RELATIONSHIP BETWEEN SELF REGULATED LEARNING, SOCIAL MEDIA USAGE AND MOTIVATION AMONG ARABIC LEARNERS IN MALAYSIAN PUBLIC UNIVERSITIES

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ABSTRACT

This study aimed at investigating the relationship between self-regulated learning strategies, social media usage, and motivation, as well as the influences of three variables to Arabic learners' Academic achievement (GPA) in Malaysian public universities. To collect the data, a number of 317 male and female undergraduate Malaysian Arabic learners were randomly selected from six public universities in Malaysia as participants of this study. The instruments were developed from Jansen et al., (2017), Monachesi et al., (2008), and Pintrich et al., (1991). Then, IBM SPSS was used for data screening and descriptive analysis whereas Smart-PLS were applied to analysis most of the inferential statistics and develop models for the influence of self-regulated learning strategies, social media usage and motivation on academic achievement, as well as the mediation effect among three variables. The findings indicated Arabic learners with medium level self-regulated learning strategies, social media usage and high level of motivation in Arabic learning. Moreover, the participants frequently use metacognitive skill and help-seeking strategies but rarely use time management in learning. Additionally, the degree of self-regulated learning strategies, social media usage, and motivation are not significantly different in gender and year of study. The result further revealed that learners' self-regulated learning strategies, social media usage, and motivation significantly correlation each other, and there is a significant effect of Arabic learners' self-regulated learning strategies on academic achievement. Meanwhile, there is no significant effect of motivation and social media usage on learners' academic achievement. Besides, the finding of this study also indicated self-regulated learning strategies are a significant mediator of the relationship between motivation and social media usage among Arabic learners. The findings of this study provided fresh empirical evidence to support with the social

cognitive theory that there is a statistically significant positive correlation between self-regulated learning strategies, social media usage and motivation in Arabic learning context in Malaysian public universities. On the other hand, this study also presented the procedures of Arabic learners using social media to support self-regulated learning in Arabic learning. This contribution finding unfolds new understandings regarding the Arabic language as second language pedagogy in Malaysia. Consequently, this study have provide several theoretical and practical implications, practicing the procedures of Arabic learners' using social media to support self-regulated learning in Arabic learning and metacognitive skills, help-seeking strategies deem to be considered crucial in Arabic learning.

Key words: Self-regulated learning strategies, Social media usage, Motivation, Academic achievement (GPA), Arabic language learning

HUBUNGAN ANTARA PEMBELAJARAN PENGATURAN KENDIRI, PENGGUNAAN MEDIA SOSIAL DAN MOTIVASI PELAJAR BAHASA ARAB DI UNIVERSITI AWAM MALAYSIA

ABSTRAK

Kajian ini bertujuan untuk mengkaji hubungan antara strategi pembelajaran kendiri, penggunaan media sosial, dan motivasi, serta pengaruh tiga pembolehubah terhadap pencapaian akademik pelajar bahasa Arab di Malaysia Awam Malaysia. Untuk mengumpul data, seramai 317 pelajar bahasa Arab lelaki dan perempuan telah dipilih secara rawak dari enam universiti awam di Malaysia sebagai peserta kajian ini. Instrumen ini dibangunkan dari Jansen et al., (2017), Monachesi et al., (2008) dan Pintrich et al., (1991). IBM SPSS digunakan untuk penyaringan data dan analisis deskriptif manakala Smart-PLS digunakan untuk menganalisis kebanyakan statistik inferens dan membangunkan model untuk pengaruh strategi pembelajaran kendiri, penggunaan media sosial dan motivasi terhadap pencapaian akademik, serta kesan pengantaraan di antara tiga pembolehubah. Dapatan menunjukkan pelajar mempunyai strategi pembelajaran kendiri dan penggunaan media sosial yang sederhana, disamping motivasi yang tinggi dalam pembelajaran bahasa Arab. Selain itu, para pelajar sering menggunakan strategi kemahiran metakognitif dan mencari bantuan tetapi jarang menggunakan pengurusan masa dalam pembelajaran. Di samping itu, tahap strategi pembelajaran kendiri, penggunaan media sosial dan motivasi pelajar tidak berbeza dari segi jantina dan tahun pengajian. Hasil kajian menunjukkan bahawa strategi belajar kendiri pelajar, penggunaan media sosial, dan motivasi yang saling berkait rapat antara satu sama lain, dan terdapat kesan yang signifikan terhadap strategi belajar kendiri pelajar Bahasa Arab terhadap pencapaian akademik. Sementara itu, tidak terdapat kesan yang signifikan terhadap motivasi dan penggunaan media sosial terhadap pencapaian akademik pelajar. Di samping itu, penemuan kajian ini juga menunjukkan

strategi pembelajaran kendiri adalah pengantara penting hubungan antara motivasi dan penggunaan media sosial di kalangan pelajar bahasa Arab. Penemuan kajian ini memberikan bukti empirikal untuk menyokong teori kognitif sosial yang menunjukkan terdapat korelasi positif yang signifikan secara statistik antara strategi pembelajaran kendiri, penggunaan media sosial dan motivasi dalam konteks pembelajaran bahasa Arab di Malaysia. Seterusnya, kajian ini juga membentangkan prosedur pembelajaran bahasa Arab menggunakan media sosial untuk menyokong pembelajaran kendiri dalam pembelajaran bahasa Arab. Hasil sumbangan ini membuka pengertian baru mengenai bahasa Arab sebagai pedagogi bahasa kedua di Malaysia. Oleh itu, kajian ini menyediakan beberapa implikasi teoretikal dan praktikal, mengamalkan prosedur pembelajaran bahasa Arab menggunakan media sosial untuk menyokong pembelajaran kendiri, kemahiran metakognitif dan strategi mencari bantuan yang dianggap penting dalam pembelajaran bahasa Arab.

Kata kunci：Pembelajaran Pengendalian Kendiri, Penggunaan Media Sosial, Motivasi, Pencapaian Akademik, Pelajar Bahasa Arab

ACKNOWLEDGEMENT

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Social Cognitive Theory	SCT
Self-regulated learning strategies	SRLs
Self-regulated learning	SRL
Social Media Usage	SMU
Social Media	SM
Academic achievement	GPA
Metacognitive skills	MS
Environmental structuring	ES
Time management	TM
Persistence	P
Help seeking	HS
Self-efficiency	SE
Task Value	TV
Goal orientation	GO
Formal Learning	FL
Informal Learning	IL

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CHAPTER 1

INTRODUCTION

1.1   Introduction

This chapter describes the overview of this research in general, starting from the background of the current study. Then, the researcher explains the statement of the problem, Conceptual framework of the study, Research questions, Objectives of the study, Limitations of the study, and Significance of the study progressively step-by-step.

1.2   Background of the Research

Currently, the Arabic language is the most widely spoken Semitic language. According to the CIA (2008), the number of Arabic speakers in the Middle East is around 330 million. Besides, the Arabic language is the language of Islam, and Morrow and Castleton (2007) mentioned that the Arabic language has a greater effect on its speakers compared to other languages. Due to its purposes in conveying Islam and trade contacts, the Arabic language is continuously spread throughout the world. Arabic was first introduced to the country by Yemeni merchants who arrived in the city of Malacca in the 13th century A.D.

"Arabs arrived in Malaysia first as merchants, to a pleasing welcome. Then later the conversion of the Sultan of Malacca to Islam opened the gate for more waves of Arab migrants which continued until the 20th century."

- Dr Tarek Ladjal

Ismail (1993) reported that there is no clear evidence of when the teaching and learning of Arabic language exactly began in Malaysia, but the researchers presumed that it began immediately after the arrival of Islam in Malaya at the beginning of the 14th or 15th century A.D. The only purpose for the teaching and learning of Arabic language during this period in the Malay states was to know about Islam. At the beginning of the 14th or 15th century A.D, the main approaches to the teaching and learning of the Arabic language were "*Halaqah*" and "*Pondok*". Formal Islamic schools, such as Sekolah Ugama/Sekolah Arab/ Madrasah, National Islamic Secondary School, and Islamic college, were later opened for Arabic learning and Islamic Knowledge.

J-QAF (*Jawi-Quran-Arabic* and *Fardhu ain*), a programme conducted by the Malaysian government, was a crucial turning point in improving the teaching and learning of Arabic language in Malaysia. The program was implemented at national schools in 2005, which includes Islamic studies and Arabic language as well. The main objective of this programme was to have a comprehensive Islamic education in national schools (Rozmal bin Malakan, 2005). Furthermore, the National Higher Education Strategic Plan Beyond 2020 was announced.

"Proficiency in the third language is vital for developing human capital that drives the k-economy as well as gears the country towards competitive innovation in the international arena, Malaysian universities are encouraged to provide learning opportunities for students to be proficient in a third language"

-The Ministry of Higher Education (2007)

As a result, more Malaysian learners have taken courses in the Arabic language to maintain their connection with Islam and history (Abduljalil et al., 2015) or to join the tourism industry (Mat et al., 2009). In order to meet the strong demand for Arabic language learners and the growth of Arabic language learning, many Arabic language teaching and learning centres were opened in Malaysia. Arab international schools are scattered throughout Malaysia. There are also Internet programmes for teaching Arabic to learners, as well as the use of electronic dictionary education, and books on the preparation for Arabic language special education teaching for non-natives. There are also scientific conferences and symposiums held to discuss the teaching of the Arabic language to non-natives using different perspectives. Numerous language teacher training courses and workshops have been established accordingly (Albouchekhi, 2012; Alsrhid, 2013).

As the number of Arabic language learners continues to increase, researchers and educators begin to focus on how to improve non-native learners' acquisition of the Arabic language, such as through learners' motivation (Abdolvahab, 2012); ideal curriculum, Arab school's role (Al-Bazeli et al., 2014); Applied Arabic Language Communication Model in Teaching and Learning in Arabic learning (Suhid et al., 2012); encourage to use language learning strategies (Norfaezah et al., 2015); self-regulated learning (Abdolvahab, 2012); the teaching methodology of Arabic speaking skills (Haron, 2013); challenges in learning to speak Arabic (Haron et al., 2016) and so on. Self-regulated learning strategies are strategies that assist learners to set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment (Pintrich, 2000). The theory of self-regulated learning is grounded from Bandura's (1977, 1986) social cognitive theory which stated that

learning occurs with personal, environmental, and behavioural factors as determinants. And social media as a "natural alliance" exists with self-regulated learning. The use of social media is considered a promising method to support the self-regulation process (Matzat & Vrieling, 2016; Dabbagh & Kitsantas, 2013). Also, motivation is the indispensable factor for driving force to sustain the self-regulated learning process over the long and arduous years of language learning (Dörnyei, 2001).

At present, students who graduate from religious schools in Malaysia enjoy a variety of opportunities in higher education. Before 1970, there were only two local higher institutions, namely the Islamic College of Malaya and the Islamic Institute of Nilam Puri, which could accommodate a limited number of students. After a few years of development, 10 universities began to offer the Arabic language, i.e. Universiti Kebangsaan Malaysia (UKM), University of Malaya (UM), Putra Malaysia (UPM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (uniZA), Islamic Science University of Malaysia (USIM), Kolej Universiti INSANIAH (Kuin), Kolej Universiti Islam Antarabangsa Selangor (KUIS), Northern University of Malaysia (UUM), University of Malaysia Sabah (UMS), University of Science Malaysia (USM), University Institute of Technology Malaysia (UiTM) and University of Malaysia Sarawak (UNIMAS) (Ainol et al., 2007). In addition, these students can also further their studies at universities in the Middle East.

In understanding how to improve the Arabic learners' language level, the researcher investigated university-level Arabic language learners' self-regulated learning strategies, motivation and social media usage, as well as the relationship and the influence of three variables on the Arabic language learners' academic achievement.

1.3   Statement of the Problem

The Malaysian National Education System provides Arabic language subjects for primary, secondary, and tertiary education as additional subjects (Ministry of education Malaysia) and the name of Secondary School Arabic Language Integrated Curriculum was changed to the Arabic Language for Communication. The objective of teaching and learning the Arabic Language for Communication since the primary level is to instil students' interest in learning the Arabic language and to assist the students in mastering language skills besides enabling them to communicate easily (Suhid and Ahmad, 2012). However, many studies claim that the teaching and learning the Arabic language as a third language have yet to achieve its intended target (Kamarulzaman et al., 2002; Ainon and Abdullah, 2005). Several empirical studies (Norhayuza et al., 2004; Sahabudin, 2003; Anida, 2003; Amilrudin, 2003; Khalid, 2004; Zawawi et al., 2005; Siti Ikbal, 2006; Mat Taib, 2006; Ghani et al., 2011; Awang, Mohamed & Sulaiman, 2013) have concluded that university-level Malay learners are weak in their ability to communicate in the Arabic language. Many factors that contribute to this situation have been identified. Firstly, it is clear that the language learning environment would significantly cause learners to be weak in Arabic oral speaking. However, some studies found that students could be good Arabic speakers while being in a non-native speaking environment (Haron et al., 2010; Yusri et al., 2012). On the other hand, Haron et al., (2010) argued that the students may lack the strategies required for Arabic language learning. The researcher believes that being aware of language learning strategy use will enhance learners' speaking skills and assist learners in becoming good Arabic speakers rather than relying solely on the learning environment. Thus, the researcher noted that there is a need to further examine

self-regulated learning strategies among Arabic learners and the influence of those strategies on Arabic performance.

On the other hand, Schunk and Zimmerman (2012) concluded,

"Although self-regulated learning interventions produced successful outcomes in classroom settings, they have often failed to sustain students' use of these processes in less-structured environments."

