

Exploring Relationship between Learners' Use of Self-Regulated Strategies and Motive

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Abstract

Self-regulated learning and motivation are closely intertwined as learners who possess strong self-regulated learning skills are more likely to be motivated to learn and attain greater academic achievement. Being able to take control of their learning, learners are capable of enhancing their self-efficacy and belief in their ability to succeed. Conversely, motivation is crucial for self-regulated learning to occur as proclaimed by many past studies. However, in regulating oneself as a directive learner, learners are to employ different learning strategies that require knowledge and exposure to the matter. Hence, this quantitative study was conducted to explore perception of learners on their motives and use of self-regulated strategies. A survey questionnaire rooted from Pintrich and De Groot (1990) consisted of four sections and 48 items were distributed to 121 undergraduate students from UiTM Centre of Foundation Studies. The finding revealed that there is a significant association between self-regulated learning and learners' motives as self-efficacy and intrinsic value were positively related to cognitive strategy use and self-regulation strategies. With these findings, this study offers insights that can help educators and learners to approach learning processes systematically and increase the pedagogical training in addressing skills of self-regulated learning strategies for the learners to accommodate their differences and learning orientation for a life-long learning.

Keywords: Self-regulation, Motivational Beliefs, Self-Efficacy, Cognitive Strategies, Academic Achievement

Introduction

Background of Study

Motivation to learn and self-regulated learning are two key factors that have received considerable attention in the literature. Motivation to learn is an essential component of learning, as it drives learners to engage in the learning process and to persist in the face of challenges. Self-regulated learning, on the other hand, involves learners taking control of their own learning process, setting goals, monitoring their progress, and adjusting their strategies as needed. To further understand the relationship between motivation and self-regulated learning it is essential to comprehend the factors involved in both variables.

Motivation as a whole is seen as a desire to be productive in achieving an end product. Gardner (1985) in his pioneer study on motivation defined motivation as the extent to which the individual works or strives to learn because of a desire to do so and the satisfaction experienced in the process of doing the work. In recent studies, motivation has been classified into two parts namely intrinsic motivation and extrinsic motivation. Motivation can be intrinsic, meaning that it arises from within the individual, or extrinsic, which means that the said motivation arises from external factors.

Self-regulated learning refers to a learning process which requires the learner to take charge in their own learning by setting up goals, monitoring progress and adjusting needed learning strategies to suit their situation (Zimmerman, 2000). Self-regulated learning is an integral theory as many variables of learning would branch out from this theory. It includes the cognitive, metacognitive, behavioral, motivational, and emotional or affective aspects in learning (Panadero, 2017). Out of the multiple branches of self-regulated learning, this study will focus solely on learners' motivational beliefs and it will explore the relationship between self-regulated learning strategies and learners' motives.

As mentioned earlier, motivation and self-regulated learning strategies are very much related. When these two elements are put in the learning context, most studies reported that greater academic achievement can be obtained (Ersanli, 2015; Tokan & Imakulata, 2019; Aziz & Shah, 2020; Hayat et al., 2020; El-Adl & Alkharusi, 2020; Ali, 2022; Rahmawati et al., 2021; Wang et al., 2021; Jiao et al., 2022; Idris et al., 2022, Sukimin et al., 2023). However not all findings are in a similar view. El-Adl and Alkharusi (2020) reported that students tended to use self-regulated learning strategies only to a moderate degree although there is a positive relationship between the motivational beliefs and academic achievement. Meanwhile Jansen et al (2019) claimed that there are other factors that lead to the students' achievement apart from self-regulated learning activities as it appeared to only contribute partially.

In the context of Malaysian education, after the pandemic hit, education has shifted from the conventional face-to-face learning to a more online based approach. This change in educational landscape has impacted most learners' mental state negatively due to the lack of interaction and guidance from their teachers. The period of online study during the pandemic has left students with a lot of uncertainty and unpredictability of how the learning process will commence as it is a new way to learn (Mese & Sevilen 2021). The way of learning may impact students' motivation, self-efficacy and their level of anxiety in learning. When learning is now more of a hybrid learning in which learners and educators are given more flexibility in choosing their learning environment, it is important to assess the influence of

learners' motivation in learning and their abilities to self-regulate themselves in employing learning strategies. Incorporating all these elements will further help understand the predicament of these students.

Statement of Problem

Motivation to learn in class acts as a pertinent factor in developing self-regulated learning strategies. The impact of achieving a goal in learning will motivate the students and enhance their self-regulation skills. Self-regulated learning strategies are related with motivational-regulation strategies and contribute to the learning process (Zhang & Dong, 2022). Despite the importance of self-regulated learning strategies, most students are not able to develop this learning strategy due to certain factors (i.e. knowledge, environment, self-efficacy, anxiety) and students who struggle with self-regulation show low academic achievement (Berger et al., 2021). Lack of self-regulation leads to uncontrolled emotions and disorganization that will hinder the learning process (Zambrano-Matamala et al., 2019). Same goes with motivation, which can be described as a central cognitive driving force that encompasses effort, determination and the accomplishment of tasks (Gardner, 1985 as cited in Jiao et al., 2022). Learners' motives have proven to be connected to academic achievement but how these motives influence their learning, thus connecting them as a self-regulated learner needs further investigation. Building upon prior research, it is important for the present study to investigate the relationship between learners' use of self-regulated strategies and their learning motives in the learning process. The findings of this study could be used to suggest an understanding among undergraduates in terms of motivation and self-regulated learning.

Objective of the Study and Research Questions

This study is done to explore perception of learners on their motives and use of self-regulated strategies. Specifically, this study is done to answer the following questions;

- How do learners' motives influence their learning ?
- How do learners perceive use of self-regulated learning strategies?
- Is there a relationship between learners' motive and their use of self-regulated learning strategies?

Literature Review

Motivation to learn

The motivation to learn can be defined as "the psychological state that drives an individual to engage in the learning process" (Ryan & Deci, 2020, p. 3). Motivation can be intrinsic, meaning that it arises from within the individual, or extrinsic, which means that the said motivation arises from external factors. Intrinsic motivation is typically associated with higher levels of engagement and achievement in the learning process, as learners are motivated by their own interest and enjoyment in the topic (Ryan & Deci, 2020). Extrinsic motivation, on the other hand, is associated with lower levels of engagement and achievement, as learners may be motivated by rewards or punishments rather than by a genuine interest in the topic. As such, it can be said that both intrinsic and extrinsic motivation carry their own outcomes when it comes to learning.

