EMPOWERING SELF-DIRECTED LEARNING THROUGH TECHNOLOGY, ORGANIZATION AND PERSONAL SUPPORT IN OPEN AND DISTANCE LEARNING: A CONCEPTUAL REVIEW

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ABSTRACT

Self-directed learning is the emerging trend in higher education especially during COVID-19 pandemic which need greater effort from students in their learning process. However, less is known about the effect of technology, organizations and personal support with regards to emotional stability during open and distance learning to the implementation of self-directed learning. Besides, there are less comprehensive model explaining about self-directed learning with regards to psychological well-being. This study will asses whether emotional stability mediate the association between technology, organizations and personal support with self-directed learning among students in higher education institution in Malaysia. This study will help to develop comprehensive framework related to self-directed learning among students in higher education institutions. Besides, this study will also contribute to new findings with regards to psychological well-being among students, especially during COVID-19 pandemic in which students have various factors that will influence their learning process. This study is important because it will suggest a proper method for students to implement self-directed learning successfully, not only in their study, but also for their lifelong learning.

Keywords: Self-directed Learning, Technology, Organization, Personal, Lifelong Learning

1. INTRODUCTION

In the 21st century, with regards to so many information at hand, every student must have the ability to create, use, and share knowledge. One of the skills is by implementing self-directed learning (SDL) that enables individuals to successfully fulfill the knowledge needed (Saxena, 2013). Individuals learned better when the flow of experience can be control by being self-directed (Gureckis & Markant, 2012). Therefore, SDL has become one of the most-investigated domains of education for the past four decades (Guglielmino, 2013). SDL refers to a group of skills including: diagnosing one’s learning needs, generating one’s own learning goals, identifying one’s learning problems, planning to solve these problems, identifying resources, selecting and applying strategies, evaluating the outcomes of learning, and re-planning according to this evaluation (Cheng, Kuo, Lin, & Lee-Hsieh, 2010; Loyens, Magda, & Rikers, 2008; Robertson, 2011). There is limited research that help students to develop their ability to identify the demands of the task, assess their own knowledge and skills, develop their plan, check their progress, improve their strategies, and adjust their approaches to learning (Ambrose, Bridges, DiPietro, Lovett & Norman, 2010).

SDL allowing learners to learn on their own time and at their own pace (Silva, 2009), improving their ability to learn in new situations (Bastable, 2008), enhancing their ability to be proactive in their learning (Merriam, Caffarella, & Baumgartner, 2007), and allowing them to concentrate on the useful information (Gureckis & Markant, 2012) and the transferable skills that will enable them to learn successfully in the future (Robertson, 2011). Moreover, SDL can increase students’ trust, independence, motivation and preparedness for ongoing learning (O’Shea, 2003), allow them to take responsibility for managing their learning (Robertson, 2011), and help them become effective learners and social beings (Abdullah, 2001). Therefore, there is increasing recognition of the importance of SDL within higher education (Robertson, 2011). However, despite the benefits of SDL, and despite the fact that self-directed lifelong learning is now found within the mission statements of most higher education institutions around the world (Payne, Rundquist, Harper, & Gahimer, 2013), learners in different contexts tend to lack SDL skills (Beckers, Dolmans, Knapen, 2013). Therefore, there is increasing recognition of the importance of SDL within higher education (Robertson, 2011). However, despite the benefits of SDL, and despite the fact that self-directed lifelong learning is now found within the mission statements of most higher education institutions around the world (Payne, Rundquist, Harper, & Gahimer, 2013), learners in different contexts tend to lack SDL skills (Beckers, Dolmans, Knapen, 2013).
& Merrienboer, 2018) and students in formal higher education settings are rarely given the opportunity to practice self-directed (Francom, 2011; Hiemstra, 2013).

The rapid loss of motivation is often linked to weaker learning behaviour, can be explained not only by the students’ physical and mental changes but also by the dominance of teacher-directed learning settings that disregarded the students’ need for self-determination (Gottfried, Flemming & Gottfried, 2001; Harackiewicz & Knogler 2017; Kaplan & Patrick 2016; Vock & Gronostaj 2017; Wigfield & Wagner 2017; Yeager, Lee & Dahl, 2017). Emotions also play a key role, as they influence learning through cognitive resources, learning strategies, and motivation (Boekaerts & Pekrun 2016; Frenzel, Gotz & Pekrun, 2014; Hascher & Hagenauer 2018; Linnenbrink-Garcia & Barger 2014; Pekrun 2000, 2018; Pekrun, Gotz, Titz & Perry 2002). Most of higher education are implementing SDL although the effects of this form of learning in a higher education context was still insufficiently investigated (Harackiewicz, Smith, & Priniski, 2016; Harackiewicz, Tibbetts, Canning, & Hyde, 2014; Hascher & Hagenauer 2018).