This gap has guided researchers to focus on motivation factors as well. The role of motivation in language learning is a driving force to sustain the SRL process over a long and dull period. The empirical studies by Daniela (2015), Dörnyei (2001) and Mahmoodi and Ghaslani (2014) have shown that students' SRLs processes and motivational beliefs are reciprocally interactive and they are significantly related to each other. On the other hand, there are also studies such as Cetin (2015) that reported no significant correlation between students' performance, motivation, and self-regulation learning. Hence, it is necessary to investigate motivation, SRLs facilitation of language learning, and its influence on academic performance among learners in the Arabic language learning context.

As mentioned earlier, there is growing evidence supporting that students' SRLs processes and motivational beliefs are reciprocally interactive. However, what leads to self-enhancing cycles of SRLs and motivation rather than conflicting cycles? Schunk and Zimmerman (2012) stressed that one of the possible answers is the "chicken-and-egg" dilemma for improving self-sources of motivation involves the use of social resources such as parental or lecture modelling and praising. Social Cognitive Theory (Zimmerman, 2000) and Vygotskian theorists (McCaslin and Hickey, 2001) view social sources as an interdependent and mutually benefiting self-sourced

motivation. The current study will treat SMU as the social source that leads to self-enhancing cycles of self-regulated learning and motivation.

On the other hand, there are a lot of studies suggesting that social media is an important tool to assist language learning (Clark and Gruba, 2010; Liu et al., 2013; Stevenson and Liu, 2010; Ismail et al., 2017) and how enriched learning enhances student self-regulation, motivation facilitates academic performance and increases positive attitudes towards learning (Kitsantas, 2013; Azevedo and Hadwin, 2005; Chang, 2007; Kramarski and Gutman, 2006; López-Morteo and López, 2007; Perry and Winne, 2006; Winne, 2006; Winne et al., 2006). However, the effects of social media integration strongly depend on the way students use them. A lot of studies (Junco 2012; Junco et al., 2013; Ahn 2011; Mazer et al., 2009) argued that students would not learn more from the social media context without the exception of the skill in controlling learning through multiple information and technology platforms. Meanwhile, Kirschner & Karpinski (2010) and Tariq et al., (2012) reported that there is a negative relationship between students' social media usage, SRLs, and academic achievement. Hence, there is no permanent response within different populations and learning contexts regarding SRLs, SMU, and motivation, including the Arabic language context. Benson and Gao (2008) divided learners' differences in language learning into two categories: (a) innate attributes such as gender, age, language learning aptitude, personality, and learning styles; and (b) acquired attributes such as attitudes, motivation, beliefs, and learning strategy use. Therefore, it is worth examining the correlation between social media usage, SRLs, and motivation and to explore its influence on academic achievement among Arabic language learners in Malaysia.

1.4   Theoretical Framework of the study

The current study investigated the relationships between SRLs, Motivation, and SMU and their influence on academic achievement among Arabic language learners in Malaysia. The Social Cognitive Theory was chosen as the core conceptual framework to understand SRLs, motivation, and SMU (learning context) aspects of Arabic language learning.

Social Cognitive Theory (Bandura, 1986), is a learning theory based on the idea that people acquire knowledge by observing others within the context of social interactions, experiences, and external media influences. In other words, people learn by observing others, together with the environment, behaviour, and cognition/personal act as the main factors influencing development in a reciprocal triadic relationship, as displayed by Figure 1.1.
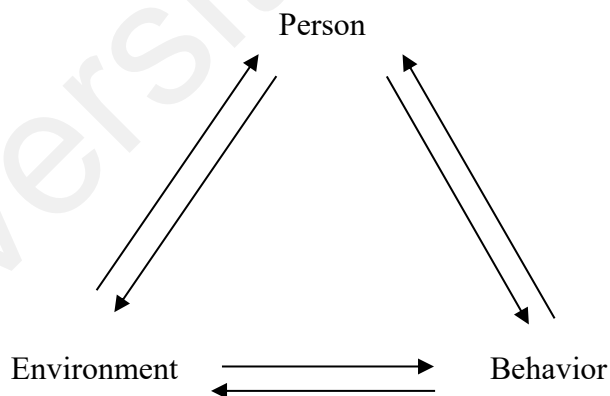
Figure 1.1. Social cognitive theory functioning by Bandura (1986)

The core concepts of this theory can be explained by Bandura's schematisation of triadic reciprocal causation. The model shows how the reproduction of observed behaviour is influenced by the interaction of the following three determinants, i.e.

Personal, Behavioural, and Environmental. The model of self-regulated learning development is typically grounded in the Social Cognitive Theory (Person, Behaviour, and Environment) (Biemiller et al., 1998; Zimmerman and Bonner, 1996; Zimmerman and Kitsantas, 2005). According to Zimmerman and Martinez-Pons (1986),

"Students effectiveness in planning and controlling their use of personal, behavioral, and environmental strategies to learn is one of the most visible signs of their degree of self-regulation".

When a learner can exert strategic control over each of the three types of influence, he or she can be described as self-regulated and can be legitimately applied to that type of strategy. Self-regulation strategies used by successful students can fall into three categories: personal, behavioral, and environmental (Biemiller et al., 1998; Zimmerman and Bonner, 1996; Zimmerman and Kitsantas, 2005). Besides, Motivation can fall into the personal category and SMU can fall into the environmental category (Siegler, 1982; Anderson, 1976; Bandura and Schunk, 1981). As shown in Figure 1.2.
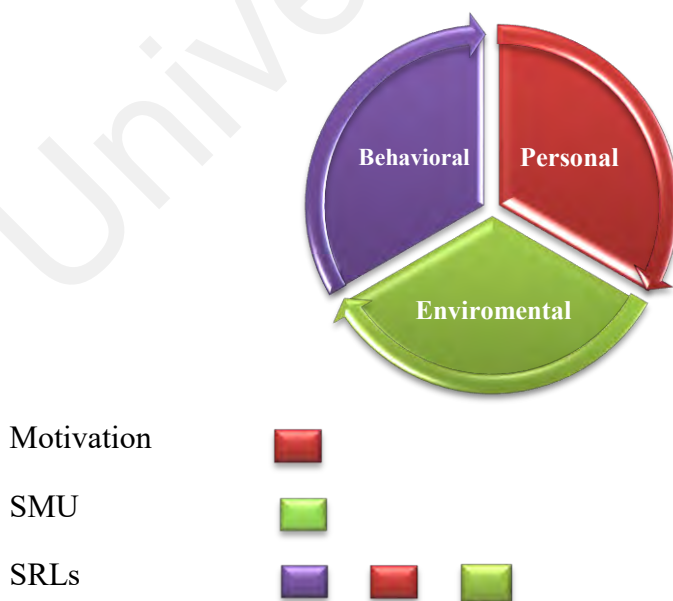
Figure 1.2. Theoretical Framework of the study based on Bandura's SCT

1.5   Conceptual Framework of Research

As mentioned in the theoretical framework, SRLs, SMU, and motivation are the three variables based on the Social Cognitive Theory in Bandura's triadic reciprocal causation. Recent models of SRLs state the importance of integrating both motivational and cognitive components of learning (Garcia and Pintrich, 1994; Pintrich et al., 1994; Pintrich and Schrauben, 1992). Motivation is one of the essential factors that influence self-regulated learning. Motivational processes play an important role in initiating, guiding, and sustaining the students' effort to self-regulate their learning (Schunk and Zimmerman, 2012). In turn, self-regulated learning interventions can be designed to enhance students' motivation concomitantly, such as learners' self-efficacy beliefs (Pajares and Schunk, 2005) as well as their learning outcomes. Motivation as an outcome of efforts to self-regulated learning can also ensure improved learners' long-term self-regulated learning outcomes.

Wolter (1999, 2003) stated that various SRLs (such as task persistence) enhances learners' behavioural forms of motivation. Based on growing evidence, students' self-regulated learning processes and motivational beliefs are certainly reciprocally interactive. However, what leads to self-enhancing cycles of SRL and motivation rather than conflicting, self-defeating cycles? Schunk and Zimmerman (2012) stressed that one of the possible answers is the "chicken-and-egg" dilemma for improving self-sources of motivation involving the use of social resources, such as parental or lecture modelling and praising. Social cognitive theory (Schunk and Zimmerman, 1997; Zimmerman, 2000) view social sources as an interdependent and mutual benefit with self-sourced motivation. For instance, there are a lot of studies showing that social media is an important tool to assist language learning (Clark and Gruba, 2010; Liu et al., 2013; Stevenson and Liu, 2010). However, poor learners are

reluctant to use social media for learning but instead use it for amusement only such as for gaming, online shopping, watching dramas, and chatting. Meanwhile, students with a high level of motivation who can master goal orientation are willing to use social media for learning due to their confidence that it will lead to more adaptive cycles of learning. In short, social sources can enhance SRLs and motivational beliefs rather than detract from them. Therefore, the researcher selected learners' SMU as the social source in this study.

According to Oxford (2013); Benson and Gao (2008) divided learners' differences in language learning into two categories Gender (male and female) and Year of study (Year One, Year Two, Year Three and Year Four) for university Arabic learners, based on the concepts of SRLs, motivation, and social media usage. The Conceptual Framework of this study as shown in Figure 1.3.

Gender
Year of study

(Panadero et al., 2017; Bidjerano, 2005; Ning & Downing, 2012)

Self-regulated learning strategies

(Pintrich, 2000; Zimmerman and M. Camppillo, 2003; Jansen et al., 2017)

- Metacognitive skills
- Time management
- Environmental structuring
- Persistence
- Help seeking

Social Media Usage (Smith and Caruso, 2010)
- Formal Arabic learning
- Informal Arabic learning

Motivation (Dörnyei, 2005; Pintrich et al., 1991)
- Goal orientation
- Self-efficacy
- Task value

Academic achievement (GPA)

(Bandura, 1986; Pintrich, 2000; 1995; Zimmerman and M. Camppillo, 2003; Jansen et al., 2017)

Figure1.3. Conceptual Framework of this study

1.6 Objective of the Research

1. To describe Self-regulated learning strategies, motivation, and Social media usage on Arabic learning among Arabic learners in Malaysian Public Universities.

2. To identify the significant difference in Arabic learners' Self-regulated learning strategies, motivation, and Social media usage between gender in Malaysian Public Universities.

3. To identify the significant difference in Arabic learners' Self-regulated learning strategies, motivation, and Social media usage among different years of study in Malaysian Public Universities.

4. To determine the relationship between Self-regulated learning strategies, motivation, and Social media usage among Arabic learners in Malaysian Public Universities.

5. To identify the influence of Self-regulated learning strategies, motivation, and Social media usage on academic achievement (GPA) among Arabic learners in Malaysian Public Universities.

6. To investigate the mediating effect of Arabic learners' motivation on the relationship between Self-regulated learning strategies and Social media usage in Malaysian Public Universities.

7. To investigate the mediating effect of Arabic learners' Social media usage on the relationship between Self-regulated learning strategies and motivation in Malaysian Public Universities.

8.   To investigate the mediating effect of Arabic learners' Self-regulated learning strategies on the relationship between Motivation and Social media usage in Malaysian Public Universities.

1.7 Research Questions

1. To what extent of Arabic learners' Self-regulated learning strategies, motivation, and Social media usage on Arabic learning in Malaysian Public Universities?

2. Is there any significant difference between gender among Self-regulated learning strategies, motivation, and Social media usage in Malaysian Public Universities?

3. Is there any significant difference between years of study among Self-regulated learning strategies, motivation, and Social media usage in Malaysian Public Universities?

4. Is there a significant correlation between Self-regulated learning strategies, motivation, and Social media usage among Arabic learners in Malaysian Public Universities?

5. To what extent Self-regulated learning strategies, motivation, and Social media usage influence academic achievement on Arabic learning in Malaysian Public Universities?

6. Is there any mediating effect of Arabic learners' motivation on the relationship between Self-regulated learning strategies and Social media usage in Malaysian Public Universities?

7. Is there any mediating effect of Arabic learners' Social media usage on the relationship between self-regulated learning strategies and motivation in Malaysian Public Universities?

8. Is there any mediating effect of Arabic learners' Self-regulated learning strategies on the relationship between motivation and Social media usage in Malaysian Public Universities?

1.8 Research Hypotheses

Based on the questions of this study, the present study addresses the need to examine the relationship between factors and the influence of each factor on academic achievement which will be formulated as the following.

The significant difference between gender in SRLs, Motivation, and SMU

H_{1a}: Arabic learners' Self-regulated learning strategies have a significant difference between gender in Malaysian Public Universities.

H_{1b}: Arabic learners' Social media usage has a significant difference between gender in Malaysian Public Universities.

H_{1c}: Arabic learners' Motivation has a significant difference between gender in Malaysian Public Universities.

The significant difference between the year of study in SRLs, Motivation, and SMU

H_{2a}: Arabic learners' Self-regulated learning strategies have a significant difference among different years of study in Malaysian Public Universities.

H_{2b}: Arabic learners' Social media usage has a significant difference among different years of study in Malaysian Public Universities.

H_{2c}: Arabic learners' Motivation has a significant difference among different years of study in Malaysian Public Universities.

The significant correlation between SRLs, Motivation, and SMU

H_{3a}: Self-regulated learning strategies (SRLs) are significantly correlated to motivation among Arabic learners in Malaysian Public Universities.

H_{3b}: Self-regulated learning strategies (SRLs) are significantly correlated to Social media usage (SMU) among Arabic learners in Malaysian Public Universities.

