثية إلى تحليل آراء المحاضرين تجاه التعلم الهجين وفقاً لنظرية تقرير المصير (SDT)، وتحديد دوافع استخدام التعلم الهجين في تعليم اللوجستيات في إحدى مؤسسات التعليم العالي المصرية. يتناول التعلم الهجين من منظور مختلف، ويحلل العلاقة بين الدافع الداخلي (IM) والدافع الخارجي (EM) والدافع اللاإرادي (AM)، ويربط بدوافع أسلوب التعلم المتكامل. تتألف منهجية دراسة الحالة من سلسلة من المقابلات مع محاضرين يعملون في أربع كليات للنقل الدولي واللوجستيات (CITLs)، والأكاديمية العربية للعلوم والتكنولوجيا والنقل البحري (AAST&MT) في مصر. تم اختيار المشاركين من سبعة فروع في القاهرة الكبرى (فروع شيراتون والدقي والقرية الذكية) وأسوان (الوادي الجديد والإسكندرية ومطروح) (العالمين) (وبورسعيد). أجريت مقابلة منظمة وجهاً لوجه مع 43 شخصاً تمت مقابلتهم في جميع مناصب أعضاء هيئة التدريس: أساتذة وأساتذة مشاركون وأساتذة مساعدون ومعيدون ومساعدي تدريس الدراسات العليا. استندت النتائج إلى "تحليل محتوى" نصوص المقابلات واستخدام برنامج Nvivo15. تم استكشاف العلاقة بين IM و EM و AM بشكل أكبر، إلى جانب تحليل الاختلافات التحفيزية داخل مناصب أعضاء هيئة التدريس المختلفة. يساهم البحث في تطبيق SDT في مجال HL من خلال تحليل آراء المحاضرين تجاه الدوافع التي يوفرها HL لمعلمي اللوجستيات في مصر. تشير هذه الدراسة إلى أنه يجب على CITLs في AAST&MT إيلاء المزيد من الاهتمام لـ IM و EM و AM في بيئة العمل. يشير التباين في الاستجابات من مختلف مستويات أعضاء هيئة التدريس إلى الحاجة إلى أن توفر AAST&MT للموظفين فرص التطوير من أجل دمج أسلوب التعلم بنجاح في برامج التعليم المحلي الخاصة بهم.

الكلمات المفتاحية: نظرية تقرير المصير، الدافع الداخلي، الدافع الخارجي، عدم الدافع، والتعلم المتكامل

1. Introduction

Nowadays, the advanced development of Information Communication and Technology (ICT) has been accompanied by a significant increase of the number of integrated e-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. The theory of motivation has been considerably considered, and various theories have been proposed to explain its nature (Kamberi, 2025). Motivation plays a role in the computer-generated learning environment. Other terminologies for Hybrid Learning (HL) include distributed learning, open, and flexible learning, "mixed mode method learning" (Brunner, 2007), "blended learning, Blended e-Learning, web-enhanced classes and technology-enhanced education" (Muirhead, 2005), and integrated e-learning (Verkroost *et al.*, 2008). The term Blended Learning (BL) and HL are more interchangeable, as they have been used in different research fields more than the term mixed method learning.

Virtual learning environment (VLE) has great potential in motivating instructors in multiple learning environment contexts. In the education sector, instructors and learners generally encounter numerous challenges in pure VLE, such as a sense of isolation, lack of engagement, poor retention, and low success

rates (Dumford & Miller 2018; Ferri *et al.*, 2020; Frei-Landau *et al.*, 2022). Furthermore, Lim (2004) pointed out, motivation has been a critical factor that affects learning environment. Qin and his colleagues (2023, p.5343) defined motivation, as “*It is a cornerstone psychological construct in the realm of educational research, wielding a profound impact on learning and academic achievement*”. 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 HL environment. *Bended Learning initiatives is part of these innovations, but its uptake, especially in developing world faces challenges for it to be an effective innovation in teaching and learning* (Kintu *et al.*, 2017, p.1).

The concept of one-size fits all for the creation of resources will not essentially work, as people have different perceptions toward virtual learning, such as e-Learning and HL methods (Wall & Ahmed, 2008). However, McIsaac and his colleague (1996) confirmed that the virtual computer-mediated tools have a faster widespread form in the educational environment context. During the 21st century, technology media tools have added to the learning process the pedagogical style that provides the instructors with a unique way to present their work teaching materials. In adapting HL, instructors must consider the strategies and methods of virtual instruction, which is called e-pedagogy (Alebaikan & Troudi, 2010), especially due

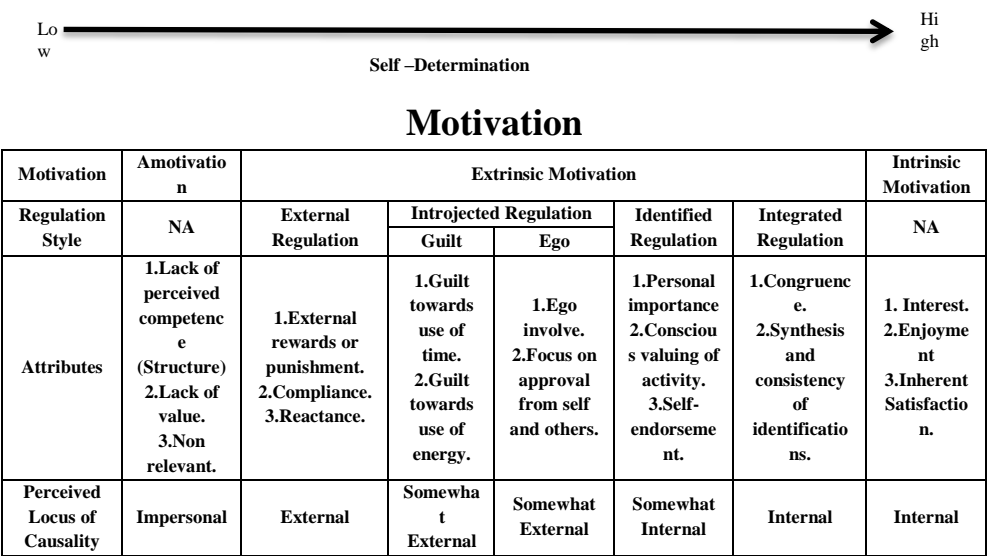
to the COVID⁻¹⁹ pandemic. As mentioned by Cheng (2025) that the COVID⁻¹⁹ outbreak has faster the push for mixed education in universities and schools worldwide, particularly the teaching modes and the role of virtual teaching in the post-pandemic era. In the education sector, university instructors as key figures of higher education organizations are vital in enhancing the standard of teaching and academic research, as well as, fulfilling the social role of universities (Jankelová *et al.*, 2025).

In the developing countries, HL is rapidly growing in Higher Education (HE); the study of HL method has recently grown in interest for researchers, especially during COVID⁻¹⁹. Fan and his colleagues (2024) have stated that one-third of learners in Australian public universities undertook a significant portion of their studies through virtual or blended delivery, experiencing a 37.1% increase in enrolment in these modes over the past 6 years. In the VLE, instructors' motivation has recently received more attention in Egypt. Instructors and learners need to be self-motivated for the successful adaptation of the virtual learning (Ghenghesh, 2013).

In recent years, Self Determination Theory (SDT) has emerged as among the most applied theoretical framework of human motivation in psychology (Ryan *et al.*, 2022). *SDT attempts to articulate the basic, vital nature of human beings— of how that nature expresses itself, what is required to sustain energy and motivation, and how that vital energy is depleted*

(Ryan & Deci, 2017, p.24). SDT is powered by diverse kinds of motivation, such as intrinsic and extrinsic motivations. Additionally, SDT describes a continuum for motivation that involves Amotivation (AM), four types of Extrinsic Motivation (EM), and Intrinsic Motivation (IM) (Ryan & Deci, 2020; Wang, 2021), as shown in Figure 1.