Self-Regulated Learning Strategies

Self-regulated learners are able to identify their own strengths and weaknesses, set realistic goals, and use a variety of strategies to achieve those goals. These learners are also able to monitor their progress and adjust their strategies as needed to ensure that they are making progress towards their goals. Self-regulation comprises three main components: metacognition, motivation, and learning strategies (Zimmerman, 2000). Metacognition refers to the learner's ability to monitor and control their own thinking processes, including planning, self-monitoring, and self-evaluation. Motivation refers to the learner's drive to learn, and can be either intrinsic or extrinsic. Learners usually apply various learning strategies to help them cope with challenges in learning. The strategies used vary from person to person as individual preference will be the deciding factor. Some of the learning strategies which are highlighted by Zimmerman (2000) are time management, study skills, and problem-solving strategies. The core of self-regulated learning strategies however can be classified into five parts the cognitive, metacognitive, behavioral, motivational, and emotional/affective aspects in learning (Panadero, 2017).

Past Studies on Motivation to Learn

A number of studies have been conducted to investigate how the learners' motives influence their learning of foreign language. Two of the main issues that have been studied the most are in terms of self-efficacy as a motivation in learning a foreign language, and the motivation coming from intrinsic values that come along with the process of learning a foreign language.

In a study conducted by Ersanli (2015) that was done to uncover the self-efficacy and intrinsic values as motives to learn foreign language of Grade 8 students; the author concluded in the findings that students who believed that they can perform well in English and perform well in classroom tasks show higher levels of self-efficacy. Self-efficacy acted as a motive in the case of this study wherein the motives of the students to learn and study are affected by it. Another study conducted by Ali (2022) to correlate how intrinsic, as well as extrinsic values, and the ways that the students employ self-regulated learning affect the students' motivation in learning a foreign language found that the platform in which the tasks were assigned contributed the most to the intrinsic motivation of the students to partake in the task.

The study done by Ersanli (2015) investigated self-efficacy as a motivation for the students, and also how it affects the higher performing students. The respondents involved 257 Grade 8 students involving both male and female from three different primary schools in Turkey. The instrument for the study was the adapted version of 'Children's Perceived Academic Self-Efficacy Scale' by (Morgan and Jinks, 1999). The findings concluded that students with higher levels of self-efficacy are more competent in performing their tasks when they know what the anticipated outcome will be. The implications of this study stated that the anticipated outcomes affect the efforts of the students in learning a foreign language and it is also stated that the female respondents show more motivation in terms of learning a foreign language as compared to the male respondents.

Meanwhile the study conducted by Ali (2022) investigated the intrinsic motivation to use online learning platforms to learn English. 72 engineering students consisting of male and female were employed for the study. A quantitative research was employed beforehand that will then serve as the base to build a more in-depth qualitative research. The study found that

the students' motivation can clearly be seen coming from themselves when they are tasked with completing or taking part in tasks that involve online learning platforms that they enjoy, and at the same time, platforms that are of benefit to them. The platform that the respondents favoured the most was 'LinkedIn' as this platform was the most beneficial for the students in terms of their study. This in relation, also coincides with the intrinsic values aforementioned in the earlier study done by Ersanli (2015) regarding self-efficacy as a motive in learning a foreign language.

Both of the studies concluded that the motivation to learn varied from person to person, as well as the end results of what the students are expecting to get or learn in turn will affect the motivation.

Past Studies on Self-Regulated Learning Strategies

Many studies have been done to investigate the learning of self-regulated learning strategies. A study by Xuan et al (2020) explored self-regulated learning strategies as academic self-management skills in Malaysian public universities. The research examined whether the year of the study would influence the students self-regulated learning strategies. A total of 317 university undergraduate students participated in the study. The questionnaire was adapted from the Motivated Strategies for Learning Questionnaire by (Pintrich, 1991). The findings indicated that study years do affect students' learning strategies. Senior students displayed a high level of help-seeking and a low level of time management which was the opposite for junior students. The study also suggested developing a self-regulated learning skill that is applicable throughout the junior years until the senior years.

Apart from that there is a study by Lilian et al (2021) which investigates self-regulated learning strategies for digital learning relevancy. The research discussed about the effects of self-regulated learning strategies (SRLS) on learning performance among Malaysian IT undergraduates. 563 respondents was used for the research through questionnaire surveys and analysed by using The Motivated Strategies for Learning Questionnaire (MSLQ) which was adapted by a study from Pintrich et al (1991) as cited in Lilian et al (2021) which was widely used in self-regulated learning strategies studies. The findings indicated that even though most undergraduate students who learned IT undergo their studies through blended learning studies which is a learning process that prioritizes student eccentric learning, students who were motivated were able to overcome this challenge even with limited supervision from the lecturer. The study then went on to highlight the importance of lecturers teaching their students motivational learning strategies to improve their learning performance.

Both studies viewed self-regulated learning strategies from different angles. The first study investigated the issue based on the years of studying in a university while the next study discussed the issue based on the syllabus the students were learning which was a blended learning course. Both studies in the end highlighted the importance of self-regulated learning strategies for two different variables.

Conceptual Framework

Figure 1 shows the conceptual framework of the study. This study explores the influence of learners' motives on their use of self-regulated strategies. Learners' use of self-regulation began with their motives to learn. The motives to learn pushes them to be self-regulated (Rahmat et.al., 2021). Pintrich and De Groot (1990) state that among some self-regulated

strategies are (a) cognitive strategy use and (b) self-regulation. They also state that learners' motives for learning is dependent on their (a) self-efficacy, (b) intrinsic value and also (c) test anxiety.