Within educational psychology, much research is conducted on the factors that predict academic success (Aronson, 2002). Within this research domain, several categories of predictors of academic performance have been identified, including students’ cognitive abilities such as intelligence, general motivational factors like achievement, and students’ interests in specific subject areas (Schiefele, Krapp, & Winteler, 1992). The previous research on family support and students’ SDL skills are still unpredicted. DeBerard, Spielmans and Julka (2004) found that university students’ individual characteristics (including their intellectual ability, motivation, and specific interests) explained about 56% of the variance in their academic performance. Contextual factors such as family support and the nature of the students’ learning environment also play an important role in this regard (Williams, Davis, Cribbs, Saunders, & Williams, 2002). Family support can be assumed to be an especially important family predictor of SDL implementation. University students need family support because coping with academic demands is stressful enough that family supports are often welcome and helpful, and facilitate the student’s coping and positive adjustment. This ‘stress-buffering hypothesis’ is based on a number of converging empirical findings. Dyson and Renk (2006) found academia-related stress levels to be high in university students. There is evidence that individuals frequently seek support within their nuclear and extended family and, less frequently, within their networks of friends (Cutrona 2000; Pinkerton & Dolan 2007). Most university students report regular contacts with their family when they are in their early academic years; and, when dealing with academic challenges, students report their families to be their number-one source of support (Stecker, 2004). Finally, Klink Byars-Winston and Bakken (2008) found that students’ levels of family support were related to their confidence in their capacity to deal with challenging academic experiences. Growing up in a secure, supportive family environment tends to foster high levels of SDL (including academic self-efficacy) and therefore facilitates a range of usefully adaptive behaviors.

Current trends in higher education in Malaysia emphasize that university students need to develop skills that will enable them to become self-directed learners (Annuar & Shaari, 2014). Most of higher education students still rely on teacher-directed approaches rather than SDL and suffer problems with SDL readiness. Due to covid-19 pandemic, the widespread use of Internet technologies in higher education (Chen, Lambert, & Guidry, 2010) has compelled teachers to face the challenge of dealing with today’s learners. These students are usually called as the digital natives, depends on technological communications to gain knowledge (Easton & Easton, 2011). To close this gap, this study was conceptualized to get more in-depth information about technology, organizational support and personal support that will be affected by emotional stability in implementation of SDL.

Thus, the research questions of this study are as follow:

RQ1. What is the relationship between technology, organization, personal support and self-directed learning among undergraduate students in Malaysia?

RQ2. What is the relationship between emotional stability and self-directed learning among undergraduate students in Malaysia?

RQ3. What is the mediating effects of emotional stability with regards to technology, organization and personal support with self-directed learning among undergraduate students in Malaysia?
2. LITERATURE REVIEW
2.1 Self-Directed Learning
The most cited definition of self-directed learning (SDL) is from Knowles (1975). He claims SDL as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. SDL corresponds directly with central features of self-regulated learning (Zimmerman & Lebeau 2000). Loyens, Magda and Rikers (2008) point to an important difference between SDL and self-regulated learning as the learning task is always defined by the learner. Learning objectives, learning activities, and learning conditions are generally not determined by the teacher (Brockett & Hiemstra, 1991; Guglielmino, Long, & Hiemstra, 2004; Loyens et al. 2008; Saks & Leijen, 2014; Schmidt, 2000).

The concept of self-directedness has been emphasized since the 1920s, originally referring to the natural need of adults to act in a self-directed way (Lindeman, 1926). The idea of self-directedness in learning emerged from andragogy, according to which adult learners are independently capable of elaborating on their learning goals, have a lot of experience as learning resources, can apply situation sensitivity based on their experiences and are motivated to learn through internal factors instead of external ones (Knowles 1975). The framework of SDL has also been brought into the context of workplace learning (Candy, 1991; Artis & Harris, 2007; Knowles et al. 2012), which has recently been accompanied by the concepts of autonomous learning (Noe & Ellingson 2017), self-learning (Ha, 2008) and self-regulated learning (SRL) (Pintrich 2004). However, there are differences in the background of the concepts, but all of them share the idea of the responsibility of the students in relation to their learning activities and the individual’s awareness of his or her own learning needs and opportunities (London & Mone, 1999). However, SDL is a broader concept and unlike SRL, it takes into account not only the characteristics of the individual, but also the importance of the learning environment and collaboration (Loyens et al. 2008).