Figure1- Self Determination Theory’s Taxonomy of



Source: Adopted from Ryan & Deci (2020), Wang & Wind (2020), Wang (2021), and Wang et al. (2024, p.2)

SDT also reflects motivation as a multidimensional concept that also varies in terms of quality (Paumier & Chanal, 2023). SDT was fruitfully applied in multi-domains, for example, counseling, education, healthcare, and sports (Turban *et al.*,

2007). However, several studies have classified SDT into three sub-theories: Cognitive Evaluation Theory (CET), Organismic Integration Theory (OIT) and Causality Orientation Theory (COT) (Vansteenkiste *et al.*, 2010a,b; Völkening *et al.*, 2010; Wininger, 2007).

These three sub-theories are the most familiar sub-theories of the SDT that have been used in multiple research domains. However, Deci and Ryan (1985), and Vansteenkiste *et al.* (2010b) have pointed out that the SDT has been elaborated into two main sub-theories of SDT: CET and OIT. Later, other studies have added more sub-theories of SDT: Goal Content Theory (GCT); Basic Needs Theory (BNT) (Vansteenkiste *et al.*, 2010a,b; Lim, 2004; Reeve, 2012); and Relationship Motivation Theory (RMT) (Deci & Ryan, 2014; Ryan & Deci, 2017; Standage & Emm, 2014).

The underlying fundamentals in SDT are Intrinsic Motivation (IM), Extrinsic Motivation (EM) and Amotivation (AM) and a set of three universal Basic Psychological Human Innate Needs (BPHINs) that underdetermine motivation, which are autonomy, structure and involvement. In the HL environment, instructors are considering intrinsic and/or extrinsic motivation, which are essential for ensuring the success throughout their teaching environment. Instructors who are self-determined are intrinsically motivated in their teaching environment, and are more willing to encourage learners'

autonomy and this in turn leads to greater IM amongst learners (Pelletier *et al.*, 2002). From the instructors' perspective, IM could be more beneficial than EM, but it depends on the nature of the situation. For example, instructors who are extrinsically motivated may prefer some kind of tangible rewards, as higher position, wages and incentives, while instructors who are intrinsically motivated may prefer some kind of intangible rewards such as love, pleasure and the happiness of teaching, the sake of knowledge, and positive feeling about themselves. The high degrees of IM do not necessarily mean that EM is low (Buckworth *et al.*, 2007).

The study investigated the motivations of HL context using the 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 Logistics Education (LE) using the HL method. There is no available research on the motivations of HL in Logistics studies. Therefore, the research has examined the process by which the acceptance of HL on specific teaching behavior could influence instructors' motivation in Logistics studies.

2. Literature Review

2.1 Self-Determination Theory's Sub-theories

Self Determination Theory (SDT) has been divided into six sub-

theories, comprising the SDT's formal framework (Nayavich, 2012; Reeve, 2012). Deci and Ryan's (1985) six sub-types of the SDT model which are: (1) Cognitive Evaluation Theory; (2); Organismic Integration Theory; (3) Basic Needs Theory; (4) Causality Orientation Theory; (5) Goal Content Theory; and (6) Relationship Motivation Theory. Table 1 demonstrates a brief summary of only these six sub-theories of SDT.

Table 1: Sub-Theories and Brief Explanations

Sub-Theory	Components	Brief Explanation
1. Cognitive Evaluation Theory (CET)	IM and the effects of social contexts.	IM is successful when people feel competent and self-determined.
2. Organismic Integration Theory (OIT)	EM and behavioral outcomes.	EM will be successful if it can be internalized.
3. Causality Orientations Theory (COT)	Causality orientation: autonomy, control, and AM.	People have different perspectives and orient their behavior in different ways.
4. Basic Psychological Needs Theory (BPNT)	Psychological needs and their relation to health and well-being.	If the need for autonomy, competence, and relatedness are fulfilled there are positive outcomes or the opposite.
5. Goal Contents Theory (GCT)	Intrinsic and extrinsic goal orientation.	The different impact that certain goals have on well-being and satisfaction. This can create conflicts between intrinsic and extrinsic.
6. Relationship Motivation Theory (RMT)	The relationship between autonomy and involvement of basic human innate needs.	It focuses with other relationships that some amount of interactions is not only desirable for the most individuals; however, it is essential for human adjustment and well being.

Source: Nayavich (2012, p. 24)

The following sections 2.1.1 - 2.1.6 will describe the explanation

the six sub-theories of SDT.

2.1.1 Cognitive Evaluation Theory (CET)

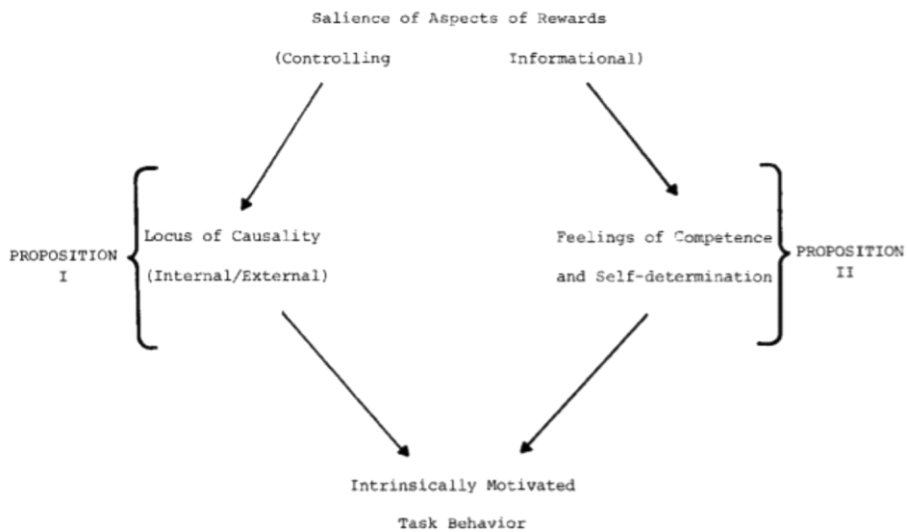
Cognitive Evaluation Theory (CET) is the first sub-theory of the SDT. Deci (1975) and Ryan (1982) pointed out that CET is the early work of SDT. CET refers to the theory of organic and dialectic development of individual behaviour (Völkening *et al.*, 2010). This sub-theory was established based on empirical results about the effects of external factors (reward and feedback) on IM (Huyen, 2020). Ryan *et al.* (2009, p.110) have classified the CET sub-theory of motivation as:

“CET outlines a social psychology of intrinsic motivation, because it specifies how social inputs affect intrinsic motivation and the processes and outcomes associated with it”.

CET has referred to one SDT of motivation; it displays the IM type of SDT. Correspondingly, Ryan & Deci (2000a, p.58) revealed that CET is to *“specify the factors in social contexts that produce variability in intrinsic motivation”*. In addition, CET proposed that autonomy and structure are considered essential parts for IM (Dyrlund & Wininger, 2006; Ryan *et al.*, 2009). CET provides that the fundamental needs for competence and autonomy are key factors that distinguish IM and EM: feeling capable of doing the task, and feeling like one is willingly doing it for personal reasons (Alberts *et al.*, 2024). Dyrlund & Wininger (2006), and Ryan & Deci (2000a,b), have added involvement to a relationship with IM, as complementary to

autonomy and structure. Figure 2 summarizes the three proposition of CET of SDT (Boal & Cummings, 1981)

Figure 2- Propositions of Cognitive Evaluation Theory



Source: Boal & Cummings (1981)

From the IM point of view, individuals are considered to be autonomous in the terms of accomplishing an activity, not because of external pressure or control, and structure refers to activity, which offers optimal challenges and appropriate feedback (Dyrlund & Wininger, 2006). Rienties *et al.* (2009) stated that basic needs are important to enhance and maintain and for the occurrence of IM as an SDT factor. Furthermore, it is necessary for IM to be maintained by autonomy and competence, as it exists between the individual and activities accomplishment (Ryan *et al.*, 2009;

Vansteenkiste *et al.*, 2010a, b). CET shows that every reward has two components: “*first, controlling refers to the change in the perceived locus of control; and second, informational refers to individuals with information about their effectiveness at the rewarded activity and thereby determines their feelings of competence and self-determination*” (Elding, 2005, p.53).