H_{3c}: Motivation is significantly correlated to Social media usage (SMU) among Arabic learners in Malaysian Public Universities.

The extent of SRLs, Motivation, and SMU influence in academic achievement

H_{4a}: Self-regulated learning strategies (SRLs) significantly influence academic achievement (GPA) among Arabic learners in Malaysian Public Universities.

H_{4b}: Social media usage (SMU) significantly influence academic achievement (GPA) among Arabic learners in Malaysian Public Universities.

H_{4c}: Motivation significantly influences academic achievement (GPA) among Arabic learners in Malaysian Public Universities.

The mediating effect of motivation on the relationship between SRLs and SMU

H_{5a}: Motivation is a significant mediator on the relationship between Self-regulated learning strategies (SRLs) and Social media usage (SMU) in Malaysian Public Universities.

The mediating effect of SMU on the relationship between SRLs and motivation.

H$_{5b}$: Social media usage (SMU) is a significant mediator on the relationship between Self-regulated learning strategies (SRLs) and motivation in Malaysian Public Universities.

The mediating effect of SRLs on the relationship between motivation and SMU.

H$_{5c}$: Self-regulated learning strategies (SRLs) are a significant mediator on the relationship between motivation and Social media usage (SMU) in Malaysian Public Universities.

1.9   Significance of the Research

The current study is to investigate self-regulated Learning strategies, Motivation, Social media usage, and its influences on Academic achievement among non-native Arabic language learners in Malaysia. These three variables are essential for a language learner. The learners use them effectively regularly since these strategies facilitate language learning that leads them to deeper learning and higher performance in language skills of speaking, reading, writing, and vocabulary (Andrade & Bunker, 2009; Oxford, 2003, 2011; Ma & Oxford, 2014; Andrade & Evans, 2013; Wang, Spencer & Xing, 2009; Rasekh & Ranjbary, 2003).

One of the central issues in education is fostering the learners to be self-regulated rather than being spoon-fed. Whenever the learners are self-regulated, they can actively set their goals, decide on appropriate strategies, plan their time, organise and prioritise materials and information, shift approaches flexibly, monitor their learning by seeking feedback on their performance, and make appropriate adjustments for future learning activities (Meltzer, 2007; Puustinen & Pulkkinen, 2001; Winne, 1995; Zimmerman, 1989, 2013). They know how, when, and why they employ certain regulating strategies (Zimmerman, 1989). Furthermore, lots of studies (Pintrich, 2000, 2004; Svinicki, 2010; Zimmerman, 2001; 2008; Zimmerman & Schunk, 2011; Wanjohi el at., 2015) have been conducting the skills necessary for self-regulation in academic settings such as schools under the rubric of self-regulated learning (SRL). Findings suggest that low self-regulation can lead a student to start developing procrastination tendencies in academics and consequently lead to reduced performance and productivity in their future careers. Thus, Oxford (2001) concluded that attaining a high level of foreign language proficiency depends on the self-regulatory skills of a learner. However, Mustapha (1997) stated that a great number of Malaysian students

are passive and spoon-fed learners. The learners only do what the teachers require them to do and only learn what the teachers taught in the class. They are not able to learn without teachers. Thus, the paradigm shift from "How to teach" to "How to learn" in the Malaysian education system is vital as the mainstream teaching and learning processes lack the substance to produce self-regulated learners (Yen et al., 2005). As a consequence, it is essential to know whether non-native Arabic learners are self-regulated learners and which are the most effective strategies in their Arabic language learning.

Social media as a "natural alliance" exists with self-regulated learning. The use of social media is considered a promising method to support the self-regulation process (Matzat & Vrieling, 2016; Dabbagh & Kitsantas, 2013). Also, motivation is the indispensable factor for driving force to sustain the self-regulated learning process over the long and arduous years of language learning (Dörnyei, 2001). Social media may become a social source which will lead to self-enhancing cycles of SRLs and motivation rather than conflicting cycles. SRL processes, motivational beliefs, and social media usage are reciprocally interactive. The three factors are closely related. However, this hypothesis has yet to be tested in the non-native Arabic language learner context such as in Malaysia. Therefore, this study investigated the relationship of self-regulated learning strategies, motivation, social media usage, and its influence in academic achievement among non-native Arabic language learners in Malaysia. It is essential to discover the outcomes for several reasons:

1.9.1 The outcomes are essential for students practice

As Alvin Toffle (1928-2016) said, "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn".

Learning ability became the most powerful capacity in the 21st century, especially for college students. The study time for college students is quite flexible and without any teachers' supervision. Sometimes, there is no class in the whole day. Thus, the students acquire the self-regulated ability which is a prerequisite skill for them to manage their learning time, goal setting, planning, and so on. According to Olaussen & Braten (1999) and Ray, Garavalia, & Murdock (2003), learners who have high frequent use of self-regulated learning strategies develop their initiatives while learning, and can adapt their methods and strategies towards learning in correspondence to their objectives of learning. In other words, self-regulated learning is the key skill of life-long learning. For language learners, language acquisition is not enough only for classroom-based-learning, but also outside classroom learning (practice over and over again). To effectively use the time outside the classroom, the students should self-regulate themselves. Fortunately, SRL ability is not instinctive but acquired and developed. Students can get improvements from it. Thus, it is essential to investigate the learners' awareness of SRL by discovering the extent to which they practice it. As this study is on students' use of SRL strategies, the findings provide a view of students' practice. Past studies indicate that students' SRL ability are not instinctive, but it can be developed and improved. Students can control their learning process in all subjects when they are given appropriate and adequate training in SRL strategy. In other words, whenever the students believe in the process of effective strategies, it will motivate them to learn more and do better in their studies. They will feel more efficacious and continuously use the learning strategy. Just like the positive cycle, an individual's educational process will be developed and improved whenever he/she is self-regulated in learning. However, how does a student acquire knowledge of appropriately selecting and regulating the use of the SRL strategies to improve his/her achievement in the

Arabic language, and to what extent does the application of these SRL strategies can be sustained? Moreover, the findings and information provide Arabic language learners with a view of which strategies will be more effective during the Arabic language learning.

Whenever the learners use them effectively regularly, these strategies would facilitate language learning (Andrade & Bunker, 2009; Oxford, 2003, 2011) by leading to deeper learning and higher performance in language skills of speaking (Ehrman, 1996; Ma & Oxford, 2014), reading (Ehrman, 1996), writing (Andrade & Evans, 2013; Wang, Spencer & Xing, 2009), and vocabulary (Rasekh & Ranjbary, 2003). Strategies are the key factors of successful language learning. According to Olaussen and Braten (1999) and Ray, Garavalia and Murdock (2003), learners who have high frequent use of self-regulated learning strategies develop their initiatives while learning, and can adapt their methods and strategies towards learning in correspondence to their objectives of learning. Therefore, from the findings, learners can perceive the problems of why one student performs better learning than others (Bail, Zhang, & Tachiyama, 2008; Ray, et al., 2003) and initiate proper changes in their learning strategy. For Arabic language teachers, the findings of this study can be a reference to determine whether they need to develop SRL among students. This is because learners over-depend on the authority figure (Cross, 2005). This study exhibits language learning strategies such as self-regulated learning strategies which included planning, time management, seeking information, organising, transforming, goal setting, self-efficacy, task value, and strategy of using social media. The learners may gain ideas for language learning strategies and apply them in real learning situations.

In recent years, a growing number of studies indicate that SRL strategies are positively related to students' academic achievement, motivation, self-confidence,

self-efficacy, learning attitude, and so on in the Malaysian context, within various learning environments such as English learning environment, History learning environment, Personal learning environment, Social Media environment, foreign language learning environment, and others. The results suggest that whatever the environment is, SRL strategies would positively relate to academic achievement. However, there is no known investigation of learners' self-regulated learning, motivation, and social media usage in the Arabic language learning environment. Thus, the researcher decided to conduct this research and the researcher believes that whenever students apply SRL strategies, motivation, and social media usage in the Arabic language learning environment, the learning process will be more effective and meaningful.

1.9.2 The Outcomes are Essential for Lecture or Instructor's Practice

As such, the findings and information of this research are important in assisting lecturers and educators to structure the methods and processes of teaching and learning for the Arabic language subject. Teachers play an important role in developing a positive and constructive relationship with students to support students learning motivation in the classroom and eventually increase their self-regulated learning behaviour. Students' interactions with teachers are the most important experiences that affect self-regulated learning (Zimmerman, 1989).

The findings would help educators and teachers recognise whether they need any intervention for the development of SRL (Zimmerman & Shunk, 2011; Candy, 1988; Pennycook, 1997). Students may tend to self-regulate if teachers promote student-centred learning, provide them with appropriate feedbacks during teaching and learning processes, and teach them learning strategies (Butler and Winne, 1995).

Therefore, lecturers should introduce useful learning strategies to help students learn and guide students to use effective strategies for their learning. This study would provide evident support for the factors in planning for learning, monitoring for learning, and evaluating personal progress against a standard essential for the facilitation of SRL in the foreign language classroom (Ormrod and Jeanne Ellis, 2009). The department of the faculty can modify the curriculum for Arabic language learning. Understanding the relationship of self-regulated learning among different courses context can assist academicians in the faculty in preparing students for successful experimental learning that would continue into their future life. (Allen & Seaman, 2008) If students use the correct and appropriate strategies to learn the materials and accomplish their tasks, they are more likely to be motivated and invest more effort in using their strategy in Arabic language learning as well to enhance the relationship between lecturers and students. SRL involves motivational decisions about learners' goal of learning the Arabic language, the perceived difficulty and value of the task, the self-perception of their own ability to accomplish the task, and the potential benefit of success or liability of failure.

SRL involves a learning environment comprising of all these components cyclically and is related to each other. Schunk and Zimmerman (1998) stressed that raising the level of enthusiasm of both students and teachers in the classroom is necessary for providing the appropriate SRL training to students and to make the learning process more enjoyable and meaningful for everyone. Furthermore, the study would help Arabic language lecturers or other language lecturers to perform quality and structured tasks or learning activities by encouraging them to be more involved in monitoring, controlling, reflecting their learning behaviour, and also their performance. Lecturers must understand that students' interests and beliefs about the importance and

utility of tasks given in the classroom since it could either support or decline students' motivation (Perry et al., 2006). The nature of a task determines whether students will continue their learning effort to the subject or withdraw from learning. For example, a too simple and routine work induces boredom and students start to feel disinterest in the learning content (Blumenfeld, Mergendoller & Swarthout, 1987). Teachers play an important role in developing a positive and constructive relationship with students to support the students' learning motivation in the classroom which would eventually increase their self-regulated learning behaviour. Evidence from previous studies shows that teachers' care is important to students of all ages (Perry et al., 2006). Caring teachers understand students' needs in the process of teaching and learning, act as a model to students, talk and listen to students, treat them fairly, and ask whether they need help (Wentzel, 1997). Teachers, who have SRL knowledge and care for their students would guide them to set adequate goals, use appropriate learning strategies to attain the goals, self-monitor and self-evaluate their progress, and eventually, alter their strategies in learning.

1.9.3   The Outcomes are Essential for Educational Practice

Secondly, recent developments in the Malaysian educational policies suggest a heightened interest in self-regulation learning skills through engagement in technology-enhanced learning environments (Wong & Bakar, 2010). For instance, the Malaysian government had begun the Smart School Project to systematically empower teaching-learning practices in schools to produce proactive, efficient, and self-regulated learners, beginning in 1999 (Ministry of Education, 2002). In other words, students are encouraged to self-regulate their learning activities proactively.

According to Social Cognitive Learning Theory, self-regulated learning occurs when a student can use personal processes to strategically regulate behaviour and the immediate learning environment (Zimmerman, 1989) and self-efficacy is a key variable affecting self-regulated learning (Bandura, 1986; Rosenthal & Bandura, 1978; Schunk, 1986; Zimmerman, 1986). Self-efficacy is defined as personal beliefs or an individual's confidence in his/her ability to perform effectively target tasks. Self-efficacy theory stresses or emphasises that personal action and success depend on how deep the interactions extend between one's thoughts and the target task (Bandura 1986, 1997). Individuals with a low sense of self-efficacy will possess negative thoughts and think of the task's demands as threatening and not as challenging therefore setting low objectives for themselves (Aid Suraya & Wan Ali 2009; Bandura 1994). Students who can initiate their study activities with self-efficacy and develop applicable self-learning strategies (e.g. self-regulated learning strategies) are more likely to progress and achieve better because non-self-regulated students are not really involved in the learning process and consequently they might be subjected to any kind of shallow knowledge and low academic achievement (Pintrich and Schraben 1992; Zimmerman 1986).

Generally, the investigation of SRL strategies, motivation, and social media usage brings specific and positive effects not only benefit students and teachers but also to educational practice as a whole. The researcher believes that proper implementation of SRL strategies, motivation, and social media usage will help students to train their minds and also cultivate a positive mindset in the process of learning.

1.10 Operational Definition of Term

For better understanding, the terms Arabic learners in Malaysian Public Universities, Self-regulated learning strategies (SRLs), Social media usage (SMU), Motivation, Academic achievement (GPA), Gender and Year of study are defined as below.

1.10.1 Arabic learners in Malaysia

The participants of the current study are Malaysians whose first language is Malay (Bahasa). They are undergraduate students from six Malaysian public universities, namely, University of Malaya (UM), University Kebangsaan Malaysia (UKM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (UniSZA), Universiti Putra Malaysia (UPM) and Universiti Sains Islam Malaysia (USIM) during Semester 2, Session 2018/2019. They major in Arabic language learning in the Faculty of linguistics or Islamic studies.