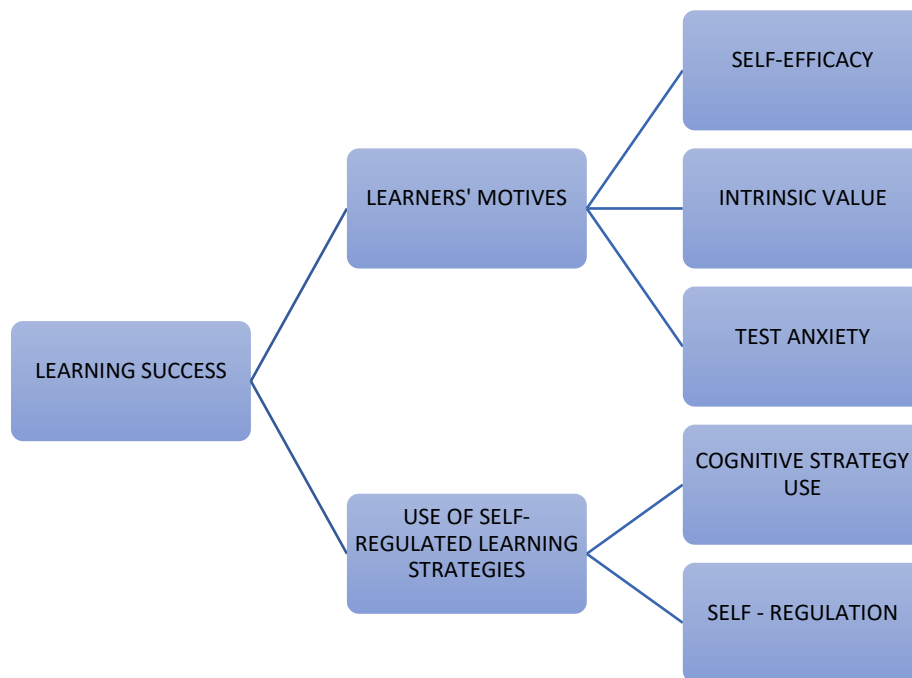


Figure 1- Conceptual Framework of the Study- Relationship between Learners' Use of Self-Regulated Strategies and Motives

Methodology

This quantitative study is done to explore motivation factors for learning among undergraduates. A purposive sample of 121 participants responded to the survey. The instrument used is a 5 Likert-scale survey and is rooted from Pintrich and De Groot (1990) to reveal the variables in table 1 below. The survey has 3 parts. Part one has items on demographic profile. Part two has 22 items on learners' motives and part three has 22 items on use of self-regulated learning strategies.

Table 1

Distribution of Items in the Survey

PART	STRATEGY	SCALE	Items	Total Items
TWO	LEARNERS' MOTIVES	SELF-EFFICACY	9	2
		INTRINSIC VALUE	9	
		TEST ANXIETY	4	
THREE	USE OF SELF-REGULATED LEARNING STRATEGIES	COGNITIVE STRATEGY USE	3	2
		SELF-REGULATION	9	
	TOTAL NO OF ITEMS			4

Table 2

*Reliability of Survey***Reliability Statistics**

Cronbach's Alpha	N of Items
.895	44

Table 2 shows the reliability of the survey. The analysis shows a Cronbach alpha of .895, thus, revealing a good reliability of the instrument chosen/used. Further analysis using SPSS is done to present findings to answer the research questions for this study.

Findings

Findings for Demographic Profile

Q1. Gender

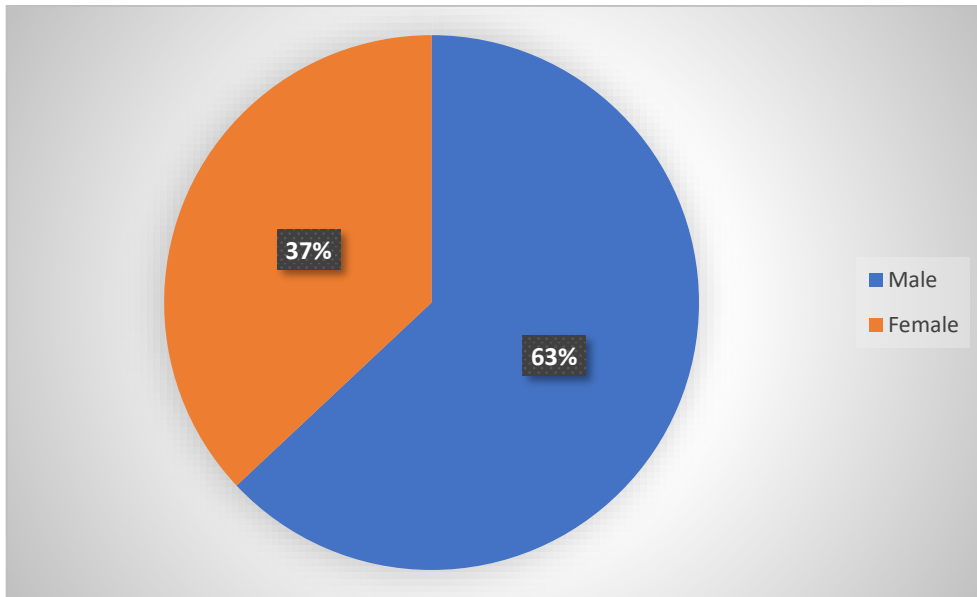


Figure 2- Percentage for Gender

Figure 2 illustrates the percentage for gender involved in this survey. From the overall total number of respondents, male respondents outnumbered female respondents which 63% are male while the remaining 37% are female.

Q2. Discipline

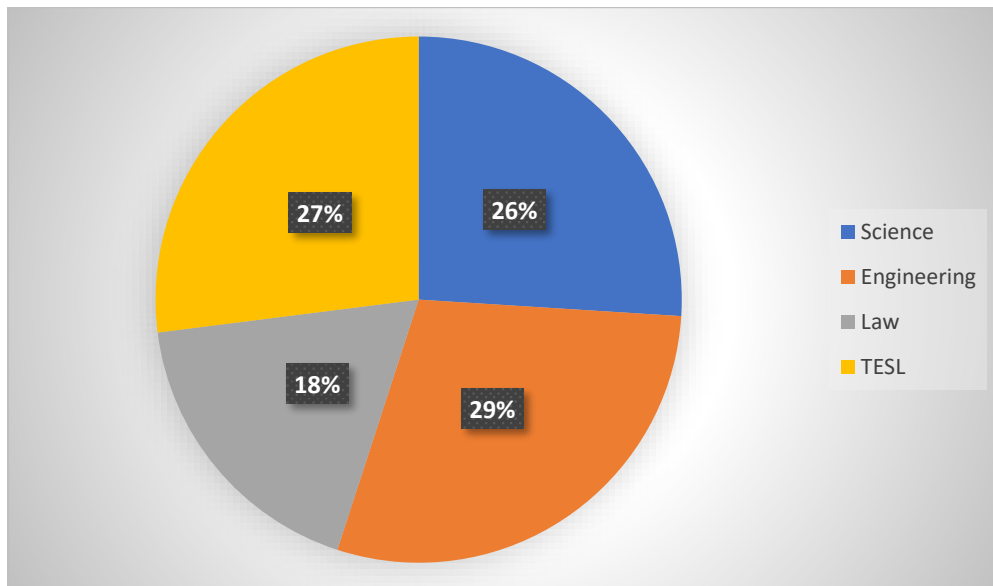


Figure 3- Percentage for Discipline

Figure 3 depicts the percentage for disciplines of the undergraduate participants from four courses namely Foundation in Science, Foundation in Engineering, Foundation in Law and Foundation in TESL. Majority of the respondents are from Engineering discipline with the highest percentage of 29%. Meanwhile, participation from TESL and Science students are 27% and 26% respectively. The lowest percentage is 18% deriving from Law discipline.