The first systematic and experimental studies of CET were reported in the early 1970s (Kruglanski *et al.*, 1971). Therefore, since the 1970s and 1980s, there has been expansive research on CET that underlines the IM concept (Gagné & Deci, 2005). More than one hundred empirical research studies have been done on the rewards of IM. In addition, multi-meta analytic research has highlighted these results (Tang & Hall, 1995; Tang & Byrne, 2007). Furthermore, Deci *et al.* (1999) pointed out that the researchers have conducted 128 lab experiments to investigate the effects of various types of rewards on IM. Rienties *et al.* (2009) stated that social and environmental factors play a significant role in defining what facilitates and hinders IM.

CET is a dynamic interplay between external rewards and individual activities of interest, pleasure and enjoyment (Deci, 1975). Moreover, Amabile *et al.* (1976) and Amabile (1985) argued that CET refers to external events, such as tangible rewards and deadlines. In the educational literature, Deci & Ryan (1980; 1985) classified external events as a form of tests, rewards, grades, scholarships, deadlines and written feedback on

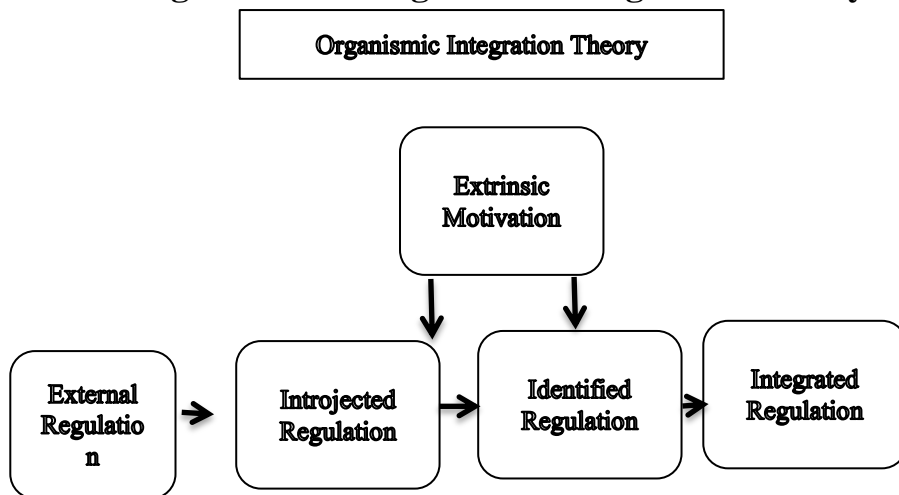
paper. A tangible extrinsic reward does not undermine IM, but it does undermine EM (Gagné & Deci, 2005; Gagné *et al.*, 2015). Similarly, Vansteenkiste *et al.* (2010a) claimed that an external event helps the individual to determine IM. From the IM, external rewards may affect students' perceived autonomy and competence (Reeve, 2012). CET faced barriers when it was applied to organisational behavioural research (Kunz & Pfaff, 2002) as within a work environment, extrinsic rewards were normally expected.

2.1.2 Organismic Integration Theory (OIT)

Organismic Integration Theory (OIT) is the third sub-theory of SDT, and plays a role in specifying the three BPHINs. OIT refers to the EM. Vansteenkiste *et al.* (2010a) suggested that SDT distinguishes between autonomous and controlled motivation instead of focusing on the IM against EM. OIT is of vital importance to understanding the individuals' behavioural motivation. In the SDT framework, IM was fully self-determined or motivated by autonomy. EM refers to controlled motivation with a lack of personal causation. Therefore, IM and EM were classified as separate and antagonistic (DeCharms, 1968; Harter, 1981; 1992). EM is represented by four different regulations, and differs in the degree of external controls or regulations: external, introjected, identified, and integrated regulations. The continuum signifies EM and IM, and is inter-correlated by a quasi-simplex pattern (Ryan & Connell, 1989).

In the early 1980's, EM was referring to the degree of individuals' autonomous versus controlled motivation. However, Deci and Ryan made the first systematic study of the OIT in 1985. The four different types of EM were ranked from integrated regulation to external regulation (Ryan & Connell, 1989). This indicates the individuals' behaviour from the highest self-determined to the lowest self-determined of EM regulations. As shown in Figure 3, the framework of OIT (Ryan & Deci, 2002). Ryan *et al.* (1993) claimed that OIT addresses the individuals' natural tendency to alter social norms, rules and mores into self-regulations and personal values.

Figure 3- The Organismic Integration Theory



Source: Ryan and Deci (2002)

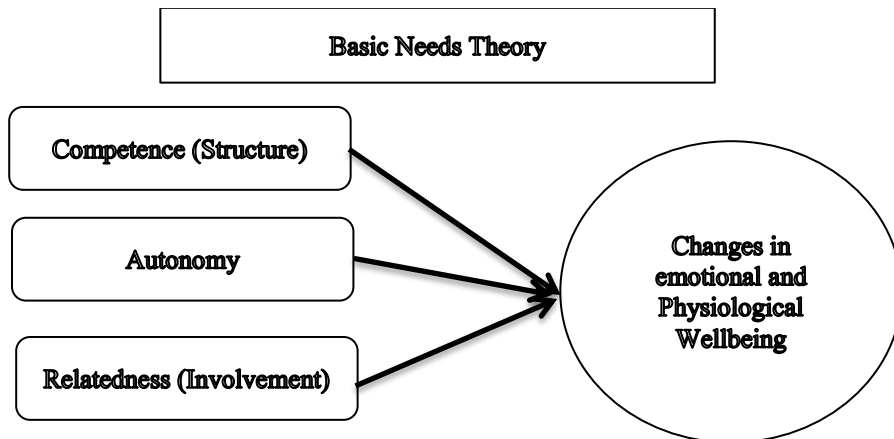
2.1.3 Basic Needs Theory (BNT)

Basic Needs Theory (BNT) is one of the sub-theories of

SDT, and plays an indispensable part in individual needs. Vansteenkiste *et al.* (2010b) have classified BNT as psychological nutriment, which are vital for individual behaviour, such as physical health and psychological and social wellness. Figure 4 shows the relationships between the three Basic Psychological Human Innate Needs (BPHINs) of competence/structure, autonomy and relatedness/involvement, and physical and mental wellbeing (Ryan & Deci, 2017). BNT in the educational environment is the basis of learners' active nature in the three BPHINs (Deci & Ryan, 2000). In the educational studies, everyone has BPHINs, and it refers to the relation to different domains; for example, learners' motivation, high quality engagement, effective functioning and psychological well-being (Reeve, 2012). Nonetheless, "*psychological studies were dominated by non-volitional theories in the first half of the twentieth century*" (Lin, 2004, p.20). The three universal BPHINs have hypothesised the classroom environment through the learners' engagements from the perspective of learners' perceptions of the BPHINs (Deci *et al.*, 1999). Vansteenkiste *et al.* (2010a) classify the BNT into two main groupings. First, the three BPHINs are vital throughout the entire individual's life cycle, for example, from the day of birth until death. Second, these BPHINs are essential for individual optimal functioning, regardless of gender, cultural context, and social class. The following sub-theories of SDT highlight the effect of a stable

individual's differences on motivation. However, the CET and OIT have focused on the effects of social context on motivation.