1.10.2 Self-regulated learning strategies (SRLs)

Self-regulated learning strategies are strategies that assist learners to set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behaviour, guided and constrained by their goals and the contextual features in the environment (Pintrich, 2000). The theory of self-regulated learning is grounded from Bandura's (1977, 1986) social cognitive theory which stated that learning occurs with personal, environmental, and behavioural factors as determinants. According to Pintrich (2000) and Zimmerman & Camppillo (2003), there are four components for SRLs which are Cognitive/Metacognitive regulation, Affective/Motivation regulation, Behavioural regulation, and Environmental

regulation. Based on these, the major five SRLs are discussed in the following respectively.

Metacognitive skills (MS): MS explain Cognitive/Metacognitive regulation. The definition of MS is strategies used to "think about one's thinking." In other words, MS clarifies how learners set goals, plan a strategy, and monitor and control their cognitive processes. Furthermore, it is how the learners evaluate what he/she performed and carries out appropriate strategy adaptation such as when the learner realised that the strategy they are using to memorise words is not working and try other methods (Nelson & Narens, 1990).

Persistence: Persistence is a strategy fully affecting regulation. Persistence is defined as "a continuous learning process that lasts until an adult student meets his or her educational goals." Student persistence, on the other hand, suggests that students have many forces working both "positively" and "negatively." The Persistence strategy is to keep students away from negative forces and make sure the learning process is continuous and effectively ongoing.

Time management (TM): TM is a strategy beyond behavioural regulation. TM can be defined as strategies used for planning and exercising conscious control of time spent on specific tasks, especially to increase effectiveness, efficiency, and productivity.

Help-seeking (HS): HS is another strategy in the component of behavioural regulation. HS is defined as any action about seeking help from others, such as social resources, lectures, libraries, online resources, and classmates.

Environmental structuring (ES): ES is a strategy in the component of environmental regulation. It can be a structure, resources, colour, and facilities surrounding the learners.

1.10.3 Social media usage (SMU)

Social media is defined as the wide range of internet-based and mobile services applications that allow users to participate in online exchanges, contribute user-created content or join online communities, such as Facebook, Youtube, Wiki, and so on (Kaplan and Haenlein, 2010). According to Grahl (2013), social media can be categorised into some categories: social network sites, Forums, Wikis, blogs, social bookmarking, status update services, virtual world content, and media sharing sites. These categories overlap to some degree. Twitter, for example, is a social network site as well as a status update service. Likewise, users of the social network site Facebook can share photographs, and users of the media sharing site Pinterest can follow other people. There are two components of social media usage:

1. Formal learning defined as learners' planned learning activities by using social media tools for learning. It typically leads to validation and certification.
2. Informal learning indicated as the Arabic language learners planned' learning activities by using social media tools for amusement. Informal learning outcomes may also validate and lead to certification.

1.10.4 Motivation

Motivation is a kind of internal drive action that encourages a learner to pursue Arabic language learning. It is the responsibility to initiate learning, later becoming the driving force to sustain the self-regulated learning process over long and arduous

years that it takes to learn a language. It is believed that without sufficient motivation, no other factor on its own can ensure student achievement (Dörnyei, 2001).

Self-efficacy beliefs mean judgments of one's capabilities to organise and execute courses of action to attain target goals, and he/she sought to assess its level, generality, and strength across activities and contexts

Task value beliefs are beliefs about the importance of an academic task, interest in, and value of the task.

Goal orientations are whether the focus is on mastery and learning of the task, grades or extrinsic reasons for doing the task, or relative ability to social comparisons with other students.

1.10.5 Academic achievement (GPA)

Academic achievement indicates non-native Arabic learners' GPA for the Arabic course in 2017/2018 semester one. The Grade Point Average (GPA) is an internationally recognised calculation used to find the average results of all grades achieved for an Arabic language course. In this study, GPA is the most important stander to measure whether the strategies are effective in learners' Arabic learning or not. According to Bandura's triadic reciprocal determinism, the researcher believed that GPA can be improved by students motivating themselves in Arabic learning and the use of personal processes to strategically regulate behaviour (self-regulated learning) under the immediate learning environment (social media usage).

1.10.6   Gender and Year of study

Past studies (Panadero et al., 2017; Bidjerano, 2005; Benson and Gao, 2008; Oxford, 2013) have reported that learners may have different SRLs, motivation, and SMU due to differences in Gender and Year of study.

1.11   Limitations of the Research

The population of this study is Malaysian undergraduate students who learn the Arabic language at universities in Malaysia. The researcher randomly selected three universities as a sample of this study. It was limited in terms of geographic region and demographic. Thus, this sample distribution has to be re-evaluated and replicated in further studies on SRLs, motivation and social media usage. This study suggests expanding the sample to obtain more generalisable findings.

Moreover, only self-administered questionnaires were used to collect data without observations and interviews with participants. The approaches that are not consistently used during the study could have a somewhat different result. Methods like observations and interviews explore self-regulation as a process rather than capturing questionnaire responses at a single point in time (Butler, 2002). On the other hand, the authors also acknowledge that "actual observations or behavioural indicators of strategy use provide better construct validity than does a self-report questionnaire such as the MSLQ" (Duncan and McKeachie, 2005).

1.12 Summary

This chapter described the overview of this study in general. The Background of the study, Statement of the problem, Conceptual framework of the research, Objective of the study, Research questions, Significance of the study and Limitations of the study were discussed. The following Chapters Two and Three will explain them in further detail.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review section first discussed Arabic language history and education in Malaysia. In the following, the relevant theories and models related to self-regulate learning strategies. Next, the relevant theories and models related to social media usage. And then, the relevant theories and models related to motivation. Following that, studies related to the influence of SRLs to academic achievement, SMU to academic achievement and motivation to academic achievement. Subsequently, studies related to the relationship between SRLs, SMU and motivation. Following that, theoretical framework of this study is reported. The researcher compared and contrasted all the findings and reviewed critically.

2.2 Arabic language in Malaysia

Since the stretched the Arab empire in the seventh century AD from the Indian Ocean in the east to the Atlantic Ocean in the west, and the Arabian Sea in the south, to Turkey and the Caucasus to the north. Influenced the Arabic language to many languages in Malaysia, Indonesia, Pakistan, Burma, Indochina, Afghanistan, Iran. Arabic was first introduced to the country by Yemeni merchants who arrived in the city of Malacca back in the 13th century.

As mentioned in Chapter one, the teaching and learning of Arabic began in Malaysia, but the researchers presumed that it began immediately after the arrival of Islam in the Malayan and the only purpose for this beginning period of the teaching

and learning of Arabic in Malaya was to know about Islam (Ismail, 1993). According to the National Higher Education Strategic Plan Beyond 2020,

"Proficiency in the third language is vital for developing human capital that drives the k-economy as well as gears the country towards competitive innovation in the international arena, Malaysian universities are encouraged to provide learning opportunities for students to be proficient in a third language"

-The Ministry of Higher Education (2007)

An increasing number of Malaysians are enrolling in courses and programs to learn the Arabic language in order to keep themselves connected to their own religion and history (Abduljalil et al., 2015) or the need of tourism industry (Mat et al., 2009). To meet the strong demand of the large and growing to learn Arabic by people, the spread of language teaching centers for non-Arabic speakers in Malaysia. Arabic international schools are scattered around Malaysia, especially in the capital Kuala Lumpur, such as the International Modern Arabic School, the Saudi School and Al Baseerah School. At the same time, the emergence of a number of sites in Internet displays educational programs for teaching Arabic to non-Arabic speakers, and the use of information technologies of modern Kaloaqras and electronic dictionaries educational, and writing books special educational teaching Arabic to non-Arabic speakers, and a number of scientific conferences and symposia to discuss topics teach Arabic for Speakers of Other Languages, from different angles. And the establishment of training courses and workshops for the preparation of language teachers for non-Arabic speakers adequate rehabilitation and rehabilitation (Albouchekhi, 2012).

In a dramatic move to enhance the learning of Arabic Language in the country, the Malaysian government has introduced a project called (J-QAF) (*Jawi-Quran-*

Arabic and Fardhu ain) to introduce Islamic studies and Arabic Language to the schools (Daily Express 2006). The main objective of this endeavor was to change the perceptions that comprehensive Islamic education cannot be obtained in national schools (Rozmal bin Malakan, 2005). In addition to that, the move was to encourage Muslim parents to send their children to national schools instead of private religious schools. This serves to be in-line with the call of Prime Minister Datuk Seri Abdullah Ahmad Badawi to bring the Arabic Language and the Quranic recitation into the mainstream education to foster better Muslims in the society (Malaysia: National schools to teach Islamic studies.2004). Attempts to institutionalize Arabic were made by former prime minister of Malaysia Abdullah Badawi, who in 2011 called for the inclusion of Arabic into the Malaysian curricula and universities. All of this proved that the booming of Arabic language in Malaysia.

2.2.1 The learning of Arabic language in Malaysia

There are 3 types for the teaching of Arabic in early Malaysia. The earliest form of the teaching and learning of Arabic in Malaysia was implemented in the form called "*Halaqah*". In this circle system, the students sit on the floor and form a circle or a semi-circle. The teaching and learning Arabic in this system normally takes place in the teacher's house, or in a mosque or in a "*surau*".

"Education in Malaysia during the pre-British period in the home or mosque and it emphasized the reading of the Quran, moral teaching, religious knowledge and Bahasa"

-Ismail (1993)

The second type of teaching and learning for adolescents. This type of institution in *Pondok* and focus on the teaching of Islamic knowledge and Arabic. In the early twentieth century, "*Halaqah*" evolved and became semi-institutionalized system kwon as "*Pondok*" which means "little hut" that built by parents around the teacher's house for their sons and daughters to stay during their studies (Said 1983 and SIi Ii 1984). The semi-institutionalized system of "*Pondok*" flourished throughout the Malayan. The first Arabic school in Malaysia was established in 1915 in the state of Kedah. The establishment of the system of *Pondok* was eventually followed by the full-institution of the teaching and learning of Islamic knowledge including Arabic. The last type of teaching and learning carried out in Islamic religious schools "*Sekolah Ugama/Sekolah Arab/ Madrasah*". The students' achievement is normally measured by assessing the reading quality and the quantity of texts they have memorized (Ahmad, 1984; 1985). Besides, the Arabic ability of those students, who could be regarded as successful students, is limited to reading only. In most cases, these successful students can read only those texts that they have already read and learned from the teacher.

Until 1961, the Islamic education subjects for the Muslim students in the national primary and secondary schools was provided by the Ministry of Education. At present, the curriculum for these schools has more secular subjects than the religious ones and their main medium of instruction is the Malay language. The role of Arabic as a medium of instruction is confined to the teaching of Arabic while the teaching of religious subjects is carried out in Malay. As far as the teaching methodology is concerned, the kind of method adopted in these schools is similar to the method used in the Arabic schools where lessons of grammar, reading writing and dictation are taught separately by means of explanation of rules and translation of vocabulary. The only difference between the method used in these schools and that of the Arabic schools lies in the use of Malay language whose use in the new schools is becoming more frequent and normal. By 1987 there were 28 schools of this type in Malaysia.

At the present time, students graduating from religious schools in Malaysia enjoy the variety of opportunities in higher education. Before 1970, there were only two local higher institutions, namely: the Islamic College of Malaya and Islamic Institute of Nilam Puri, which could accommodate a very limited number of students. After few years development, there are 10 more universities offered Arabic language course in Malaysia: Universiti kebangsaan Malaysia (UKM), University of Malaya (UM), Putra Malaysia (UPM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (uniZA), Islamic Science University of Malaysia (USIM), Kolej Universiti INSANIAH (Kuin), Kolej Universiti Islam Antarabangsa Selangor (KUIS), UUM, UMS, USM, UiTM and UNIMAS (Ainol et al., 2007). In addition, these students can also continue study in the Middle-Eastern universities. As summarized the in Figure 2.1.