Findings for Learners' Motives

This section presents data to answer research question 1- How do learners' motives influence their learning? In the context of this study, learners' motives consist of self-efficacy, intrinsic value, and test anxiety,

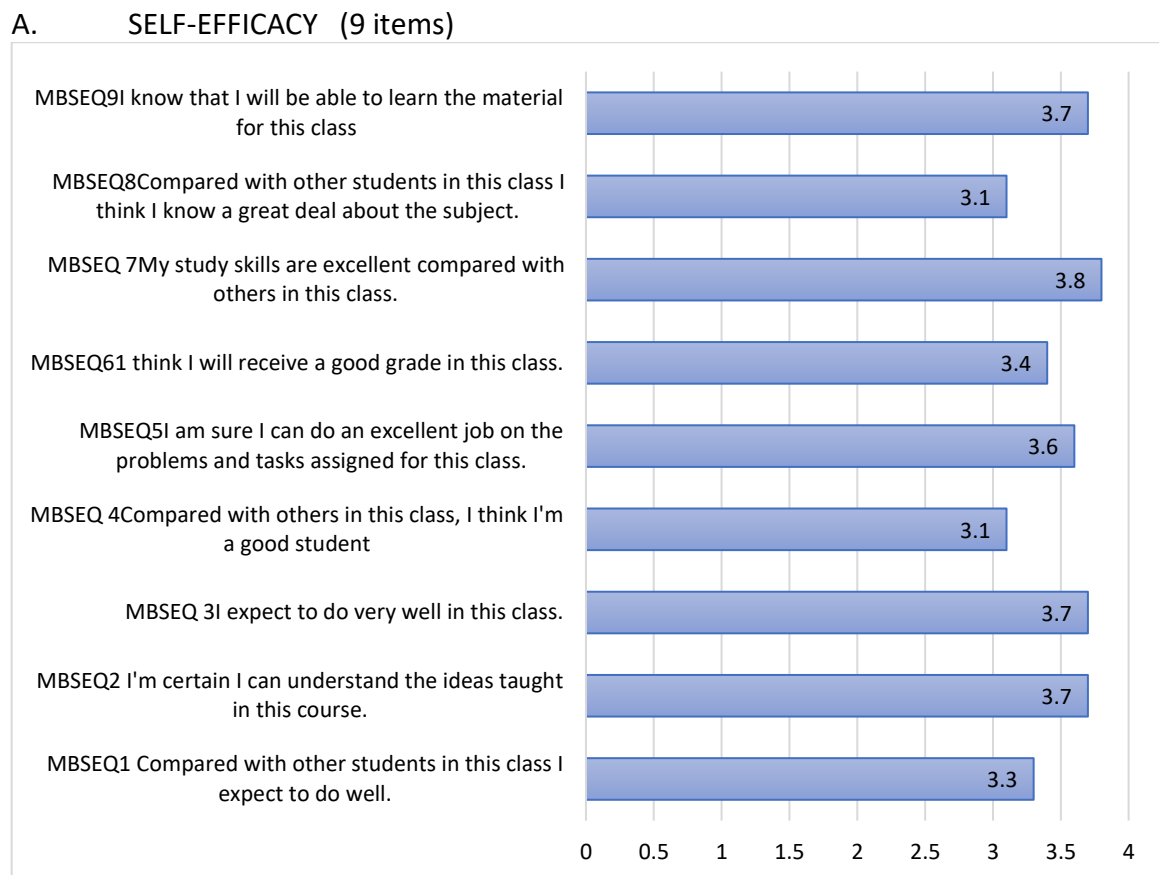


Figure 4- Mean for Self-Efficacy

Figure 4 represents the mean scores for self-efficacy, which is a measure of an individual's belief in their ability to succeed in a particular domain. The mean scores for self-efficacy range from 3.1 to 3.8. Item 7, which assesses the perception of excellent study skills compared to others in the class, has the highest mean score of 3.8, suggesting that students generally feel confident about their study skills. This is followed closely by Item 2, 3, and 9, which all have mean scores of 3.7. These items reflect a high level of certainty in understanding course concepts, expecting to do well in the class, and having confidence in learning the material. On the other hand, Item 1, 4, and 8 have relatively lower mean scores of 3.3 and 3.1. These items relate to comparing oneself with other students in terms of expected performance and subject knowledge. The lower scores suggest some students may have slightly lower confidence in their abilities compared to their peers. Overall, the data indicates that the majority of students have a moderate to high level of self-efficacy in various aspects of their academic performance, such as understanding course content, expecting good grades, and having confidence in their study skills. However, there may be a slight variation in self-efficacy beliefs among students, particularly when comparing themselves to others and their perceived knowledge level.