Figure 4- The Basic Needs Theory



Source: Ryan & Deci (2017)

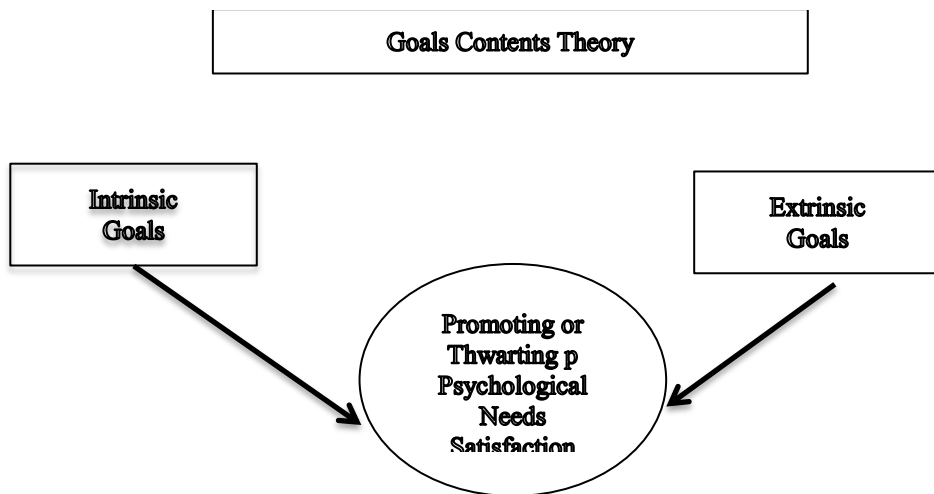
2.1.4 Causality Orientation Theory (COT)

COT is the fourth sub-theory of motivation, and plays a role in the SDT. Vansteenkiste *et al.* (2010a) say that COT suggested individuals' differences in global motivational orientations. It refers to a personality method, compared to CET, which refers to social psychology (Reeve, 2012). Völkening *et al.* (2010) stated that motivation orientations were differently weighted as self-determined and IM, and were related to autonomy and determined by foreign reasons. EM was related to controlled motivation, while non-regulation or helplessness is

related to AM. DeCharms (1968) defined causality orientation as a reason behind individual behavioral initiation. COT has been used in multiple domains. In the educational environment, COT refers to the different levels of the individual's personality that learners are orientated towards being motivational forces of their behaviour (Deci & Ryan, 1985).

2.1.5 Goal Content Theory (GCT)

Figure 5-The Framework of Goals Contents Theory



Source: Ryan & Deci (2017)

Goal Content Theory (GCT) is the fifth sub-theory of SDT and displays a specific concept in SDT. GCT is the theory of SDT that works to show the division between extrinsic and intrinsic goals. Figure 5 by Ryan & Deci (2017) illustrates the GCT of SDT.

Vansteenkiste *et al.* (2010b) have mentioned that it distinguishes between both intrinsic and extrinsic goals, which can be followed from either autonomous or controlled motivational reasons. Autonomous motivation is the most self-determined, and sometimes is referred to as IM, while controlled motivation is the lowest self-determined and sometimes is called EM. However, AM is non-self-determination, and is referring to a lack of self-determination. This sub-theory of SDT addresses clear estimates regarding the correlation of goal contents, such as intrinsic and extrinsic goals (Vansteenkiste *et al.*, 2010b). The differences in intrinsic and extrinsic goals affect well-being and motivation in diverse ways (Ryan *et al.*, 1996; Vansteenkiste *et al.*, 2006).

2.1.6 Relationship Motivation Theory (RMT)

RMT is the sixteen sub-theory of SDT and displays a specific motivation concept (Deci & Ryan, 2014; Ryan & Deci, 2017; GüLsoy, 2025). RMT is one of mini-theory of SDT suggest that motivation is a multidimensional construct comprising autonomous and controlled types (GüLsoy, 2025). RMT offers a crucial systematic and consistent theoretical approach of SDT (Standage & Emm, 2014).

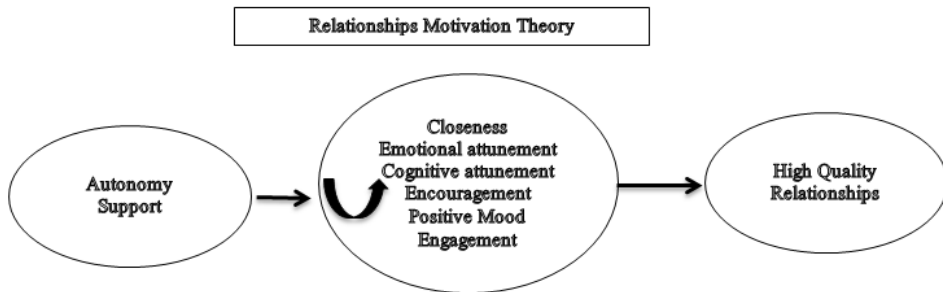
RMT provides an evidence-based theory which, as human beings, we intuitively know to be true when considering close friends, romantic partners and family members (Kato, 2022, p.166).

This theory investigates the relationship between autonomy and involvement of BPHINs. Knee & Browne (2023)

have mentioned that elaborates the mutual roles of close relationships in supporting self-development, and how motivation can help the improvement of flourishing close relationships. This sub-theory of SDT focuses with other relationships and suggests that some amount of interactions is not only desirable for the most individuals, however, it is essential for their enhances marital adjustment and well being (Chakravartty, 2018; GüLsoy, 2025). It also spotlights on the vital ingredients of high-quality relationships based on feelings of autonomy, belonging, and structure (Ervin, 2021) and this relationship also includes trust, acceptance, unconditional regard and perspective-taking (Kato, 2022).

Deci and his colleagues (2006) have stated that individuals need to feel volitional about being in relationship, and to see the other as volitional, for the purpose of connection to be high in quality relationship. The researchers also mention that the purpose of this sub-theory is for developing relationships well provided with human satisfaction of the need for involvement. Finally, RMT deepens our understanding of what motives and sustains relationships well beyond the more standard ideas that are instrumental to adaption or that they provide warmth and security (Ryan & Deci, 2019). Figure 6 illustrates the relationship motivation theory (Weinstein *et al.*, 2010).

Figure 6-The Framework of Relationship Motivation Theory



Source: Weinstein et al., (2010)

2.2 Basic Psychological Human Innate Needs Of Self-Determination Theory

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). In the education sector, SDT focuses not only on promoting learner's academic motivation and performance, but can additionally benefiting learners' overall development and well being by supporting learners' three BPHINs: autonomy, structure, and involvement (Ryan & Deci, 2000a,b; Kusurkar *et al.*, 2011; Elphinstone *et al.*, 2021).

The following sections 2.2.1 - 2.2.3 will describe the explanation the thress basic human psychological needs of SDT. These basic human psychological needs relate to sensation of volition and personal ownership over one's behaviour, feeling effectiveness and mastery, and feeling accepted by and

associated to close others (Wang *et al.*, 2025).

2.2.1 Autonomy

Recent developments in the SDT framework have highlighted the need for autonomy. Autonomy is the first division of SDT, and it refers to an individual's free will to engage in activities, and be the agent of his/her actions (Koka & Hagger, 2010). Student autonomy in learning includes making informed decisions, taking ownership of one's learning and feeling empowered to shape one's learning knowledge, especially in medical education (Neufeld & Kassam, 2025). 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.

2.2.2 Structure

Following an overview of SDT, structure is another division of BPHINs. Numerous research studies have hypothesised that structure is widely used in different domains (Ryan & Deci, 2000a,b). The need for structure 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 structure when they focus on learners' effort and rely on an individual's human own abilities and past performance in evaluating learners' work/outcome.