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│      Types of teaching and learning Arabic in Malaysia        │
└─────────────────────────────────────────────────────────────┘

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│        │ │        │ │ Sekolah  │ │          │ │        │ │        │ │          │
│        │ │        │ │ Ugama/Se │ │ National │ │        │ │        │ │ Go abroad│
│Halaqah │ │ Pondok │ │  kolah   │ │ Islamic  │ │Islamic │ │Universiti│ │  Arab   │
│        │ │        │ │  Arab/   │ │Secondary │ │Colleges│ │   es    │ │countries │
│        │ │        │ │ Madrasah │ │  School  │ │        │ │        │ │          │
└────────┘ └────────┘ └──────────┘ └──────────┘ └────────┘ └────────┘ └──────────┘
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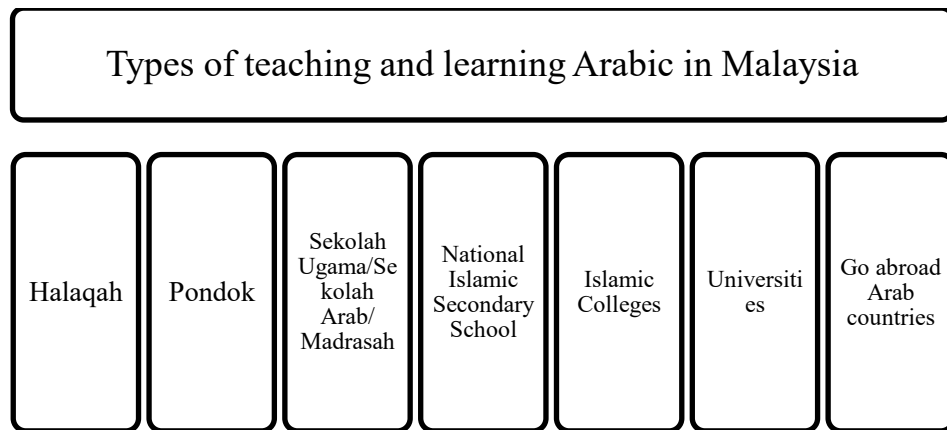
Figure 2.1. The Types of teaching and learning Arabic in Malaysia

2.2.2   The Learning of Arabic in Higher Institutions in Malaysia

Arabic language with a special from exist in language education system in Malaysia due to its religious roles. Since the National Education Policy has given a new orientation to Islamic education in Malaysia: the Arabic language as a separate entity from the religious subject. The Arabic language education in Malaysia can be divided into three main categories: language proficiency courses, language programs and programs for teaching languages (Mat Daud, 2010). The kind of higher education opportunists open to students graduating from Arabic and Religious schools of the second and the third categories referred to earlier are determined by the nature of the curriculum at the school level. The teaching and learning of Arabic in these universities varies in some respects:

International Islamic University Malaysia (IIUM) The International Islamic University was established in the early 1980s. In the International Islamic University, Arabic is taught in this university for beginners and intermediate students. Besides, the IIUM provide for the beginner special language center which called the center of

language and pre-university academic development division (CELPAD). There are seven levels for the beginners. The students can pursue their study in the Arabic language department, Arabic as the second language department or Arabic language Education only after they passed level seven. The teaching adopt mainly the Audio-Lingual Method and the Direct Method in language teaching. At present, they carried out Electronic devices as an important teaching and learning method. In addition, it is important to state that, in the Academy, Arabic and English are the medium used in the teaching of Arabic and other religious subjects which represent most of components of the whole curriculum.

University of Malaya (UM): In the Islamic study of the University of Malaya, the teaching of Arabic begins at the advanced level and there is no special language center for the beginners. The teaching and learning are focusing on the grammatical and morphological rules. Malay (Bahasa) and Arabic are the medium used in the teaching of Arabic and other religious subjects. The act of teaching is carried out in the classroom by means of reading and explaining what is written in both texts for students. Apart from grammar and morphology, which represent the major content of the syllabuses, the syllabuses also includes some, but not a great deal of reading and conversation lessons. Students are awarded the Bachelor of Arabic Languages and Linguistics upon completion of a total of 126 credits of study.

National University of Malaysia (UKM): National University of Malaysia (UKM) are also intended for students at the advanced level in Arabic. Grammar and morphology represent the major components of the syllabuses. The objective of study is to graduates with high moral character who are adept in communication, able to cooperate and possess professionalism. Malay (Bahasa) and Arabic are the medium used in the teaching of Arabic and other religious subjects. Students are awarded the

Bachelor of Islamic Studies with Honour (Arabic Studies and Islamic Civilization) upon completion of 3 years or 4 years of study.

Universiti Sains Islam Malaysia (USIM) In addition, Universiti Sains Islam Malaysia (USIM) Arabic Language and Communication with Honours, the objectives of the program is producing graduates who are skilled and have knowledge of Arabic, Islamic studies in Communications and a strong foundation to face the challenges and demands of time. To expose students to the key issues in communication is very important in a professional through the mastery of Arabic and Ensure that graduates master the knowledge and skills in accordance with the Arabic language and current challenges. At once, provide insight to students about the theories and concepts related to communication that can be implemented in various Arabic language activities. English and Arabic are the medium used in the teaching of Arabic and other religious subjects. To be eligible to be awarded the degree, candidates must take and pass a number of courses set at - at least 149 units of courses minimum within 4 years.

Universiti Putra Malaysia (UPM) The curriculum for the Bachelor of Arts program (Arabic language) is developed following a broad-based concept in order to produce well-balanced individuals who are proficient, knowledgeable, and skilled in many disciplines. The scope of the Bachelor of Arts program is based on an integrated approach. Through this approach, student will take courses from the following categories: General University Courses and faculty courses (core and major). In the first semester, student receive general education that provides the foundation and background understanding of forth coming courses. The specialization in their chosen field of study in the second semester. The duration of the Bachelor of Arts program is 3 years to fulfill 123 credits of study. Arabic and Malay is used as the medium of instruction in teaching the Arabic language and religious courses. The objectives of

the Bachelor of Arts program are as to enhance language competency among students in terms of listening, speaking, reading, writing, and communication skills in various styles, registers, discourses and moods in understanding knowledge culture and to inculcate national integration. To equip students with proficiency in various language through observation, action as well as critical and creative thinking in various knowledge fields. And to produce graduates who are efficient ion the field of language and linguistics, and also who are knowledgeable in other knowledge disciplines.

In conclusion, the present manifestation of the poor achievement in Arabic among university graduates suggests that the Arabic programs in these universities are in great need of thorough evaluation.

2.3   Social Cognitive Theory

Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura. It developed into the SCT in 1986.

According to Bandura (1986)

"Of the many cues that influence behavior, at any point in time, none is more common than the actions of others."

To investigate how people learn by observation, Bandura (1961) with his colleages Dorrie and Sheila Ross began the famous phycological Bobo Doll Experiment to investigate whether social behaviors can be acquired by observation and imitation, as well as how it demonstrated learning performance distinction.

As Bandura et al., (1961) conducted 72 preschool children from the Stanford University Nursery School aged between 3 to 6 years old were devided into three conditions. 24 children (12 male and 12 female) assigned into experimental group, observed adult models playing aggressively with an inflatable plastic Bobo doll; Another 24 children (12 male and 12 female) assigned into second group which observed adult models playing non-aggressively with a Bobo doll; and the last 24 chirden (12 male and 12 female) subjects in the control group had no exposure to the models. Additionally, half the children in the experimental conditions observed same-sex models and half viewed models of the opposite sex. Subjects were then assessed for the amount of imitative as well as nonimitative aggression performed in a new, generalized situation in the absence of the models (Bandura et al., 1961). As displayed in Figure 2.2.
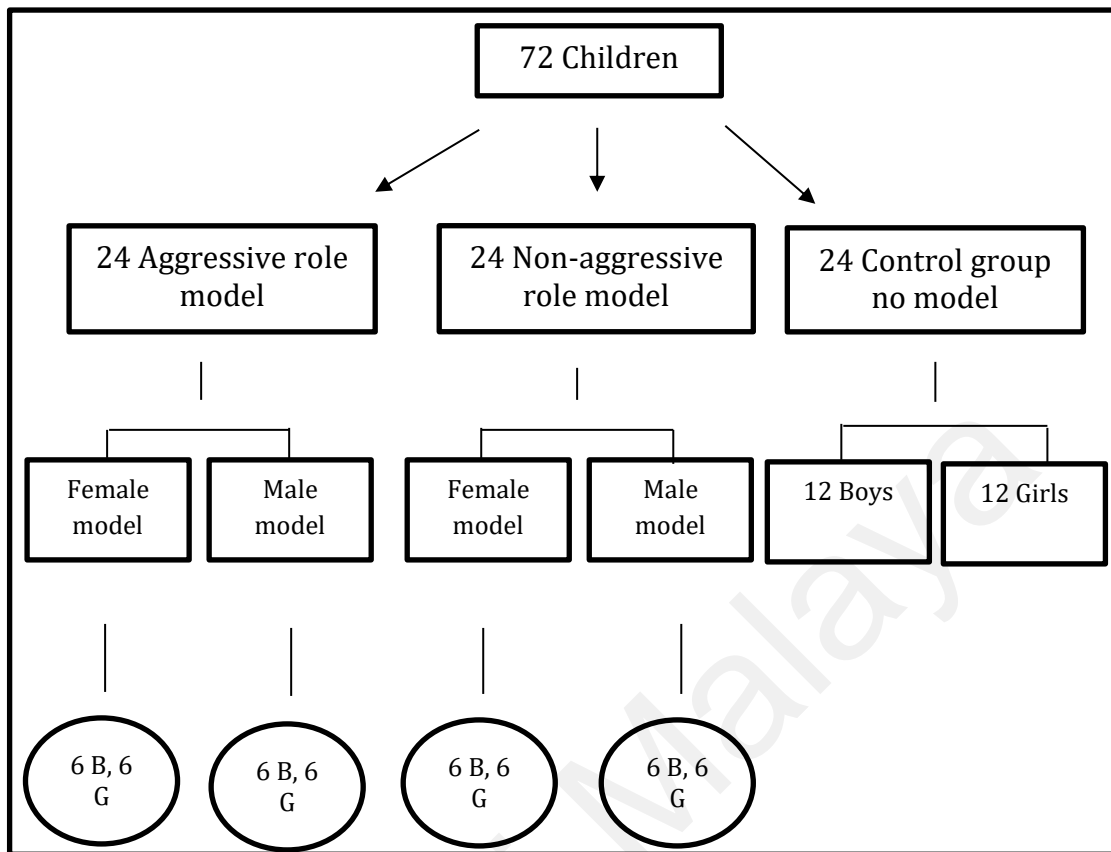
Figure 2.2. Bobo Doll Experiment Method

The results of the Bobo Doll experiment displayed that children exposed to the aggressive model exhibited aggressive behavior similar to the model, and their average aggression score was significantly higher than that of the non-aggressive and control subjects. Furthermore, children in the aggressive condition exhibited significantly more

"Partially imitative and nonimitative aggressive behavior and were generally less inhibited in their behavior than subjects in the nonaggressive condition"

Bandura el al., (1961)

Finally, the extent to which children imitated the model was differentially influenced by the sex of the model, with boys showing more aggression than girls following exposure to the male model.

Based on results Bobo Doll experiment, Bandura and his colleagues argued a lot of existing research on social learning, which focused on shaping new behavior through rewards and punishment. Bandura's findings suggested that

"observation of cues produced by the behavior of others is one effective means of eliciting certain forms of responses for which the original probability is very low or zero"

In other words, observational learning can occur in the absence of reinforcements to the observers. And, obverosly, these ideas were in express disagreement with those stated that learning is a result of direct reinforcement in that time (Zimmerman & Schunk, 2003).

Then after the initial Bobo doll experiment, In 1963, Bandura, Ross, and Ross conducted a similar study which sought to determine the extent to which film-mediated aggressive models could serve as sources of imitative behavior (Bandura, Ross, & Ross, 1963). This follow-up experiment be known as "*Imitation of Film-Mediated Aggressive Models*," provided additional evidence to support their theoretical account of observational learning. In general, their results found that filmed aggression increased aggressive reactions in children. As mentioned by Bandura et al., (1963),

"Subjects who viewed the aggressive human and cartoon models on film exhibited nearly twice as much aggression than did subjects in the control group who were not exposed to the aggressive film content".

As a result of two Bobo doll experiments provided strong evidence that learning can occur

"without any reinforcers delivered either to the model or to the observer".

Bandura et al., (1963)

Furthermore, the contribution findings of classic Bobo doll experiment open a door to Bandura's (1977) Social Learning Theory which claimed children's learning can be occurred through watch from other person or through television or film .

Based on findings from the classic Bobo doll experiments, Bandura began developing the theoretical underpinnings of his social learning theory, to include the prominent role of observational learning and social modeling in human learning and motivation. In the words of Bandura (1989),

"observational learning is governed by four component subfunctions".

As known as attention, retention, motor reproduction, and motivation. These subfunctions, or processes, are necessary before an individual can successfully model another.

Attentional processes determine what aspects of modeled behavior individuals observe and what information they extract from that behavior. Students cannot learn a new skill if they do not pay close attention to the critical features of the modeled behavior and less attention to the irrelevant parts. For teachers, this point becomes critical because often times they must modify or alter the behavior they model to compensate for the attentional limitations of their students (Bandura, 1989). Furthermore, teachers can improve the likelihood that students will attend to critical features of a lesson by making presented information clear and highlighting important points (Woolfolk, 2007).

People cannot be influenced by observed events if they cannot remember them (Bandura, 1989). Thus, the second retention process in learning from a model is to remember the behavior that has been observed. According to Bandura (1989),

"Retention involves an active process of transforming and restructuring the information conveyed by modeled events into rules and conceptions for memory representation"

Teachers can help students remember modeled behaviors by encouraging them to use various learning strategies. Examples of effective learning strategies include rehearsal techniques (repeating what needs to be learned over and over again); organizational methods (imposing structure on newly learned material); and elaboration strategies (connecting information to prior knowledge, making assumptions, and drawing inferences; Ormrod, 2004).

The third process necessary for observational learning is motor reproduction, also known as behavioral production. Motor reproduction requires that the learner be able to replicate the behavior demonstrated by the model. If the observer cannot reproduce the modeled behavior, due Bandura and the Bobo Doll 8 to inadequate physical ability, lack of strength, or even physical disability, then behavioral production will not occur (Ormrod, 2004). It is possible, then, that a learner could comprehend the information being modeled but not be able to actually perform the behavior (Bandura, 1989). Teachers can assist their students with motor reproduction by giving them opportunities for guided practice and feedback (Woolfolk, 2007).

The final process necessary for observational learning is motivation. Students must want to demonstrate what has been learned, and thus Bandura (1989) has distinguished between acquisition and performance, since people do not perform everything they learn. Moreover, Bandura (1989) has demonstrated how performance of observational learning can be influenced by three types of incentive motivators, or reinforcers – direct, vicarious, and self-produced. Certainly, learners may receive direct reinforcement when they correctly perform a modeled behavior, but

reinforcement may also be indirect (i.e., vicarious reinforcement). Vicarious reinforcement occurs when observers see others reinforced for the particular behavior and then increase their production of that behavior (Bandura, 1977). This type of reinforcement is particularly effective if students witness successes of individuals who are similar to themselves (Bandura, 1986). Finally, personal standards of conduct provide another source of incentive motivation or reinforcement. People tend to reproduce behaviors that they see as valuable or selfsatisfying and reject what they personally dislike (Bandura, 1989).