B. INTRINSIC VALUE (9 items)

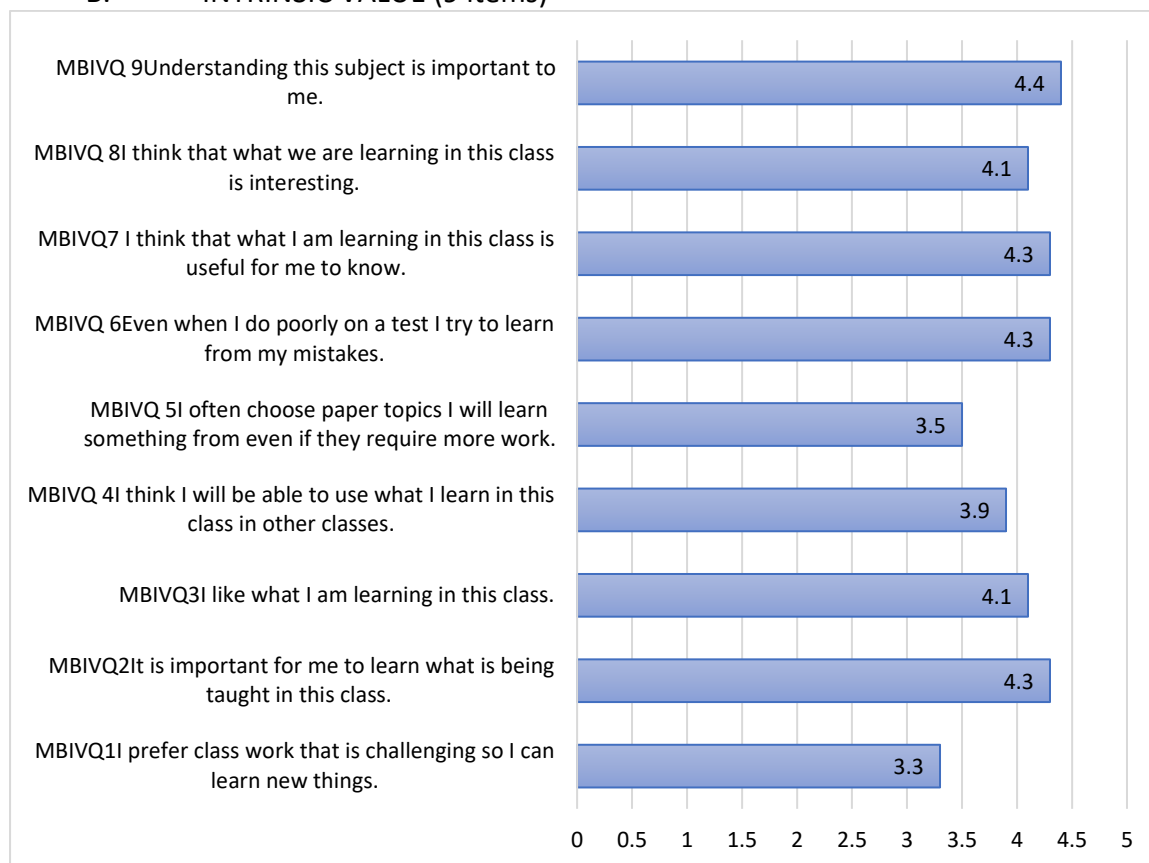


Figure 5- Mean for Intrinsic value

Figure 5 shows the analysis of the intrinsic value items which indicate that the participants have a positive perception of the value they derive from their class work. The participants showed strong agreement that it is crucial for them to learn the material being taught in the class (Mean = 4.3) and expressed a high level of satisfaction with what they are learning (Mean = 4.1). Furthermore, participants believed that the knowledge gained in the class is applicable to other courses (Mean = 3.9) and demonstrated a willingness to invest additional effort in selecting paper topics that offer learning opportunities (Mean = 3.5). On average, the participants also expressed a moderate preference for challenging class work to facilitate new learning experiences (Mean = 3.3). In addition, proactive learning approaches are exhibited by reflecting on their mistakes and seeking improvement (Mean = 4.3). Also, content of the class is perceived as both useful (Mean = 4.3) and interesting (Mean = 4.1), indicating a positive engagement with the subject matter. Overall, the findings suggest that the participants value the challenging nature of the class, are motivated to learn and find the content meaningful, applicable, and interesting.

TEST ANXIETY (4 items)

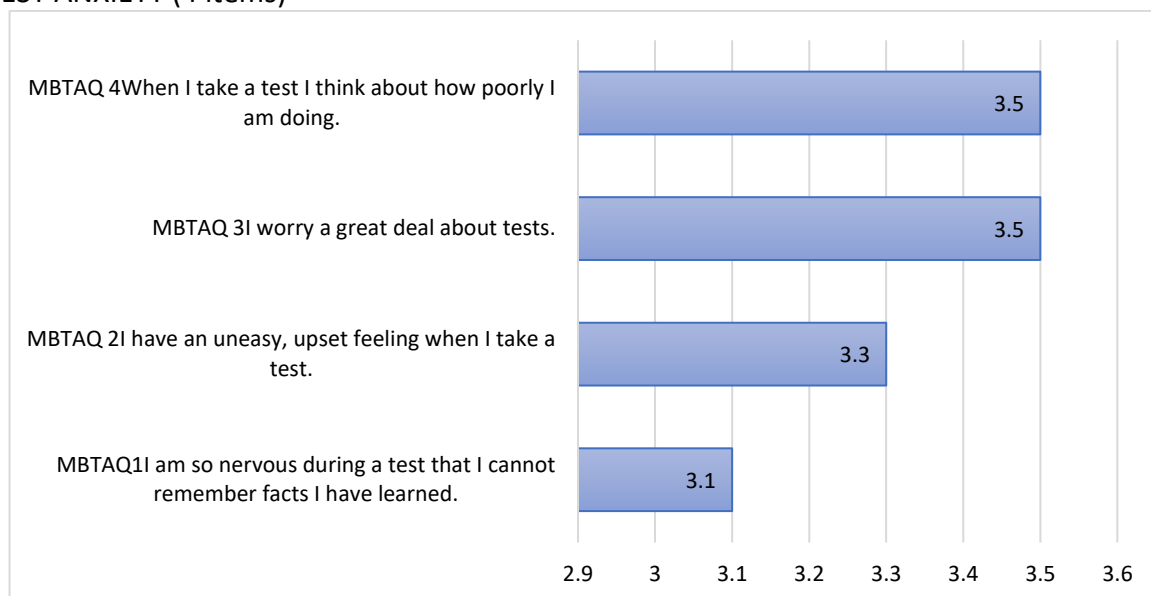


Figure 6- Mean for Test Anxiety

Figure 6 shows the test anxiety questionnaire findings. The mean scores for the four test anxiety items range from 3.1 to 3.5. Item 1 (Mean=3.1) suggests that some individuals become so nervous during tests that they have difficulty recalling the information they have learned. Item 2 (Mean=3.3) reveals that test-taking evokes an uneasy and upset feeling in participants. Item 3 indicates a significant amount of worrying related to tests, and finally, item 4 suggests that individuals tend to think negatively about their performance while taking tests with both 3.5 mean. Overall, these findings suggest that test anxiety is a common phenomenon among the participants, potentially impacting their test performance and overall well-being.