In the educational environment, individual learners effectively feel interaction with their learning materials. This helps them achieve their desired outcome performance and achievement. Structure helps learners exercise their talents and choices, and also gains them self-confidence (Ryan & Stiller, 1991). In addition, instructors can support this need by giving encouraging feedback, providing optimal challenges, and designing well-structured learning resources (Wang *et al.*, 2024).

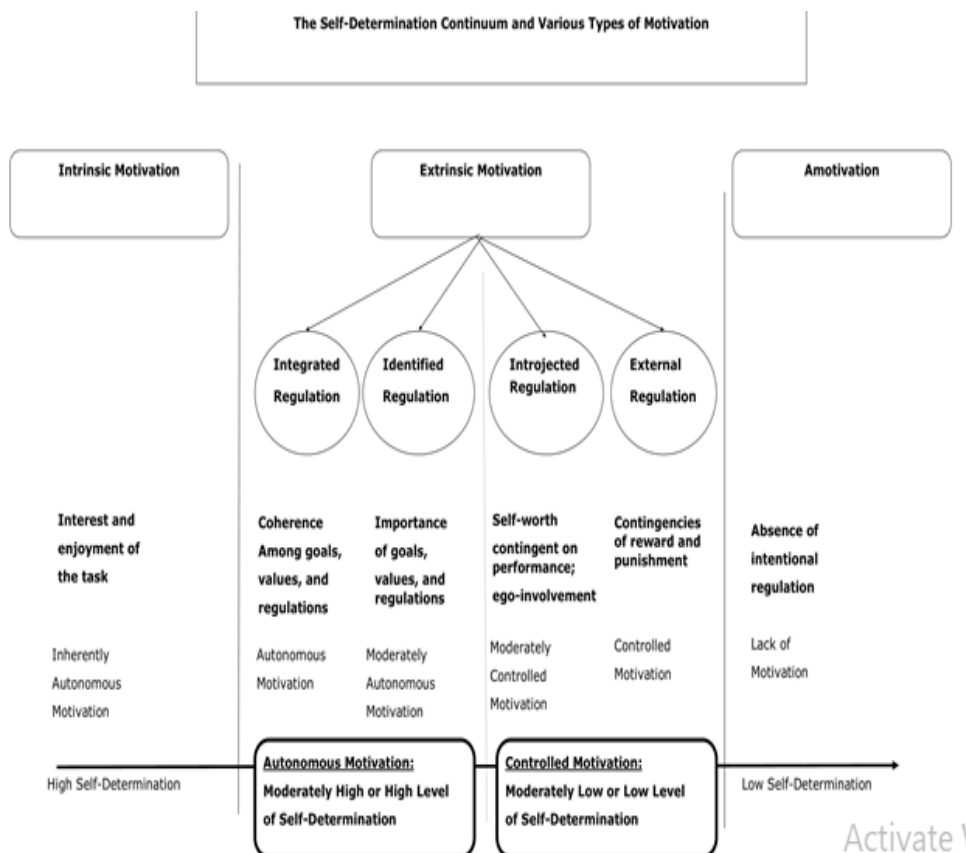
2.2.3 Involvement

Following an overview of SDT, involvement is third type of BPHINs. 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, involvement 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, structure and involvement shows an increase in the self-determination of tasks.

2.3 Types of Self-Determination Theory

It also underlines the concept of Intrinsic Motivation (IM), Extrinsic Motivation (EM) and Amotivation (AM) (Deci & Ryan, 1985; 2000), as shown in Figure 7.

Figure 7- The Self-Determination Continuum and Various Types of Motivation



Source: Deci & Ryan (2000)

Motivation can be distinguished into IM and EM. The key motivations in SDT are Intrinsic Motivation (IM), Extrinsic Motivation (EM) and Amotivation (AM). These three types of motivation will be discussed in the following sections.

2.2.1 Intrinsic Motivation

Motivation is to achieve an activity for its own sake. IM means to the individual in experiencing the pleasure, interest, enjoyment and satisfaction inherent in the tasks (Deci *et al.*, 1989). The literature on IM has shown that it is often used to explore learners' reasons for engagement in distance education (Xie *et al.*, 2006). According to Jawaid and his colleagues (2024) mentioned that the IM is the most independent type of SDT, which refers to individuals who need to engage in activities out of sincere interest and satisfaction. Learners' perspectives in order to progress toward intrinsic motivation, it is vital to offer external support for their three universal BPHINs: autonomy, structure, and involvement (Wang *et al.*, 2024). Numerous studies in the educational environment have confirmed that IM pedagogical characteristics of HL improve learners' motivation, which includes increased interaction, more time utilization, provision of additional learning material, and increased students control over the speed of learning, apart from when and where learners desire to learn (Afsar & Umrani, 2020). However, Ryan & Grolnick (1986) and Grolnick & Ryan (1987) mentioned that controlling instructors has a negative influence on learners and decreases their IM toward universities. But still, Ryan and Stiller (1991) pointed out that IM is an essential phenomenon for instructors, a natural wellspring of learning and achievement that can be thoroughly categorized. IM sometimes is more desirable

than EM in the hybrid learning environment.

2.2.2 Extrinsic Motivation

Extrinsic motivation can be described as the motivation to accomplish an activity undertaken for reasons other than inherent interest in the action (Deci & Ryan, 1985). For example, learners are willing to acquire information and knowledge in order to obtain higher or better reward, as marks (Breen & Lindsay, 1999; Schunk *et al.*, 2008; Alkış & Taşkaya-Temizel, 2018). Studies have shown that EM refers to individuals may engage in activities to achieve tangible rewards, for instance, money, praise, or social approval, or to avoid punishment or negative outcomes (Teixeira *et al.*, 2012; Ryan & Deci, 2020). It also involves, individuals who perform activities as a means to an end, not for their own sake (Wong-on-Wing *et al.*, 2010; Pelletier *et al.*, 1995).

EM is broken into four subtypes: integrated, identified, introjected and external regulations. 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). Occasionally, integrated regulation is not mentioned in the previous literature studies, as it may be more related to IM. Identified regulation refers to the process through which individual behavior recognises and accepts the underlying value of a behavior or activity (Ryan & Deci, 2000a). Introjected regulation refers to performing an action due to a sense of obligation rather than an internal desire or for enjoyment (Uzun

& Aydemir, 2020), as the pursuit of contingent self-worth or feelings of guilt and shame (Ntoumanis & Standage, 2009a,b). It also occurs when behaviors are performed in response to internal pressures, to prevent guilt or anxiety or to achieve pride or ego-enhancements (Ryan & Deci, 2000a, b). 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). Ryan and Deci (2000b) stated that external regulations occurs when individuals undertaking a certain task of behavior to satisfy an external demand or reward contingency. 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). According to the degree of self-regulations and descriptions, Table 2 describes the four types of extrinsic regulations.

Table 2: The Four Types of Extrinsic Regulations According to the Degree of Self Regulations and Descriptions

Forms of Extrinsically Motivated Behaviour		
Types of Regulation	Degree of Self-Regulation	Description
Integrated Regulation	Very High	Behaviour experience as “ <i>wholly free</i> ” because the regulation has been integrated with the person’s sense of self-determination.
Identified Regulation	Moderately high	Behaviour chosen because the person identifies with the importance of the activity.
Introjected Regulation	Moderately Low	Behaviour controlled by demands or contingencies inside the person such as self-esteem contingencies.
External Regulation	Very Low	Behaviour controlled by demands or contingencies external to the person.