In 1986, Albert Bandura was developed SLT into the Social cognitive theory (SCT). The unique feature of SCT is the emphasis on social influence and its emphasis on external and internal social reinforcement. The main assumption of this theory is that person's behavior is the outcome of personal, environmental, and behavioral variables.

In the words of Bandura (1989),

"In this model of reciprocal causation, behavior, cognition and other personal factors, and environmental influences all operate as interacting determinants that influence each other bidirectionally"

SCT considers the unique way in which individuals acquire and maintain behavior, while also considering the social environment in which individuals perform the behavior (Wayne, 2016).

Social cognitive theory (SCT) is a learning theory based on the idea that people knowledge acquisition by observing others within the context of social interactions, experiences, and outside media influences. In other words, people learn by observing others, with the environment, behavior, and cognition/personal all as the majority

factors in influencing development in a reciprocal triadic relationship. As shown in Figure 2.3.
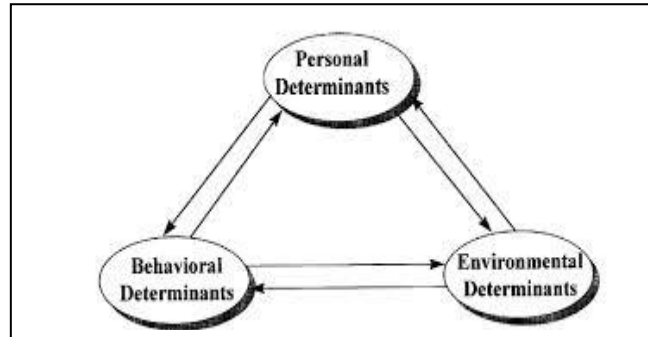
Figure 2.3. A triadic analysis of social cognitive theory functioning by Bandura (1986)

The core concepts of this theory can be explained by Bandura's schematization of triadic reciprocal causation. The model shows how the reproduction of an observed behavior is influenced by the interaction of the following three determinants:

- Personal: Whether the individual has high or low motivation toward target behaviors.
- Behavioral: The response an individual receives after they perform a behavior, such from the individual, through cognitive processes, and by the environment, through external social stimulus events.
- Environmental: Aspects of the environment or setting which surroundings around the individual that contain potentially reinforcing stimuli.

It worth to mention that reciprocal causation does not mean that the different sources (Personal, Behavioral and Enviromental) of influence are of equal strength. Some may be stronger than others (Bandura, 1989). In this way, the following indicate briefly on major interactional links between the different subsystems of influence.

The Personal to Behavioral of reciprocal causation reflects the interaction between thought, affect and action. Expectations, beliefs, self- perceptions, goals and intentions give shape and direction to behavior. What people think, believe, and feel, affects how they behave (Bandura, 1986; Bower, 1975; Neisser, 1976). The natural and extrinsic effects of their actions, in turn, partly determine their thought patterns and emotional reactions. The personal factor also encompasses the biological properties of the organism. Physical structure and sensory and neural systems affect behavior and impose constraints on capabilities. Sensory systems and brain structures are, in turn, modifiable by behavioral experiences (Greenough, Black, & Wallace, 1987). As show in Figure 2.4.

Figure 2.4. Personal to Behavioral of reciprocal causation

The E to P segment of reciprocal causation is concerned with the interactive relation between personal characteristics and environmental influences. Human expectations, beliefs, emotional bents and cognitive competencies are developed and modified by social influences that convey information and activate emotional reactions through modeling, instruction and social persuasion (Bandura, 1986). People also evoke different reactions from their social environment by their physical characteristics, such as their age, size, race, sex, and physical attractiveness, quite apart from what they say and do (Lerner, 1982). People similarly activate different social reactions depending on their socially conferred roles and status. For example, children who have a reputation as tough aggressors will elicit different reactions from their

peers 4 than those reputed to be unassertive. Thus, by their social status and observable characteristics people can affect their social environment before they say or do anything. The social reactions so elicited affect the recipients' conceptions of themselves and others in ways that either strengthen or alter the environmental bias (Snyder, 1981). As show in Figure 2.5.
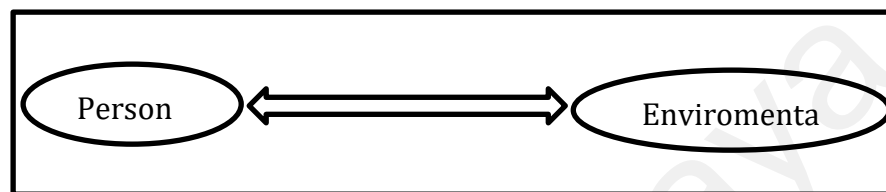
Figure 2.5. Personal to environment of reciprocal causation

The B to E segment of reciprocal causation in the triadic system represents the two-way influence between behavior and the environment. In the transactions of everyday life, behavior alters environmental conditions and is, in turn, altered by the very conditions it creates. The environment is not a fixed entity that inevitably impinges upon individuals. When mobility is constrained, some aspects of the physical and social environment may encroach on individuals whether they like it or not. But most aspects of the environment do not operate as an influence until they are activated by appropriate behavior. Lecturers do not influence students unless they attend their classes, hot stove tops do not burn unless they are touched, parents usually do not praise their children unless they do something praiseworthy. The aspect of the potential environment that becomes the actual environment for given individuals thus depends on how they behave. Because of the bidirectionality of influence between behavior and environmental circumstances, people are both products and producers of their environment. They affect the nature of their experienced environment through selection and creation of situations. People tend to select activities and associates from

the vast range of possibilities in terms of their acquired preferences and competencies (Bandura & Walters, 1959; Bullock & Merrill, 1980; Emmons & Diener, 1986). Through their actions, people create as well as select environments. Aggressive persons produce hostile environments wherever they go, whereas those who act in a more friendly manner generate an amiable social milieu (Raush, 1965). Thus, behavior determines 5 which of the many potential environmental influences will come into play and what forms they will take. Environmental influences, in turn, partly determine which forms of behavior are developed and activated. The growing recognition of reciprocal causation has altered the way in which socialization is viewed. One-sided developmental analyses of how parents influence their children have given way to transactional analyses of how parents and children influence each other (Bell & Harper, 1977; Cairns, 1979; Lewis & Rosenblum, 1974). As show in Figure 2.6.
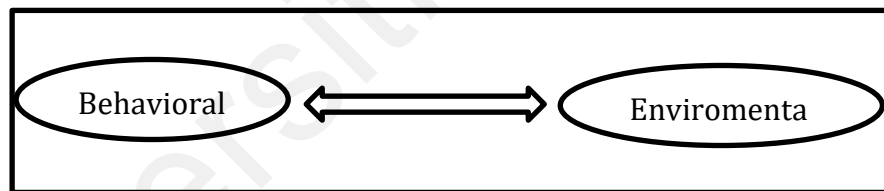
Figure 2.6. Behavioral to environment of reciprocal causation

In conclute, SCT has not only involves how people acquire cognitive, social, emotional and behavioral competencies, but also how they motivate and regulate their behavior and create social systems that organize and structure in real life. In SCT, the social portion of the title acknowledges the social origins of much human thought and action; the cognitive portion recognizes the influential contribution of cognitive processes to human motivation, affect, and action.

2.4   Self-regulated learning (SRL)

Models Self-regulated learning (SRL) development are typically grounded in a social cognitive theory (Person, Behavior and Environment) (Biemiller et al., 1998; Zimmerman and Bonner, 1996; Zimmerman and Kitsantas, 2005). When a learner can exert strategic control over each of the three types of influence, he or she can be described as self-regulated and can be legitimately applied to that type of strategy. Self-regulation strategies used by successful students can fall into three categories: personal, behavioral, and environmental. The following section will discuss in detail.

2.4.1   A triadic analysis of Self-regulated Learning

Bandura (1986) defined that self-regulated learning occurs to the degree that a student can use personal processes to strategically regulate behavior and the immediate learning environment. Self-regulated learning is never an absolute state of functioning but rather varies in degree, depending on the social and physical context (Thoresen and Mahoney, 1974). Self-regulated learning was viewed as especially important during personally directed forms of learning, such as discovery learning, self-selected reading, or seeking information from electronic sources, it was also deemed important in social forms of learning, such as seeking help from peers, parents, and teachers. The core issue is whether a learner displays personal initiative, perseverance, and adaptive skill. These proactive qualities of learners stem from advantageous motivational feelings and beliefs as well as metacognitive strategies (Zimmerman and Schunk, 2007). On the basis of Bandura's social learning assumptions and constructs, it is possible to offer an initial view of students' self-regulated learning. Self-regulation strategies used by successful students can fall into three categories: personal, behavioral, and environmental. See Figure 2.7.
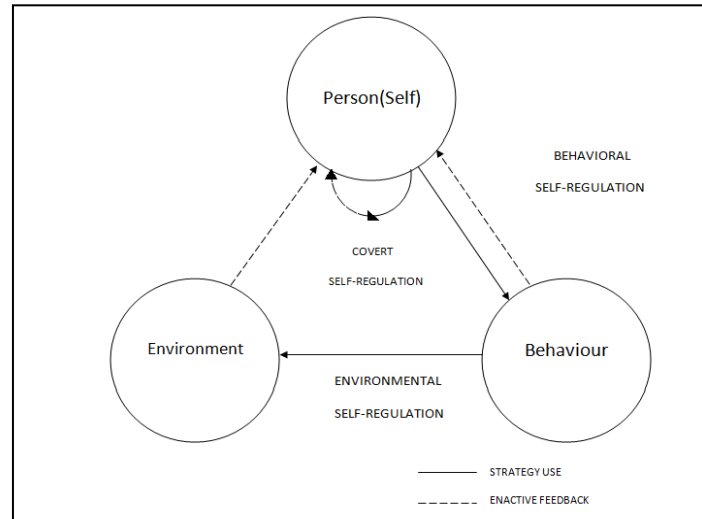
Figure 2.7. The developed triadic analysis of self-regulated learning by Zimmerman

Personal influences: Historically, social cognitive theorists (Bandura, 1977; Rosenthal and Zimmerman, 1978; Zimmerman and Martinez-Pons, 1988) have distinguished knowledge acquisition from behavioral performance. Students use of SRLs depends not only on their knowledge of strategies but also on metacognitive decision-making processes and performance outcomes. Metacognition is defined as the awareness of and knowledge about one's own thinking. Metacognitive decision making depends also on learners' long-term goals, according to the proposed definition of self-regulated learning. A particularly effective strategy for reaching long-term goals involves setting intermediate goals that are based on their specificity, difficulty level, and proximity in time (Bandura, 1982).

Student's self-efficacy perceptions depend in part on each of four other types of personal influence: students' knowledge, metacognitive processes, goals, and affect. Here, the self-regulate knowledge not only include declarative knowledge which means organized according to its own inherent verbal, sequential, or hierarchical structure, but also include procedural knowledge which organized around conditions

and actions. It is highly sensitive to context and to outcomes of such action-related variables as a person's current goals, level of motivation, contents of short-term memory, and stimulation from the external environment. (Siegler, 1982; Anderson, 1976). Bandura and Schunk (1981) reported that the effects of proximal goal setting were impressive in comparison with those of distal goal-setting: The numerical advantages of proximal goals during post-testing were approximately 60% higher self-efficacy, 95% higher arithmetic skill, and 25% higher intrinsic interest. Students' long-term goals and use of metacognitive control processes are theorized to be dependent on perceptions of self-efficacy and affect, as well on self-regulatory knowledge. Bandura (1986) suggested that "those who have a high sense of self-efficacy set themselves more challenging goals to accomplish" These strategies usually involve how a student organizes and interprets information.

Behavioral influences: Social cognitive theorists assume that self-regulation involves three classes of sub-processes: self-observation, self-judgment, and self-reaction (Bandura, 1986). These performance-related sub-processes are assumed to interact with each other in reciprocal fashion. Bandura (1986) theorized that all three classes of behavioral influence are highly interdependent. Self-observation refers to students' responses that involve systematically monitoring their own performance. Observing oneself can provide information about how well one is progressing toward one's goals. Self-observation is influenced by such personal processes as self-efficacy, goal-setting, and metacognitive planning, as well as by behavioral influences.

A second class of student self-regulated response involves self-judgment. Self-judgment refers to students' responses that involve systematically comparing their performance with a standard or goal. This definition assumes that self-evaluation depends on such personal processes as self-efficacy, goal setting, and knowledge or

standards, as well as self-observed responses. Knowledge of standards or goals can be derived from a variety of sources including social norms, temporal criteria such as earlier performance levels, or absolute criteria such as mastery tests or goals (Bandura, 1986).

A third class of students' self-regulated response involves self-reactions to one's performance. As was the case with self-observation and self-evaluation, learners' self-reactions involve such personal processes as goal setting, self-efficacy perceptions, and metacognitive planning, as well as behavioral outcomes. The relations between these processes are assumed to be reciprocal. For example, initial levels of self-efficacy will affect a learner's choice of strategy, and the enactive feedback from actual usage will alter subsequent estimates of efficacy. Not all forms of self-reaction will necessarily increase self-regulated learning: Unfavorable self-evaluations of learning progress may lead to withdrawal or learned helplessness when learners no longer try because they expect their responses to be futile (Seligman, 1975).