Findings for Self-Regulated Learning Strategies

This section presents data to answer research question 2- How do learners perceive use of self-regulated learning strategies? Self-regulated strategies consist of cognitive strategy use and self-regulation.

Self-Regulated Learning Strategies

A. Cognitive Strategy Use (13 items)

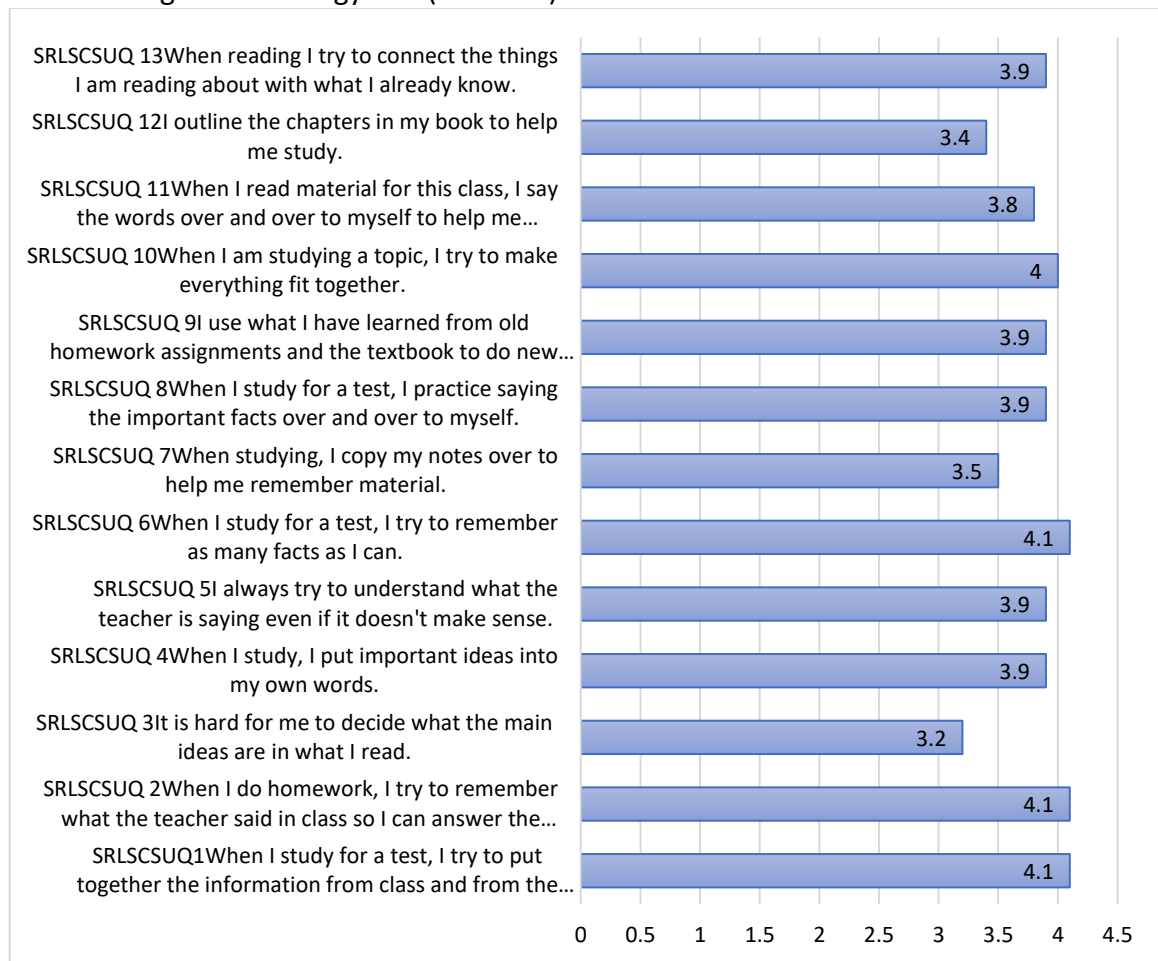


Figure 7- Mean for Cognitive Strategy Use

Figure 7 shows the mean for cognitive strategy use. Three items share the highest mean of 4.1 and they are “When I study for a test, I try to put together the information from class and from the book”, “When I do homework, I try to remember what the teacher said in class so I can answer the questions correctly”, “When I study for a test, I try to remember as many facts as I can”. One item has the mean of 4 which is “When I am studying a topic, I try to make everything fit together”. The lowest mean from Table 8 is 3.2 which is “It is hard for me to decide what the main ideas are in what I read”.