In SDL, autonomy is not a necessary concept for learning. Instead, enabling autonomy depends on how much responsibility the individual has regarding the different decisions in learning (Nunan & Lamb, 1996). No one can always be completely autonomous (Merriam & Caffarella, 1999). Brookfield (1993) described the SDL as a practice in which the individual takes responsibility for a situation either with or without others’ help. Thus, self-directedness does not directly translate into a completely autonomous individual learning activity: SDL can also occur collectively and it can also be influenced by the organization in the context of work (Maehl, 2000; Candy, 1991). Therefore, the concept of self-directedness should be criticized for giving an image of a one-sided and autonomous activity (Candy, 1991), even though studies have found that SDL is not realized in such a radical way that no other people would have any effect on learning (Loyens et al., 2008).

SDL is the student’s centered learning concept. It is considered as complex in nature as involving learners in the self-regulated learning process. Usually, SDL approach is attached with the adult's learning (Yang & Li, 2013). It is a helpful learning model for education that is required on demand for removing some deficiencies. SDL shift the concept of cognition to meta-cognition. In many programmes the use of self-directed learning showed high degree of confidence and student' self-improvement on the part of the learners (Park, 2013). The integration of self-directed learning with routine learning programmes improves the student’s ability to learn and increase it higher degree involvement in the process. Self-directed learning is considered as emerging pedagogical approach where learner is responsible for his or her own learning (Torabia, Aslani, & Bahrami, 2013).

SDL is described as a goal itself or a skill to be developed (Brockett & Hiemstra 1991; Knowles 1975) and as an individual feature (Lindeman, 1926; Guglielmino, 2008). However, the broadest framework for SDL is based on the idea of SDL as a practice (Khiat, 2017; Caffarella, 1993; Knowles et al., 2012). In his research, Though (1971) explored nonformal adult learning practices that he identified as self-directed because these practices were designed, embedded and controlled by the adults themselves. This practice-based view is also the starting point for a number of very linear process descriptions of SDL. Common to all these descriptions is that a learner who is employing SDL can manage the learning process from the beginning to the end (Knowles 1975; Brockett & Hiemstra, 1991; Brookfield, 1986, 1993; Pintrich, 2004). Therefore, the individual is responsible for the setting, design, implementation and evaluation of learning goals (Merriam & Caffarella 1999; Merriam 2001). In this sense, SDL at work can take place in a variety of contexts: formal, informal, online or social interaction (Noe, Clarke, & Klein, 2014). In the current study, we approach SDL as one of the higher education learning practices.
2.2 Technology Support
The students’ readiness and the availability of technology are the factors that directed the SDL (Sumuer, 2018). Technology provided the ways to search and resolve the students’ problems and decreases the learner’s dependency on another person. The trend of information and communication technology is a fast-growing phenomenon. Various studies showed its impact and relation with learning and learning strategies. Especially the trend of MOOCs and learning management system highly adds in this process. Students have multiples responsibility and these responsibilities change over time. These varying role needs to involve learning experiences (Merriam & Bierma, 2014).

Open and distance learning provides better opportunities to learn especially by implementing SDL. Lai (2016) conducted a study to find out the effectiveness of open and distance learning in self-directed learning. It is also found that open and distance videos for learning are proved to be effective for digital and critical learning skills. It helps to increase the capabilities and maximize the potential to engage learners in open and distance learning (May-Chan & Ah-Choo, 2018). Technology promotes willingness, efficiency and guided learning behaviour in open and distance learning. It also depends on the selection of appropriate technology relevant to that skill and knowledge needed to be improved (Laia, Shuma, & Tianb, 2016).

Technology is widely used to help in implementation of self-directed learning. It is especially significant with the starting of open education or distance learning. The use of technology is very helpful in supporting teaching and learning process compared to without using technology (Lee, 2014). Technology is widely used and accepted as it will decrease the dependency of students on other people. During this covid-19 pandemic, the use of technology is getting increase and widely used. Thus, this study will identify the effect of technology towards SDL.