Three self-regulatory classes of self-reaction strategies should be distinguished according to social cognitive theory: (a) behavioral self-reactions by which students seek to optimize their specific learning responses; (b) personal self-reactions by which they seek to enhance their personal processes during learning; and (c) environmental self-reactions by which they seek to improve the learning environment. These forms of self-reaction correspond closely to the three major classes of self-regulation strategies. In triadic terms, all three strategic reactions are self-initiated (a personal influence) and sustained through positive self-evaluations (a response influence). Each of the three classes of self-reaction strategies is designed to increase one or more triadic influences during subsequent responding.

Environmental influences: The final type of environmental influence on student self-regulated learning that will be considered is the structure of the learning context (environment), particularly such elements as the academic task and setting. According to social cognitive theory (Mischel and Peake, 1982; Zimmerman, 1983), human learning remains highly dependent on the social environmental context from which it sprang. This assumption is extended in my formulation to self-regulated learning. Changing an academic task to increase the difficulty level or changing the academic setting from a noisy to a quiet place to study is expected to affect self-regulated learning. A growing body of evidence indicates that student judgments of self-efficacy are directly influenced by the difficulty of the tasks (Bandura, 1986).

In a recent observational study of self-regulation during writing, Marcus (1988) found that students who displayed superior ability on a standardized test of writing regulated their immediate physical environment more effectively than did students with poor writing ability. Students were brought to an experimental room to write a paper on jogging. The setting contained a variety of stimuli that could facilitate or impede writing. Marcus found that 11th-grade students with superior writing ability were more likely to adjust the sound of a television set and to use a clock to monitor their performance while they wrote their themes than were students of lower ability. These results indicate that high ability writers displayed greater awareness of the need to self-regulate environmental stimuli such as televisions and clocks than did less able writers. Each of the environmental influences just described is assumed to be reciprocally interactive with personal and behavioral influences. When learners become self-directed, personal influences are mobilized to strategically regulate behavior and the immediate learning environment.

Self-regulated learners are assumed to understand the impact of the environment on them during acquisition and to know how to improve that environment through the use of various strategies. Zimmerman and Martinez-Pons (1986, 1988) found that self-regulated learners use such strategies as environmental structuring (e. g. creating a study area), seeking social assistance from teachers (e. g. regarding an assignment), and seeking or reviewing information (e. g. from literary sources). Because, in the proposed triadic formulation, environmental, personal, and behavioral influences affect one another, external mechanisms for increasing personal self-regulation should be of interest to educators. It is assumed that students can be taught or prompted to become more self-regulated learners by acquiring effective strategies and by enhancing perceptions of self-efficacy. Students' use of SRLs enables them to increase their personal control over their own behavior and immediate environment.

Consequently, self-regulated learning occurs to the degree that a student can use personal processes to strategically regulate behavior and the immediate learning environment.

2.4.2 Zimmerman's Self-regulated learning definition

An early defining moment in research on self-regulation was a symposium at the American Educational Research Association annual meeting in 1986 that was published in a special issue of Contemporary Educational Psychology (Zimmerman, 1986). It sought to integrate under a single rubric research on such processes as learning strategies, metacognitive monitoring, self-concept perceptions, volitional strategies, and self-control. An outcome of the 1986 symposium was an inclusive definition of SRL as the degree to which students are metcognitively, motivationally, and behaviorally active participants in their own learning process (Zimmerman, 1986, 1989, 2008), as displayed in Figure 2.8. Schunk and Zimmerman (1994) defined SRL as "the processes whereby students active and sustain cognitions, behaviors and affects that are systematically oriented toward attainment of goals." Self-regulation refers to self-generated thoughts, feelings, and behaviors that are oriented to attaining goals (Zimmerman, 2000). Zimmerman suggests that self-regulated learning involves the regulation of three general aspects of academic learning:

First, self-regulation of behavior involves the active control of the various resources that students have available to them, such as their time, their study environment (e.g., the place in which they study), and their use of others seeking help such as peers and faculty members to help them (Zimmerman, 1989).

Second, self-regulation of motivation involves controlling and changing motivational beliefs such as self-efficacy and goal orientation, so that students can adapt to the demands of a course. In addition, students can learn how to control their emotions and affect (such as anxiety) in ways that improve their learning.

Third, self-regulation of cognition involves the control of various cognitive strategies for learning, such as the use of deep processing strategies that result in better learning and performance than students showed previously (Zimmerman, 1989). As displayed in Figure 2.8.
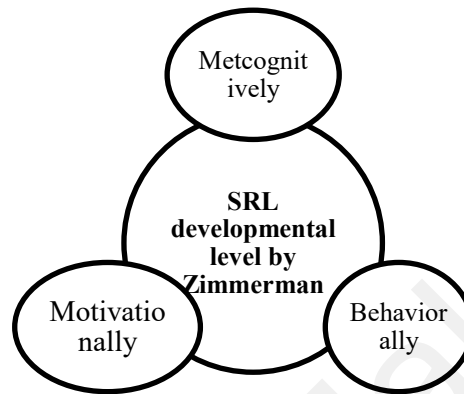
Figure 2.8. Self-regulated learning developmental level by Zimmerman

2.4.3   Pintrich's Self-regulated Learning Definition

Pintrich (1995) Self-regulated learning means an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment. Therefore, SRL requires the integrative use of learning skill and willpower in learning (Pintrich, 2000). Self-regulation are processes mediate between personal and environmental characteristics and achievement (Pintrich, 2004). As presented   in Figure 2.9. Other interpretations incorporate self-regulation as strategies (Pintrich, 1999). Therefore, the definition of SRL can be concluded that self-regulation is described as a process or learners' effort to direct their own learning by setting goals, planning how to achieve them, monitoring

the learning task, using metacognitive, motivation and behavioral strategies suited to their learning environment which is an important criterion for learner's success.
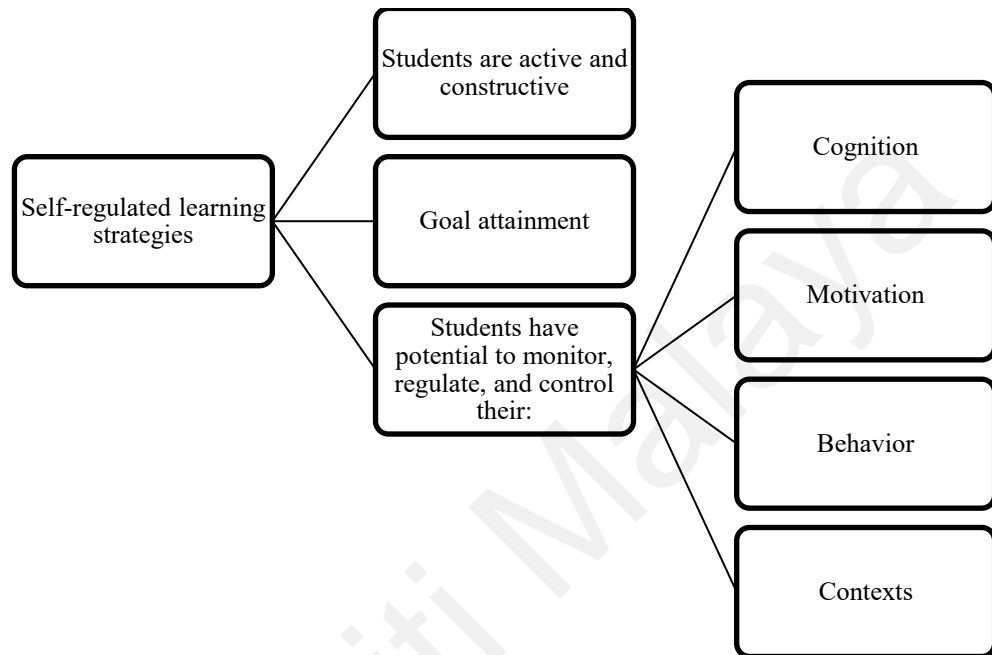
Figure 2.9. Self-regulated learning developmental level by Pintrich

Besides, Pintrich (1995) stated the Importance of Self-Regulated Learning for College Students and Faculty which is the idea of self-regulated learning offers an optimistic perspective on college learning and teaching. This perspective includes several assumptions about learning and teachng that have important implications for students and faculty.

Self-regulation is not born but acquired, which means students can learn to be self-regulated. Self-regulated learning is a way of approaching academic tasks that students learn through experience and self-reflection. It is not a characteristic that is genetically based or formed early in life so that students are "stuck with it for the rest of their lives.

Models of self-regulated learning argue against the notion of intelligence as a characteristic that varies among students and is unchangeable after a certain point in life. There may be students who are more or less self-regulating over time and across different classes, but all students can learn how to be self-regulating, regardless of age, gender, ethnic background, actual ability level, prior knowledge, or motivation. This is a much more optimistic view of learning and our students than we once had, implying that all students can learn how to become self-regulated learners and that faculty can explicitly help them achieve this goal.

Self-Regulated Learning Is Controllable. Related to the first assumption, this view proposes that self-regulated learning is a way to approach academic tasks that the individual student can control. Self-regulated learning is not a personality "style" or trait that the individual has no control over, as suggested, for example, by the Myers-Briggs typology (which, for example, might classify someone as inherently an introvert or extrovert). Students can control their behavior, motivation and affect, and cognition in order to improve their academic learning and performance. Although students may believe that they can "only learn one way" or that they "are too hyper a person" to learn how to become self-regulating, there is an abundance of empirical research that shows that students can learn how to control their own learning and become self-regulated learners (Schunk and Zimmerman, 1994; Zimmerman and Schunk, 1989). It is not always easy, but students should accept responsibility for their own learning and realize that they have the potential to control their own learning. At the same time, faculty can help students learn how to control their own learning by providing opportunities for student choice and control of academic tasks.

Self-Regulated Learning is Appropriate to the College Context. In contrast to students in K-12 education, most college student have a great deal of control over their own

time management and schoolwork schedules as well as over how they actually go about studying and learning. At the same time, many college students have difficulty managing this freedom in terms of the quantity of time they devote to learning as well as the quality of cognitive effort they put into learning. If students can learn to control their study time and learning, they will better adapt to the academic demands of the college classroom and will better balance those demands with the social demands of college life (Zimmerman, Greenberg, and Weinstein, 1994). In this manner, research on self-regulated learning may be more relevant to college students than to K-12 students. In addition, in contrast to traditional psychological research, which is often based in the laboratory and focused on nonacademic tasks, much of the research on college students and their self-regulation of learning has been done in ecologically valid classroom studies and has focused on actual tasks taken from real college courses (for example, studying for midterm exams in chemistry, biology, or calculus; writing an essay for an English class; or writing a paper for a psychology course). The ecologcal validity of the self-regulation research makes it much easier to apply to the classroom than some traditional psychological research.

Self-Regulated Learning Is Teachable. Just as students can learn to become self-regulated learners, teachers can teach in ways that help students become self-regulating learners. There are any number of specific strategies for doing this. The most important idea to keep in mind is that strategies for self-regulated learning can be taught in any type of classroom context. They can be taught in separate courses or programs, or in general study and learning skills programs (Weinstein, 1994), and they can also be taught in mathematics, science, social sciences, humanities courses and linguistic courses.

In this study, the researcher employed according to four components for SRLs which are Cognitive/Metacognitive regulation, Affective/ motivation regulation, behavioral regulation and Environment regulation (Pintrich, 2000; Zimmerman and Campillo, 2003 and Jansen et al., 2017). As summarized in Figure 2.10.
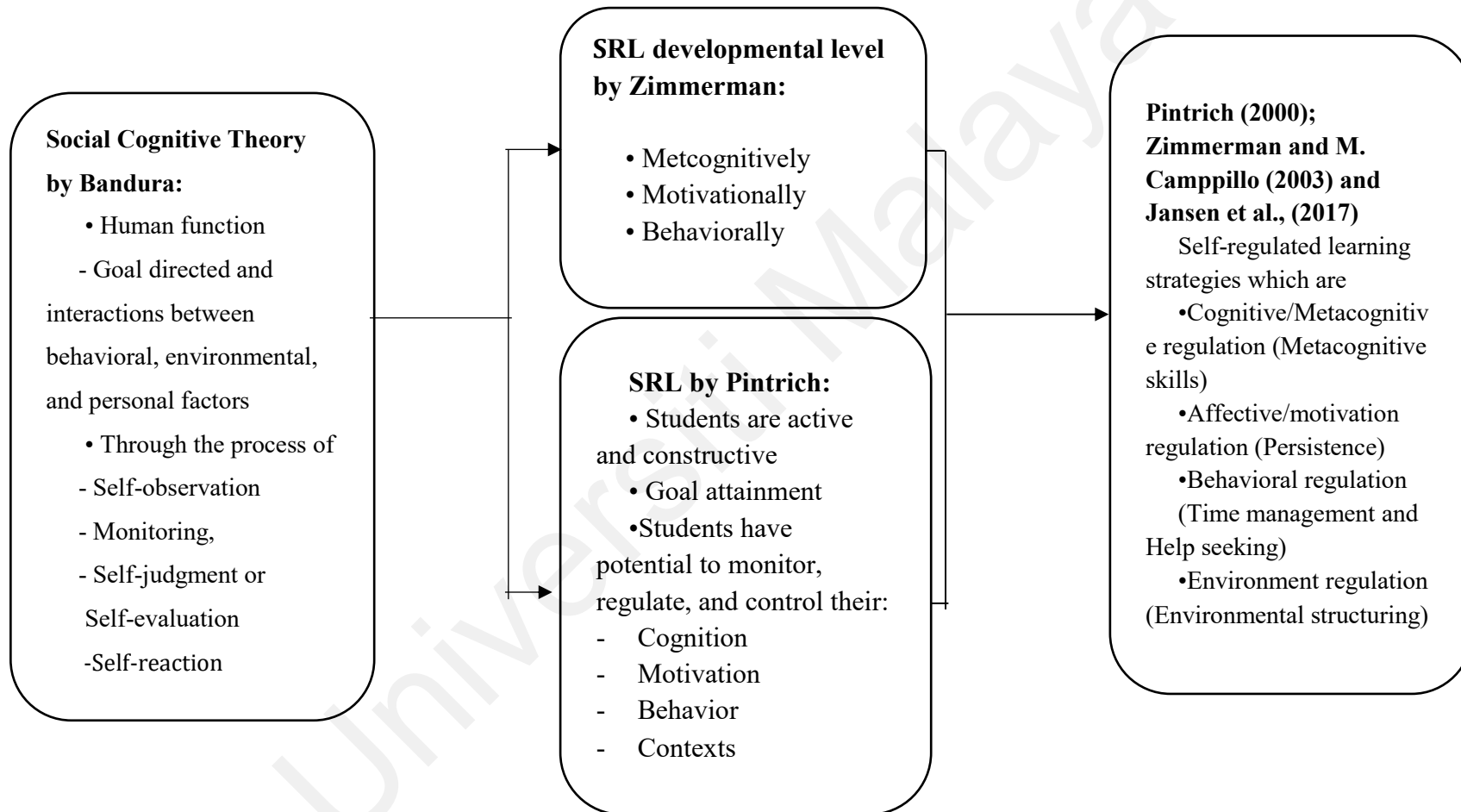
Figure 2.10. The Development Theoretical Framework of Self-Regulated Learning Strategies