Source: Deci et al. (1996, p.168)

2.2.3 Amotivation

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). The research work of Deci & Ryan (1985) has identified that AM is when individuals are lacking a behaviour toward a particular activity or situation. It characterizes into a distinct lack of feeling to act, attributed to a perception of ineffectiveness, a deficit in competency/structure, or an absence of value in the assignment. (Ryan & Deci, 2000 a,b). Ryan & Deci (2002) mentioned that AM 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.

From the instructors' perspectives, they may feel uninterested in the teaching environment due to a lack of available resources. This can lead to AM towards their jobs. Moreover, instructors may be less motivated due to low pay, as there is no encouragement to continue their career. Ryan & Deci (2002) show that AM refers to an absence to act by either not acting at all or acting through the motions with no intention to do what should be done, and thus it can lead to "*incompetence or helplessness*" (Ryan & Weinstein, 2009, p.226).

2.3 Definition of Hybrid Learning

After COVID⁻¹⁹, hybrid learning (HL) has been used in various domains and it has been constantly changing with the development of the educational technology sector (Masood *et al.*, 2024), as a new era of today's learning. Up to now, HL is still controversial and trivial in its meaning (Danushka & Weerasinghe, 2021). HL refers to mixture between synchronous learning (real-time/fixed-time interaction) and asynchronous learning (non-real-time interaction) that instructors and learners both in-physical and virtual/online classroom simultaneously. Hybrid learning is integrated into traditional face-face classroom environment, using a digital computer-based, the Internet or a smart classroom tools, where the teachers meet the learners face-to-face, and learner-instructor interaction is embedded in the online-course design (Akhmetshin, 2023; Akhmetshin *et al.*,

2023; Al-Said *et al.*, 2023). HL is a term frequently used in the literature, but as to data, there is no consensus about a standard definition.

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 lectures* (Fleck, 2012, p.399). In the current study 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. HL provides students with the suitable descriptions of both traditional education and virtual mediums, while diminishing the undesirable aspects of each method (Stevens *et al.*, 2021).

In the virtual learning environment, Gerbic (2011) refers to HL 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 HL method within several educational settings, including learners, regulations, outcomes and local conditions.

Blended learning is fostered by webbased learning technologies that are increasingly used in conjunction with traditional textbooks, teachers are also increasingly using tools

that can connect more effectively with students and provide feedback in real time (Radovan et al., 2022, p.3).

In Allen and Seaman (2003; 2007), and Allen and his colleagues (2007), the Sloan Foundation research pointed out that the HL course must offer approximately a range of 30% to 79% of the total virtual course content while the remaining course content delivered is more Traditional Face-to-Face Learning (TF2FL) (see Table 4). King & Arnold (2012) suggested that HL includes those that combine in-class and virtual instruction with 30% to 70% virtual content. Allen & Seaman (2003; 2007; 2008; 2010) showed that the course with 29% virtual content is merely web facilitated, while 80% or above is considered fully e-learning. Niemiec (2006) highlighted in Ocak (2011) that since a substantial portion of the course content is delivered virtually, between 24% to 75%, then these percentages should be considered as HL. In their research study, Hakala *et al.* (2010) demonstrated that the video VL method contained between 20% to 40%, with the rest going to traditional learning. According to Radovan and his colleagues (2022), instructor's essential use of technology in their daily work that enables learners' engagement, ease of use, and interpersonal contact.

**Table 3- Operational Definitions of Course Classifications
Based on Mode of Content Delivery**

Type of Course	Typical Description	Proportion of Content Delivered Online
Traditional Face-to-Face Learning (TF2FL) Method	No online technology is used and content delivery is via writing or orally.	0%
Web Facilitated Method	A traditional Face to Face (TF2F) course supplemented by/augmented with a web-based technology such as a Course Management System (CMS), or an assignment- or syllabus-related web pages.	1-29%
Blended/Hybrid Learning Method	A hybrid of online and traditional F2F delivery; with more online meetings than F2F meetings.	30-79%
Online Learning Method	Most or all of the course and its content is delivered online, with none/negligible F2F meetings.	+80%

Source: Allen & Seaman (2010, p. 5)

3. Drivers of Hybrid Learning in the Arabic Countries

3.1 Motivation of hybrid learning adoption in the Arabic countries

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 VL 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 HL method, including pedagogical richness, access to knowledge, social interaction, personal agency, cost effectiveness and ease of revision. 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 HL concept. Instructors mentioned some concerns toward virtual learning that must be taken into consideration when adapting HL, such as loneliness and isolation, lack of motivation, poor communication, fear of online communication and lack of guidance (Hanisch *et al.*, 2011). In this study, the researcher has explored some of the above motivations of HL which are more related to the instructor's

point of view. These motivations have been demonstrated from the SDT framework of Deci and Ryan. It means that the opportunities for HL from instructors' perspectives are divided into IM and EM, while the challenges include AM.

4. Research Methodology

4.1 Data Collection

This research study conducted structured 43 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 assigned by stratified random sampling. All interviewees were from seven branches in the CILTs, AAST&MT located in Egypt: Greater Cairo (three branches), Alexandria, Aswan (El-Wadi El-Gedid), Matrouh (Al-Amien) and Port Said. The interviews were conducted in English for the instructors who teach the English undergraduate programme in the CITLs, AAST&MT. The data collections conducted in three semesters (Fall 2022, Spring 2023 and Fall 2023) were between October 2022 to December 2023. Participants received either a letter or a phone call that informed them that the participation in this research study was voluntary. 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 HL method.

The interview transcripts were standardized for NVivo¹⁵

software format package: the questions were in bold text and the response in normal text according to the software design. This study used the NVivo¹⁵ to analyse the qualitative data method for four purposes, according to Hoover and 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 Nvivo¹⁵. Qualitative data from face-to-face interviews were fully transcribed into NVivo¹⁵ and content analysed. 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). Interviewing was used to measure demographic information, IM, EM and AM along with basic psychological human needs believed to influence the logistics instructors to accept the motivations of HL. The interview schedule was based on the participants ranking of faculty position in the organisation: Professors, Associate Professors, Assistant Professors, Teaching Assistants (Master Degree/ More than two years of working experience), and Graduate Teaching Assistants (without master degree/ Less than two years of working experience).

4.2 Participants

Participants were 43 instructors agreed to be interviewed as seen in Table 4. This Table shows the distribution of

interviewees' work status, faculty title, faculty age, teaching hours per week, nationality, faculty title and years of teaching experience. Among the respondents who participated in this survey, 70% (n=30) of them were from Greater Cairo, 23% (n=10) were from Alexandria, 2% (n=1) were from Port-Said, 2% (n=1) were from Matrouh (Al-Amein), and 2% (n=1) were from Aswan. Gender was distributed fairly and evenly among the respondents of this survey: 47% (n=20) were male and 53% (n=23) were female. In the terms of age range, approximately 35% (n=10) of the respondents were below 21-30 years, 56% (n=24) were 31-40 years of age, 30% (n= 13) were 41-50 years of age, 12% (n=5) were 51-60 years of age and 2% (n= 1) were 61 or older. In addition, the faculty positions were divided into Professor 2% (n=1), Associate Professors 7% (n=3), Assistant professors 14% (n=6), Teaching Assistants 44% (n=19) and Graduate Teaching Assistants 33% (n=14).