2.3 Organizational Support
The practice of SDL was most often described as a responsibility of the individual, but also as a ‘shared responsibility’. Perhaps the open and distance learning is the reason why the ideal form of SDL appears to be more individual than team based. Instead, an organization was positioned as enabling actors, not taking responsibility or even supporting practices. Therefore, there is a need to provide insights into organizations preferring self-directedness at a larger scale: the autonomy of the students is emphasized when self-directed action is also culturally produced in learning as well. The organization’s role appeared negatively only when SDL was talked about as an obligation. In other cases, the organization’s role was either positive or neutral. Interestingly, the emphasis on self-directedness also indicates that self-directedness might become a generally accepted idea both among students and in the learning environment. If this occurs, an important question arises concerning how students’ well-being and developmental opportunities will be addressed when learning is not as inspiring or when there is so much distraction that learning is impossible (Bauer, Hemmer-Schanze, Munz, & Wagner, 2012).

Commitment is the strength of an individual's identification with and involvement in a particular organization (Porter, Steers, Mowday, & Boulian, 1974). The measurement of commitment includes assessments of motivation, intent to remain, and identification with the values of the organization. Identification and involvement have also been seen by other researchers as the basis for psychological attachment (Brown, 1969; Hall & Schneider, 1972; Lee, 1971; Sheldon, 1971). Buchanan (1974) saw commitment as a partisan, affective attachment to the goals and values of an organization, to one's role in relation to the goals and values, and to the organization for its own sake, apart from its purely instrumental worth. Others have made a similar point and differentiated a type of attachment based on calculative involvement or an exchange of behavior for specific extrinsic rewards from a moral attachment where involvement is predicated on a congruence of values (Becker, 1960; Meyer & Allen, 1984). In this study, the organization support refers to the commitment of the people working in the universities to help the students in their open and distance learning process.

One important mechanism in the development of psychological attachment is the process of identification (Kaplan & Kaplan, 2018). From this perspective, attachment to an individual, object, group, or organization results from identification with the attitudes, values, or goals of the model; that is, some of the attributes, motives, or characteristics of the model are accepted by the individual and become incorporated into the cognitive response set of the individual (Kamal & Ahiulwalia, 2017). Thus, although organizational support has often been used in a global way to encompass antecedents, processes, and consequences of attachment, for purposes of this study, the organizational support is conceived of as the psychological attachment felt by the person for the universities in which referred as the organization. It will reflect the degree to which the
individual internalizes or adopts characteristics or perspectives of the universities. This approach calls attention to the fact that the underlying dimensions or bases for attachment may vary within and across individuals. It also differentiates the state of attachment from both its antecedents and its consequences.

2.4 Personal Support

In the cooperative learning environment, the students must have support and take responsibilities of their overall learning environment. Cooperative learning motivates students to involve in SDL activities to support, prepare and assist their class members (Kyndt, Raes, Lismont, Timmers, Cascallar, & Dochy, 2013). Open and distance learning has provided an opportunity to learn more and deeply because learners are involved to answer their own questions by their self (Punch, 2014). SDL serves as a mean to make effectiveness of the knowledge, skills and attitude and on the other side, it enables the learners to acquire independency of learning task completion. It also makes them self-accountable and responsible. Personal support in this study refers to the family, financial and friends support of the students to be effective in open and distance learning.

Although family social support and family economic support are often ‘lumped together,’ the individual importance of these two factors is widely assumed. Demaray, Malecki, Davidson, Hodgson and Rebus (2005) defined family social support as a student’s perception of how much his or her family cares about, values, and encourages his or her efforts to succeed in university. Lyubomirsky, King, and Diener (2005) have asserted that family social support satisfies fundamental needs for acceptance, belonging, and love which cannot be satisfied by economic security alone. Family support is found to offer individuals a sense of security and comfort because it represents how much their parents care about them and are supportive of their goals (Gonzalez-De Has, Willems, & Holbein, 2005; Trusty & Lampe, 1997). Consistent with this assertion, McGee and Stanton (1992) found that perceived family social support was negatively correlated with adolescents’ level of distress. Similarly, Hovey and Seligman (2007) reported that better family support was significantly associated with lower levels of anxiety and depression in university students.

On the other hand, family economic support is also important as a distinct aspect of family support. In the present study, family economic support refers to the financial support that an individual receives from his or her family. Although individuals are seldom supported financially by their families of origin throughout their entire lifespan, they often depend on family economic support during the difficult transition period between adolescence and young adulthood. Aquilino (1999) has noted that the lack of such support can impair individuals’ ability to successfully establish students’ roles. Furthermore, there is evidence that family economic support not only provides material well-being but also buffers individuals from the negative impact of life events. For example, Johnson and Krueger (2006) found that the influence of unique environment on life satisfaction increased as family financial resources decreased, but that for families with abundant financial resources, the influence of unique environment on life satisfaction was small (North, Holahan, Moos, & Cronkite, 2008).