B. SELF-REGULATION (9 items)

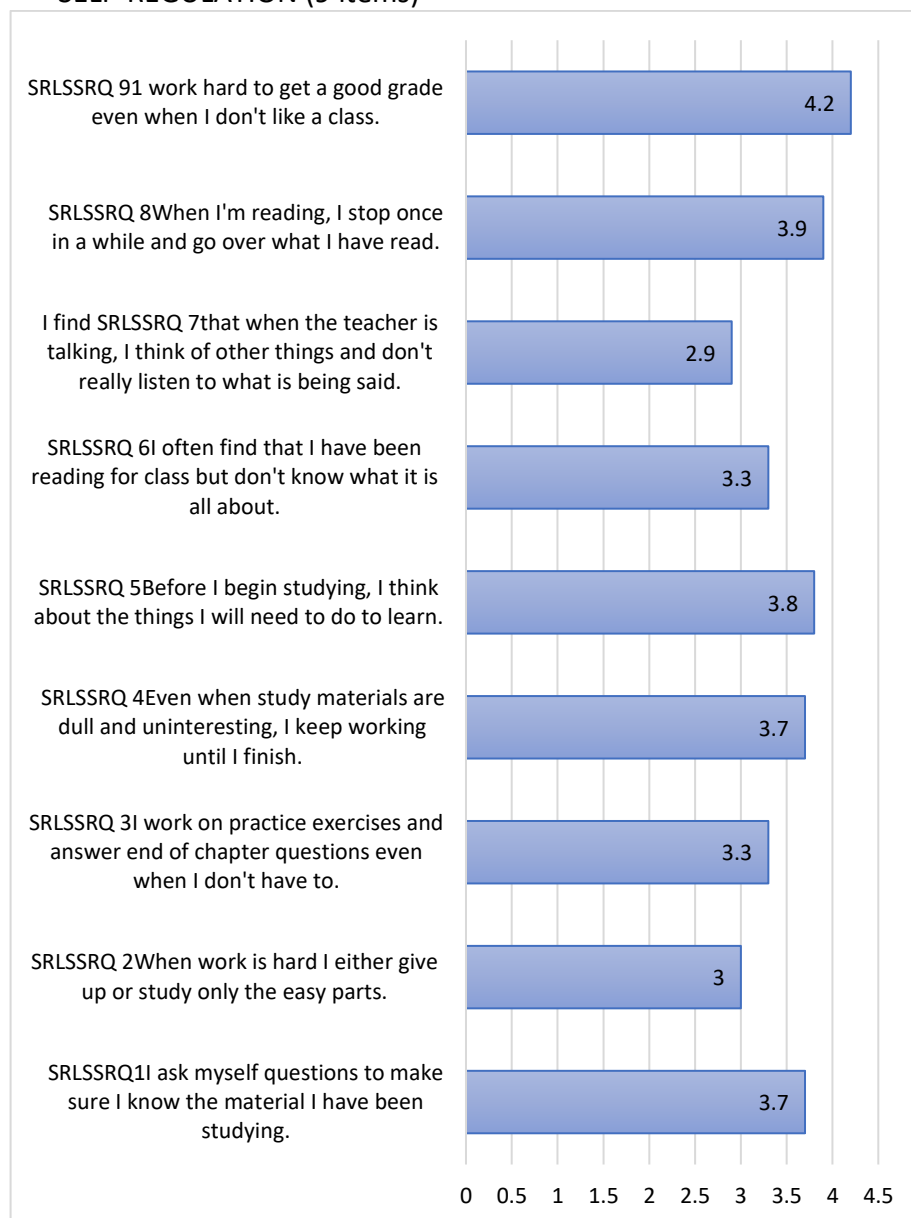


Figure 8- Mean for Self-Regulation

Table 9 shows the mean for self-regulation. One item has the highest mean of 4.2 which is “I work hard to get a good grade even when I don't like a class”. The second highest mean of 3.9 is “When I'm reading, I stop once in a while and go over what I have read” and is followed by the third highest mean of 3.8 which is “Before I begin studying, I think about the things I will need to do to learn”. The lowest mean in Table 9 is at 2.9 and it is for item “That when the teacher is talking, I think of other things and don't really listen to what is being said”.

Findings for Relationship between Learners' Motives and Self-Regulated Learning Strategies

This section presents data to answer research question 3- Is there a relationship between learners' motives and their use of self-regulated learning strategies? To determine if there is a significant association in the mean scores between metacognitive, effort

regulation, cognitive, social and affective strategies data is analysed using SPSS for correlations. Results are presented separately in table 3 below.

Table 3

Correlation between Learners' Motive and Use of Self-Regulated Learning Strategies

Correlations

		LEARNERMOTIVE	USESELFREGULATED
LEARNERMOTIVE	Pearson Correlation	1	.633**
	Sig. (2-tailed)		.000
	N	121	121
USESELFREGULATED	Pearson Correlation	.633**	1
	Sig. (2-tailed)	.000	
	N	121	121

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows there is an association between learners' motives and use of self-regulated strategies. Correlation analysis shows that there is a high significant association between learners' motives and use of self-regulated strategies. ($r=.633^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between learners' motives and use of self-regulated strategies.

Conclusion

Summary of Findings and Discussions

The current study explores the influence of learners' motives on their use of self-regulated strategies and the findings contemplate the association between learners' motives and self-regulated strategies. The motivation and self-regulated strategies are measured through two strategies which are; 1) learners' motives which consist of self-efficacy, intrinsic value and test anxiety; and 2) the use of self-regulated strategies which consist of cognitive strategy use and self-regulation. The findings showed that the learners' motives moderately influenced learners' learning, learners perceived positively on the usage of cognitive and self-regulated strategies and there is a positive relationship between learners' motives and their use of self-regulated learning strategies. Therefore, based on the analysis, several key findings have emerged.

First, there are two components that have a significant influence on learners' learning which are 'self-efficacy' and 'intrinsic value' which both are within the learners' motives. Self-efficacy as according to Bandura (1994) is beliefs held by individuals regarding their capacity to accomplish certain levels of performance. The result indicated that the learners' self-efficacy has a positive inclination towards learning. The participants believe and expect themselves to do well in their learning which these beliefs have shown their positive self-efficacy. This finding is supported with studies that illustrated a strong link between self-

efficacy and motivation towards learning (Ersanli, 2015; Hayat et al., 2020; Ugwuanyi et al., 2020; El-Adl & Alkharusi, 2020; Ali, 2022) as self-efficacious students showed remarkable academic performances. Next, as seen in the result, the second component of learners' motives which is intrinsic value has shown a notable influence on learning. Intrinsic value as referred by Ryan and Deci (2020) is what motivates a person to participate in the learning process causes the learners to have a higher level of engagement in the doing and participating in learning tasks which resulted in better achievement. A similar finding in Tokan and Imakulata (2019) highlighted the direct effect intrinsic motivation has on students' learning behaviour as well as their learning achievement. In their study, high learning motivation will cause good learning behaviour which resulted in good achievements. However they also emphasized on the negative influence bad behaviour has on learning achievement even if the students have high motivation. However, this study revealed that the participants showed positive remarks on the importance of academic tasks as they agreed that they need to focus, understand the knowledge conveyed and learn from mistakes even if they did poorly on exams. This shows that their intrinsic motivation has helped them to project best behaviour and perceptions, hence influencing their learning. Similarly, Jiao et al. (2022) found that intrinsic interest motivation has a significant positive effect on the students' English achievement. Therefore, interest in classroom subjects has an important role in the learners' learning experiences as intrinsic value motivates the learners to engage in the learning process. On the other hand, 'test anxiety', the third scale within learners' motives showed negative influence towards learning as the participants signified low levels of test anxiety.