Table 4 Nature of Work Group

Characteristics		F.	%
Gender	Male	20	47%
	Female	23	53%
Age	Below 21-30	10	35%
	31-40	24	56%
	41-50	13	30%
	51-60	5	12%
	Above 61	1	2%
Level of Education	Bachelor Degree Holder	10	23%
	Master Degree Holder	23	53%
	PhD Degree Holder	10	23%
	Others (Please Specify):-	0	0%

Work Location	Greater Cairo (Sheraton Branch)	16	28%
	Greater Cairo (Dokki Branch)	11	26%
	Greater Cairo (Smart Village Branch)	3	7%
	Alexandria	10	23%
	Port-said	1	2%
	Aswan(El-Wadi El-Gedid)	1	2%
	Matrouh (Al-Amein)	1	2%
Nationality	Egyptian	42	98%
	Non-Egyptian (Please Specify): American Egyptian	1	2%
Work Status	Full-Time Instructor	40	93%
	Part-Time Instructor	3	7%
	Others (Please Specify):-	0	0
Faculty Title	Professor	1	2%
	Associate Professor	3	7%
	Assistant Professor	6	14%
	Teaching Assistant	19	44%
	Graduate Teaching Assistant	14	33%
Teaching Hours Per Week	Less than Six Hours	1	2%
	Eight to Twelve Hours	3	7%
	Fourteen To Eighteen Hours	10	23%
	More than Twenty to Twenty Two Hours	29	67%
Years of Teaching Experience	Below Six Months	10	23%
	One to Two Years	11	26%
	Three to Four Years	10	23%
	Five to Six Years	6	14%
	Seven to Eight Years	3	7%
	Above Eight Years	3	7%

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

5. Results

In this study, the IM related to instructors' point of view of motivation from the opportunities and challenges of BL method. As seen in Table 1, the new subcategories and their respective response rates included the following: IM: (Flexibility in Access

Interaction and Assessment, Time Management, Pedagogical Style, and Enhanced Workflow), EM: (External Motivation, Introjected Motivation, Identified Motivation and Integrated Motivation), and AM: (Adaptability, Lack of Work Design and Experience, Lack of Copyright and Accreditation Issues Protection, and Lack of Technological Infrastructure of Digital Age). Of the four sub-dimensions measured, the context of the faculty position is fundamental to instructor IM associated with the highest response. First rank is for “*Pedagogical Style*” 93%(N=40), which was mentioned by Professors, Associate Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants. Second ranking is for the “*Time Management*” 84%(N=36), which was mentioned by Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants. Third ranking is for “*Flexibility in Access Interaction and Assessment*” 81%(N=35), which was mentioned by Associate Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants. Finally, “*Enhanced Workflow*” was ranked as fourth with a percentage of 70%(N=30), and it was mentioned by Assistant Professors, Teaching Assistants and Graduate Teaching Assistants.

The next explanation from the instructors’ point of view was toward the EM, which was associated with four main factors: “*External Motivation*” 67%(N=29), and “*Introjected Motivation*” 47%(N=20), which was mentioned by Associate

Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants. Secondly, “*Identified Motivation*” 14%(N=6), which was mentioned by Associate Professors and Assistant Professors. Lastly, “*Integrated Motivation*” was ranked as fourth with a percentage of 12%(N=5), and it was mentioned by Associate Professors and Assistant Professors.

The respondents showed that the “*External Motivation*” is the highest responses in the EM. The results showed that the IM has the highest responses from the interviewees compared to EM. This indicated that instructors preferred to be intrinsically motivated, than extrinsically motivated. Wilkesmann and Schmid (2014) 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 respondents expressed more sub-dimensions related to AM, which were “*Adaptability*” 98%(N=42) and “*Lack of Work Design and Experience*” 93%(N=40). Professors, Associate Professors, Assistant Professors, Teaching Assistants and Graduate Teaching Assistants were definitely mentioned these two sub-dimensions. These sub-dimensions represent the highest response toward the Hybrid Learning. On the other hand, “*Lack of Copyright and Accreditation Issues Protection*” 21%(N=9) was mentioned by Associate Professors and Assistant Professors, while Professors and Assistant Assistants were revealed for

“Lack of Technological Infrastructure of Digital Age” 7%(N=3). These sub-dimensions represent the lowest response toward the Hybrid Learning by 7% or less.

Table 5 Respondents’ Motivation of Teaching Related Source of Intrinsic Motivation, Extrinsic Motivation and Amotivation

Sub/Themes (Dimensions)	R	F.	%	Faculty Tile(s)
Intrinsic Motivation				
1. Pedagogical Style	1	40	93%	Professors Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
2. Time Management	2	36	84%	Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
3. Flexibility in Access, Interaction and Assessment	3	35	81%	Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
4. Enhanced Workflow	4	30	70%	Assistant Professors Teaching Assistants Graduate Teaching Assistants
Extrinsic Motivation				
1. External Motivation	1	29	67%	Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
2. Introjected Motivation	2	20	47%	Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
3. Identified Motivation	3	6	14%	Associate Professors Assistant Professors
4. Integrated Motivation	4	5	12%	Associate Professors Assistant Professors
Amotivation				
1. Adaptability	1	42	98%	Professors Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants
2. Lack of Work Design and Experience	2	40	93%	Professors Associate Professors Assistant Professors Teaching Assistants Graduate Teaching Assistants

Lack of Copyright and Accreditation Issues Protection	3	9	21%	Associate Professors
				Assistant Professors
Lack of Technological Infrastructure of Digital Age	4	3	7%	Professors
				Assistant Assistants

Note: R.=Ranking F.=Frequency; %=Percentage

6. Discussions and Conclusion

6.1 Discussion

In this study, the findings support and build on the evidence of research in problems instructors encountered in adaptation of the HL. It also shows a significant effect of HL on many domains of instructors' motivation in the educational environment. For example, Patall and her colleague (2022) conducted virtual study to promote and enhance schools and universities learners' believing in one's own empowerment and basic psychological needs satisfaction. Moreover, instructors must used computer games to enhance learners' learning motivation (Blankenburg *et al.*, 2016; Mckernan *et al.*, 2015).

Broadly, The respondents indicate that instructors face significant motivations in adapting and accepting the HL method. The results are in agreement with those of other studies on the motivations of HL, 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 HL method.

Comparing percentages of mentioned sub dimensions, it was noticed that respondents were highly biased towards IM,

then AM, while they rarely revealed any of the sub dimensions of EM. This means that respondents care much about IM and intangible rewards over tangible rewards. The highest ranking was given to “*Pedagogical Style*” which can be attributed to the desire of learners to improve their way of teaching and learning. In the 21st century, virtual learning and pedagogical technology are proper means of transmitting knowledge in the educational setting (Ohazuruike, 2021). Today, pedagogical style refers to a proper means of transformation knowledge and skills, which imparted in the VLE. Pedagogy is often defined as the act of teaching and learning in educational setting and it also refers to differences among traditional face-to-face teaching and virtual teaching. It should also consider the needs and learning styles of learners and instructors who are learning remotely, such as a hub for learner learning resources. The multi-teaching style can offer the instructor a change of teaching environment from transmission to a transformational way of learning strategy. This multi-teaching style mainly relies on IM and enjoyment in learners and instructors. As said by Piskurich (2004), the BL 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 Learning

Management System (technology-learning tools) such as, Videos-Audio Conferences, CDs/DVDs, Interactive White Board Systems (IWBs), Discussion Forums (Moodle, Blackboard, Uni-learn, WebCT, Top-Class, Claroline, ILIAS, and Desire2Learn), and Kortext (it provides learners and instructors with access to their textbooks and libraries with various of affordable core textbook packages). These Learning Management System (LMS) are widely used in both academic and non-academic corporate learning (training learning programmes) (Shurygin *et al.*, 2021). These learning technology tools also support learners and instructors in their virtual educational setting. As stated by Basri *et al.* (2021) and Basri (2024) virtual learning environment is the ability to require immediate response through digital platforms as one of the biggest advantages. These also let instructors find their pleasure in teaching through coaching, monitoring, and advising students rather than just delivering information. The usage of various educational technology applications make learning more interactive, engaging, and entertaining for both instructors and learners. Makhdoom *et al.* (2013) pointed out that BL 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 “*Time Management*”, as instructors with different faculty titles and experience were all using VL. Several studies have suggested that instructors benefit

from time management in using a VLE (Lynch & Dembo, 2004; Kearsley, 2000; Song *et al.*, 2004; Woods *et al.*, 2004). Time management could be one of the factors that increase instructors' levels of IM through the use of BL (Woods *et al.*, 2004). Holenko and Hoić-Božić (2008) highlighted that the lack of motivation can arise from trouble with time management during the weeks the lesson does not happen. It provides instructors with a way to manage their time effectively, as they have an organised course or programme and an outline of tasks and responsibilities. Respondents claim that BL has helped to manage instructors' time more effectively than TF2FL. Therefore, BL provides instructors with the opportunity to manage their work through the flexible usage of the combination of the e-learning and TF2FL methods.