Taken together, these data suggest that a high level of family economic support acts as a protective factor, whereas a low level of family economic support constitutes a risk factor, in regard to such outcomes as life satisfaction, the ability to cope with major stressors, and future success. A similar conclusion may apply to family social support as well. Multidisciplinary research from the past 30 years has provided abundant evidence for the cardinal role of social support in successful coping (Cohen, Gottlieb & Underwood, 2000). Social support has been found to act as a stress buffer and to contribute to psychological and physical health (Cohen et al., 2000). In particular, family social support has been linked to more positive outcomes (Hamdan-Mansour, Puskar & Sereika, 2007), distress (McGee & Stanton, 1992), happiness (North et al., 2008), anxiety and depression (Hovey & Seligman, 2007), and life satisfaction (Johnson & Krueger 2006).

Even though parents play an important role in early adulthood, friends become increasingly important sources of support for emotional problems (Collins & Madsen 2006). Friends, who are perceived by young adults as the most important relationship outside the family (Brown 2004), contribute to students’ adjustment during the transition to university (Rayle & Chung 2007) and to well-being in general (Argyle 2001). Among the characteristics specific to friendship is the fact that it involves mutuality and equality, something that is not particular to hierarchical relations such as parent–child relationships. A study by Surjadi, Lorenz, Wickrama, & Conger (2011) surveyed late adolescents during their transition into adulthood and found that the contribution of parental support was gradually replaced by that of extra-familial partners (friends) in the prediction of mastery, a concept akin to competence. A similar process might also operate for autonomy and relatedness. Among the studies that specifically focused on autonomy support (Deci et al., 2006; Kasser &
Ryan, 1999), it was found that friends’ contribution increased psychological well-being. Thus, this study will evaluate the relationship of personal support (family, financial and friends support) that will affect the student’s level of SDL.

2.5 Emotional Stability as Mediating Factor

Emotions are mental processes that are directed inward, arise in ongoing situations along the dimensions valence and control experiences, and have a strongly judgmental character (Frenzel, Gotz & Pekrun, 2014; Pekrun, 2016). Pekrun (2006) postulates that subjective control and value convictions trigger positive or negative emotions in learning and performance contexts. The more control experiences and value convictions, the more positive are the emotions that arise and vice-versa (Pekrun 2006). Pekrun (2000, 2006) differentiates between positive activating emotions (enjoyment) and positive deactivating emotions (relaxation). Positive activating emotions increase concentration (Gotz, 2004) and promote the use of elaboration strategies (Fiedler & Beier, 2014; Frenzel et al., 2014; Pekrun, 2011) which will lead to the willingness to exercise self-control and self-regulation (Clore & Huntsinger, 2009; Fredrickson, 2001; Pekrun & Linnenbrink-Garcia, 2014) and effort investment (Fiedler 2001; Fiedler & Beier 2014; Pekrun, 2011).

According to Pekrun (2000, 2006), some characteristics in learning and performance contexts trigger control experiences and value convictions and the associated emotions. For example, the quality of instruction, extent of value induction, the type of expectations and goal structures, and the quality of performance feedback determine the quality and extent of emotions (Frenzel et al., 2014). With these characteristics, SDL can be differentiated according to the emotional result. However, there are almost no comparative studies on the emotional results of SDL (Frenzel et al., 2014; Hascher & Hagenauer, 2018). Emotions have a strongly judgmental character and therefore give signals for how current learning and performance situations are experienced (Pekrun, 2011; Pekrun & Linnenbrink-Garcia, 2014). Until now, research has focused primarily on dealing with negative emotions (Frenzel et al., 2014). Thus, the objective of this study was therefore to investigate the mediating effect of emotional stability towards SDL through the support from technology, organization and personal.

3. CONCLUSION

Based on the literature, it is expected that high level of self-directed learning ability will be achieved by students through technology support, organizational support and personal support with regards to emotional stability. This study will contribute to the stakeholders such as the open and distance learning students, universities and higher education institution and the body of knowledge. During the COVID-19 pandemic, the emotional stability of the students’ needs to be taken care. Stakeholders can identify the loop holes where they can improve the level of self-directed learning ability with better planning and implementation, especially when facing with unusual learning environment. Consequently, open and distance learning students must understand the objective of the learning is not only to integrate theory and practice in real world but also for their lifelong learning.

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5. REFERENCES


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