Furthermore, this study also revealed learners' perceptions on the use of self-regulated learning strategies. Two components of self-regulated learning strategies which are 'cognitive strategy use' and 'self-regulation' were perceived positively by the learners. The analysis showed that learners use cognitive strategies like organising, summarising and repeating in processing the information either for classroom tasks or preparation for their tests. As mentioned by Zimmerman (1989, 2002; cited in Jansen et al. 2019), there are three phases of self-regulated learning - preparatory, performance and appraisal - and students use cognitive techniques to learn the subject at hand during the performance phase. In Peng (2012) study, cognitive strategies are important components as it influences the students' test performance. Contrary to the assumption that self-regulated learning is effective in improving achievement, Jansen et al. (2019) proved that self-regulated learning does not have a significant impact on academic improvement, though the interventions of self-regulated learning activity and achievement were effective. This contrary finding is supported by Lestari and Wahyudin (2020); Sukying (2021) findings that although cognitive strategies are used by the learners, it is not the primary strategy used by the second language learners. However, other studies Suyitno et al (2017); Aziz & Shah (2020); Rahmawati et al (2021); Wang et al (2021); Idris et al (2022) showed high preference use of cognitive strategy in learning and its association with academic performance. Additionally, participants of this study also have positive perceptions on self-regulation. Interestingly, it is reported that even if they do not like the class (i.e. subject) or they find that the materials are uninteresting, they will continue their learning to ensure they obtain good results. Apart from that, the participants were also able to regulate themselves by setting goals before they started the academic lesson. According to Sahranavard et al (2018), self-regulated individuals exhibit control over their psychological processes as well as environmental adaptability and in the finding of

Sahranavard et al (2018), self-regulation are related with academic performance and students who are equipped with self-regulation strategies are able to plan and set goals for future planning. To add, Matric (2018) asserted that learners' great motivation is grades as finding revealed that all students agreed that grades motivate them to do better. This evidently supports the finding of the current study that even though the learners dislike the academic content but if they set a proper goal i.e. wanting to achieve good grades, they are able to utilise the self-regulation strategies to accomplish their targeted goals. Even in an online learning environment, learning achievement can be attained through self-regulation as discovered in Yu (2023), there is a positive relationship between self-regulation ability and language achievement in the online environment as students with clear vision and interest are able to self-regulate effectively.

Therefore, these two key findings have conclusively bound the third finding which is on the relationship between learners' motives and their use of self-regulated learning strategies. The analysis has corroborated that there is a high significant association which showed a strong positive relationship between learners' motives and use of self-regulation strategies. Hayat et al (2020) emphasized on the significance of self-regulation strategies with academic performance which they found that if the students who believe in their own capabilities are more optimistic resulting in high self-efficacy. Although in El-Adl and Alkharusi (2020) the students used self-regulation learning strategies moderately, there was a positive relationship between self-regulation learning including positive motivational beliefs and academic achievement. Similarly, they highlighted that self-regulated students who possessed control learning resulted in high levels of confidence in their abilities to learn. However, there is a negative association between association test anxiety and self-regulated learning as it was found that there is a decreased usage of cognitive strategy and self-regulated learning strategies when the test anxiety increases as anxiety causes distraction and disorientation (El-Adl & Alkharusi, 2020). They add that as students are worried they lose their confidence and cause them to feel demotivated in employing self-regulation learning strategies. Opposite to Sukimin et al (2023), learners were found to 'worry a great deal about the test' but the finding showed a strong correlation between self-regulation and cognitive strategy use on learners' learning. In comparison to the current study, the result for the test anxiety is slightly lower and students perceive self-regulation positively as it has a negative influence on the learners' motives.

In summary, self-efficacy and intrinsic value are two interconnected psychological constructs that reinforce the learners' motives which contributed to the learning experiences. By possessing higher learning motivation beliefs, learners are able to employ self-regulation learning strategies in performing their academic tasks. Notably, this study highlights a strong positive relationship between learners' motives and the use of self-regulated strategies.

Pedagogical Implications and Suggestions for Future Research

Although motivational beliefs and self-regulated learning strategies postulated positive relationships towards learning as proven in this study and supported by other numerous studies Ersanli (2015); Suyitno et al (2017); Tokan & Imakulata (2019); Aziz et al (2020); Hayat et al (2020); Ugwuanyi et al (2020); El-Adl & Alkharusi (2020); Ali (2022); Rahmawati et al (2021); Wang et al (2021); Jioa (2022); Idris et al (2022); Sukimin et al (2023), learners are still incapable of self-regulating themselves to the maximum extent. As they are also still learning to self-regulate while managing their motives (self-efficacy, intrinsic motivation and

performance anxiety), they are lacking in knowledge on strategy use for their academic tasks as well as in their individual factors.

Primarily, most studies suggested that change needs to be done pedagogically. Second language learners are not equipped with such knowledge, most probably due to their previous learning environment which caused them to use fewer strategies in self-regulating learning. It is imperative that educators and policymakers make necessary changes to accommodate the knowledge of self-regulation learning strategies in the curriculum. Training such as advanced teaching methods need to be given to the educators (Li, 2018) in order to understand more on the needs of current generations. Sukimin et al (2023) suggested that for future research on self-regulated learning strategies, the age gap between learners and educators needs to be addressed as the interaction between them might be contradicted due to generation differences.

Next, Zimmerman (2002) “self-regulation is not a mental ability or an academic performance skill; rather it is the self-directive process by which learners transform their mental abilities into academic skills” (p. 65). In order to master their own learning process, learners need to be aware of their own psychological states and motives. Yu (2023) highlighted that encouragement and motivational beliefs are essential to improve students’ learning effectiveness. Although the classroom environment or style has changed, learners must know how to navigate their learning orientation by setting new goals, increasing their self-efficacy and controlling any unnecessary anxieties. Aziz and Shah (2020) stress on the effect of anxiety on language learning and future research needs to focus on matter as the findings might be insightful. In the current study and other related studies, self-efficacy of the learners is not in its highest level but showed a low positive inclination. For future research, it is suggested that in-depth observation should be conducted to investigate the learners’ self-efficacy and self-regulated learning strategies - their refusal of admitting their achievement and capabilities. El-Adl and Alkharusi (2020) suggested multiple data collection methods should be done such as classroom observation and interviews. Gender and cultural differences can also be the variables that will give more beneficial findings on learners’ motives and self-regulated learning strategies.

Conclusively, this study aims to explore the influence of learners’ motives on their use of self-regulated strategies and the findings reflect the association between learners’ motives and self-regulated strategies and further investigation in understanding more on learners’ motives and strategies used to become a self-regulated learner is needed in order to address on learners’ differences and learning orientation based on the current environment that able to accommodate to each stakeholders and nurturing directive goal-oriented learners that will benefit their life-long learning.

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