Third ranking was given to “*Flexibility in Access, Interaction and Assessment*”, as offers instructors multiple benefits, for example, time management and flexibility in accessing their course materials. IM has been used to promote learners to engage in the VLE (Shroff & Vogel, 2009; Xie *et al.*, 2006). The HL method provides instructors with new work experience through the combination of both VL and TF2FL 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 organisation strategy, which forces them to use the Moodle especially during and after COVID⁻¹⁹ . This lets instructors have an adequate experience with using virtual tools.

It should be highlighted that the researcher was expecting great percentages in EM, which does not really happen. This result can be interpreted to the idea that “*External Motivation*”, and “*Introjected Motivation*” were considered to be lower to self-determination of instructors, compared with IM. Concerning the VLE, instructor who extrinsically motivation refers to rewards that are external to the subject, for example financial incentives (Rewards/Higher wages and incentives and rewards-higher position) and/or substances of addiction.

Regarding AM, instructors explored some barriers towards adaptation of HL method, such as “*Adaptability*” and “*Lack of Work Design and Experience*” issues have been combined as one of the most widespread aspects of AM in HL and have been identified by participants in this study. Instructors and learners get afraid and frustrated due to several issues that might create some kind of resistance to VLE, and they have identified several reasons for resistance to change/adaptability in adapting HL. This was due to the fear of older aged instructors to using technology in teaching. They are still in need of training for

design course using technological tools, as they are not aware enough of how to use them. This also might be due to their lack of work design and experience, as they see technology as a complicated tool to understand and supportive a material and course recourses to work with. Also, through instructors work experience with VL tools, they found that they are always in need of full support from a technical and facilities support, which is always in need of maintenance for broadband, viruses and unexpected shut downs in the system. Instructors might be frightened of technology updates that can completely after the instructors' main teaching task. In some countries, instructors are not ready to use VL due to lack of technology experience, for instances, they lack information technology competence/structure and the essential abilities to use computer based VLE (Leontyeva, 2018; Yelubay *et al.*, 2022).

Subsequent, "*Lack of Work Design and Experience*" is another barriers of HL in this study. The majority of the respondents have agreed that there is a lack of virtual work design and experience in the education system. There is an open virtual resource, which is not suitable for teaching VL programmes. As mentioned by Bello *et al.* (2014), several applications are accessible for deploying a VLE and they come in different forms and flavours. Therefore, instructors need to be prepared for designing an effective HL courses which suits the learner needs. Finally, instructors were asked to express their

experience, opinion and thought of the HL method, which was appropriate for their field of study. They highlighted the motivations of HL. In addition, respondents from different faculty positions strongly revealed these dimensions of SDT through expressing their views of HL concept.

6.2 Conclusion

Nowadays, virtual learning (VL) is the practical application of motivation theory in school learning (Slavin & Cheung, 2005). After the sudden outbreak of COVID⁻¹⁹ in 2020, virtual learning was accepted more widely, which may prepare learners improved for future work environment (Ravat *et al.*, 2021). Also, the study of Basri (2024) highlights the significant positive impact of VL, digital literacy programs, and comprehensive instructor training on learner's outcomes in 2024. Therefore, VLE inspire learners to take more responsibility for their own education, fostering a sense of autonomy and self-regulation (Brown *et al.*, 2022). Ryan and Deci (2020) pointed out that SDT is a broad theory of human development and wellness, with strong implications for education setting.

In this study, different faculty levels were examined. It was found that instructors are more oriented towards self-determination through IM, rather than non self-determination, through EM. Also, it was discovered that "Professors" were highly exploring IM much more than EM. Additionally, several factors have associated with an increase risk of AM barriers were

stated by “Professors”, especially in “*Adaptability*”, “*Lack of Work Design and Experience*” and “*Lack of Copyright and Accreditation Issues Protection*” in hybrid learning setting. On the other hand, “Associate Professors”, “Assistant Professors”, “Teaching Assistants” and “Graduate Teaching Assistants” were biased towards IM and EM. Researcher found that the main sub-dimensions of IM were “*Pedagogical Style*”, “*Time Management*”, “*Flexibility in Access, Interaction and Assessment*”, and “*Enhanced Workload*”; the latter sub-dimensions could be encouraging instructors to adapt blended learning method.

The results illustrate that the younger faculty are commonly motivated by the variables of this study, such as IM, EM, and AM. However, when it comes to the senior faculty, they were presented as AM. They did not seek significantly the extrinsic nor intrinsic motivation. This can imply that in order to motivate the senior faculty, change is needed and new ideas should be applied. This can be implemented in future studies. Future studies can focus on senior faculty and how they can be motivated in the educational institutions. It is normal that older generations have different preferences in teaching and working.

7. Suggestion of Future Research

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, EM, and AM with relationship with faculty position and age range. Also, further research could highlight barriers of AM, as well as challenges facing older instructors through those barriers and how to overcome such challenges.

8. Limitations of the Study

The researcher faced several limitations in the current study. One most important limitation was that there is no logistic faculty except in the Arab Academy for Science, Technology and Maritime Technology (AAST&MT). This let the researcher restricted to this faculty rather than having varieties of ideas and visions. It also should be mentioned that the AAST&MT is a private university, which let it enjoy relatively better bended learning media tools. Such tools might not be present in other public and private universities in Egypt. Finally, the researcher was limited in the study in getting data from Egypt only; this was due to geographical constraints.

9. Ethical Consideration

Ethical consideration deals with moral complications related to the practice of research studies (Mirza *et al.*, 2023). Ethical and legal compliance is critical for fostering trust, supporting credibility, and ensuring the well-being of individuals and society (Hamzah & Ok ,2025).

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 considerations are guided by fundamental principles that serve as the foundation for

moral decision-making in various fields including, integrity and honesty, fairness and justice, respect for rights, and dignity and confidentiality and privacy (Hamzah & Ok ,2025). Ethical issues are a very important aspect of social science research (Cohen *et al.*, 2000). Judd and his colleagues (1991) highlighted that “ethical consideration is vital in academics to ensure the protection of several ethical guidelines”, including participants' copyrights, well-being, and dignity. Additionally, these protection guidelines of ethical deliberation must be relate to clarify the principles of better research techniques.

DiCicco-Bloom and Crabtree (2006), and Diener and 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. Additionally, Mirza *et al.* (2023) stated that the eight most common ethical considerations in qualitative research that the researchers need to give their highest attention to while conducting their research studies: ethic of respect, relationship with participants and conflict of interest, informed consent, incentives, confidentiality and anonymity, reporting back to the participants, trustworthiness of research, and issues of translation.

This present study considered the use of AAST&MT ethical matters. In the interview survey, the respondents were informed that their names would not be mentioned in the study. Moreover, the interviewees were given the opportunities to review and read the transcript of their interviews to have the option of changing information. This means they have the choice for excluding any information that was included in the transcript. Therefore, interviewees were handed a print copy of their transcript. Reiman (1979) restated that the outcome of the interview method should enhance the freedom of the respondents more than it enhances the author's career. Furthermore, the respondents knew that their responses were confidential, however, the researcher would use them in this study.

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