2.4.4 Self-regulated learning strategies (SRLs)

SRLs refer to actions and processes directed at acquisition of information or skills that involve agency, purpose, and instrumentality perceptions by learners. (Zimmerman, 1990) They include such methods as organizing and transforming information, self-consequating, seeking information, and rehearsing or using memory aids (Zimmerman and MartinezPons, 1986). Bandura (1986) ascribed much importance to a learner's use of self-regulation strategies. In Bandura's view, strategy applications provide a learner with valuable self-efficacy knowledge (Bandura, 1986). Self-regulated learners are distinguished by their awareness of strategic relations between regulatory processes or responses and learning outcomes and their use of these strategies to achieve their academic goals, systematic use of metacognitive, motivational, and behavioral strategies is a key feature of most definitions of self-regulated learners. (Zimmerman, 1989)

A learner's degree of self-regulation is assumed to be determined situationally by his or her use of strategies that fully incorporate triadic influences in obtaining academic goals. A "good strategy user" should possesses three kinds of knowledge about strategies: declarative, procedural, and conditional. Declarative knowledge is simply knowing about a variety of strategies (Paris et al., 1983); for example, what does summarizing in your own words mean? Procedural knowledge is knowing how to use these strategies (Anderson, 1990; Garner, 1990); for example, knowing how to summarize in your own words and being able to do so effectively. Conditional knowledge is knowing when (and when not) to use particular strategies (Paris et al., 1983). Students have to know the strengths and weaknesses, or costs, of using different strategies. Some strategies are applicable in some situations and not others, although

the conditions might look the same on the surface. Many of the SRLs are useful across various content domains. Specifically, self-regulated learning consists of three components: cognition, metacognition, and motivation. The cognition component includes the skills and habits that are necessary to encode, memorize, and recall information as well as think critically. Within the metacognition component are skills that enable learners to understand and monitor their cognitive processes. The motivation component surfaces the beliefs and attitudes that affect the use and development of both the cognitive and metacognitive skills. Below are suggestions for how to develop self-regulation in the adult education classroom.

Zimmerman and Martinez Pons (1986) relied on interviews with high school students about self-reported strategies used in a variety of common learning contexts. They found evidence of students' use of 14 types of SRLs that were very similar to strategies that had been studied in laboratory research:

1. *Self-evaluating*: Statements indicating student-initiated evaluations of the quality or progress of their work: e.g. "I check over my work to make sure I did it right."

2. *Organizing and transforming:* Statements indicating student-initiated overt or covert rearrangement of instructional materials to improve learning; e.g. "I make an outline before I write my paper."

3. *Goal setting and planning*: Statements indicating students' setting of educational goals or sub-goals and planning for sequencing, timing and completing activities related to those goals; e.g., "First, I start studying two weeks before exams, and I pace myself."

4. *Seeking information*: Statements indicating student-initiated efforts to secure further task information from nonsocial sources when undertaking an assignment; e.g., "before beginning to write the paper. I go to the library to get as much information as possible concerning the topic."

5. *Keeping records and monitoring*: Statements indicating student-initiated efforts to record events or results; e.g., "I took notes of the class discussing". "I kept a list of the words I got wrong."

6. *Environmental structuring*: Statements indicating student-initiated efforts to select or arrange the physical setting to make learning easier; e.g., "I isolate myself from anything that distracts me". "I turned off the radio so I can concentrate on what I am doing."

7. *Self-consequence:* Statements indicating student arrangement or imagination of rewards or punishment for success or failure, e.g., "If I do well on a test, I treat myself to a movie."

8. *Rehearsing and memorizing*: Statements indicating student-initiated efforts to memorize material by overt or covert practice; e.g., "In preparing for a math test, I keep writing the formula down until I remember it."

9-11 *Help seeking*: Statements indicating student-initiated efforts to solicit help from peer, teacher, and adults; e.g., "If I have problems with math assignment, I ask a friend to help".

12-14 *Reviewing records*: Statements indicating student-initiated efforts to reread notes, tests, or textbooks to prepare for class or future testing. As summarized in Figure 2.11.
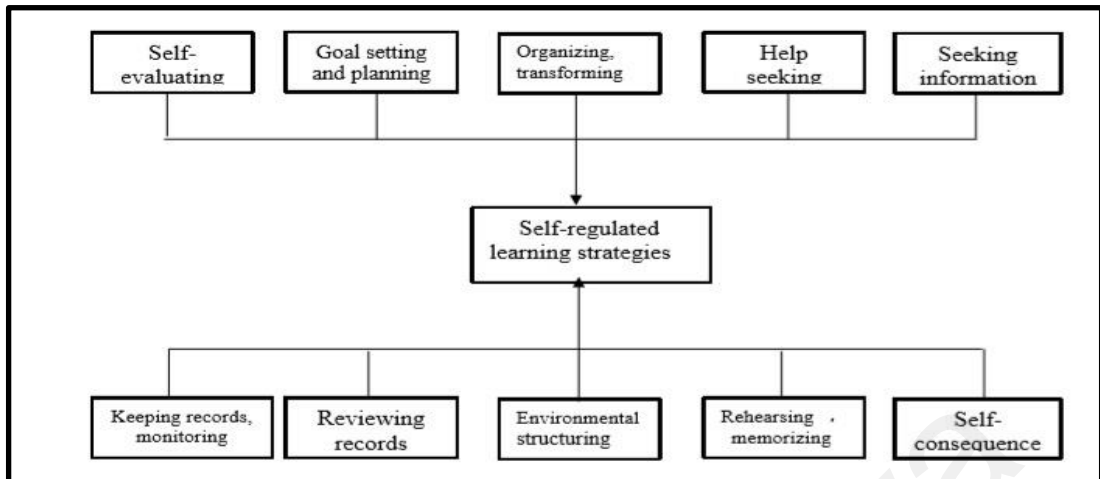
Figure 2.11. Zimmerman and Martinez Pons (1986) 14 types of SRLs had been studied by students

Besides, Jansen et al., (2017) summarized SRLs with five core starategies in his study as:

a)   Metacognitive skills: Metacognitive skills play a vital role in a variety of cognitive activities, including information exchange, good reading comprehension, motivation, language understanding, writing, language learning, perception, attention, memory, problem-solving, and social cognition (Baker & Brown, 1984; Brown, 1987).

As Flavell (1979) explains, "…metacognitive knowledge can lead you to select, evaluate, revise, and abandon cognitive tasks, goals, and strategies in light of their relationships with one another and with your abilities and interests concerning that enterprise."

Metacognition is one's awareness of his/her own ability to think and regulate, control, and manipulate the thinking process. Metacognitive strategies (MS), on the other hand, refers to the skill of using previous knowledge to plan a strategy for a specific learning task, take necessary steps to solve a problem, reflect on and evaluate results, and modify one's strategy as needed. Therefore, Flavell (1979) divided metacognitive knowledge into three categories i.e. person variables, task variables, and

strategy variables which are defined respectively as understanding one's self, understanding the target task, and knowing which strategy to use for the specific task. As the medieval Chinese military strategist Sun Tzu once said, "*Know yourself and know your enemy; you will win every war*." Thus, MS is a significant component in facilitating the retention process and promoting language output.

b)   Help-seeking: Ryan et al. (2001) stated that help-seeking was an SRL Strategy (SRLS), which was used by the students to face academic challenges. It was used as a tool to acquire the necessary help. Academic HS was seen to be a vital learning technique due to the fact that the learners who experienced a learning impasse and showed a less satisfactory performance could require guidance and assistance so that they could continue their learning process. In such situations, it is essential to calibrate the extent of the learner's need for help. The students need to identify all their issues, determine if they require assistance, decide if they wish to seek help and determine what type of help (i.e., instrumental or executive), whom to ask for assistance and finally understand the help that they have received (Karabenick and Dembo 2011). As depicted in Figure 2.12.

Determine problem		Solicit help		Obtain help
Deteemine help need		Decide whom to ask		Process the help received-judge or evaluate it
Decide help seeking		Decide type of help		Process the help received-react to it
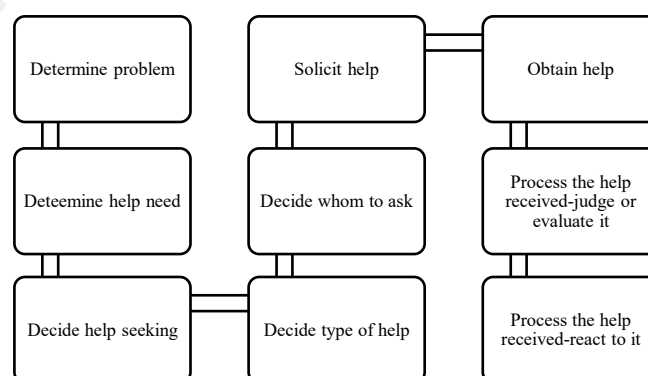
Figure 2.12. Stages of Help-seeking process (Karabenick & Dembo, 2011)

HS was considered as an integrated learning technique instead of a degrading activity, which must be avoided (Black and Allen 2019). As Karabenick & Berger (2013) reported "The process of seeking assistance from other individuals or other sources that facilitate accomplishing desired goals, which in an academic context may consist of completing assignments or satisfactory test Performance". In some of the earlier reports (Newman 2000; Karabenick 2004), the researchers argued that the university students could monitor and evaluate their own success and determine if they needed any additional assistance with regards to their academic curriculum. However, they stated that a majority of the student shy away from actively seeking support and help with their studies (Newman 2000; Karabenick 2004).

c)   Persistence: Persistence is another expression of motivation. It is this quality that enables one to continue to do something for a long period of time without interruption despite the challenges. It is the quality that allows someone to continue in pursuit of a goal even when challenges arise. A student has to want to persist to degree completion in order to expend considerable effort to do so (Tinto, 2017).

d)   Environmental structuring: Statements indicating student-initiated efforts to select or arrange the physical setting to make learning easier; e.g., "I isolate myself from anything that distracts me". "I turned off the radio so I can concentrate on what I am doing."

e)   Time management: The analysis of how the working hours are spent and the priositization to tasks in order to maximize personal efficiency in target task. As stated by Khanam, Sahu, Rao, Kar & Quazi, (2017) that vasy majority of university students complain about shortage of time to do target task, in turn, some other students got

sufficient time to complete their assignments with no struggle due to the diverse usage of time management skills. Time management is the art of arranging, organizing, scheduling and budgeting one's time for generating more effectiveness work and productivity.

2.4.5 Apply self-Regulated Learning in the Leaning Process

Self-regulation involves some processes and understandings, including autonomy, learning strategies, metacognition, motivation, and self-management (Rubin, 2001, 2005; Benson, 2011; Cotterall, 2008; Chamot, 2013; Cohen, 2011; Griffiths, 2013; Oxford, 2011; Anderson, 2008; Chamot, 2009; Vandergrift and Goh, 2012; Dörnyei and Ushioda, 2011).

More recently, Zimmerman (2000, 2008) viewed SRL as proactive processes that students use self-generated thoughts, feelings and actions that are planned and cyclically adapted to acquire academic skill" such as (a) setting specific proximal goals for oneself, (b) adopting powerful strategies for attaining the goals, (c) monitoring one's performance selectively for signs of progress, (d) restructuring one's physical and social context to make it compatible with one's goals, (e) managing one's time use efficiently, (f) self-evaluating one's methods, (g) attributing causation to results, and (h) adapting future methods to improve their academic achievement. A students' level of learning has been found to vary based on the presence or absence of these key self-regulatory processes (Schunk and Zimmerman, 1994; 1998).

Zimmerman and Kitsantas (2005) have suggested a four stage process. In the first stage, learners acquire self-regulatory skills and strategies most rapidly from social sources such as observing the processes being modelled, verbal descriptions and

social guidance, and feedback. An imitative level of self-regulatory competence is reached when the learner's performance emulates that of the observed model. The internalization of the strategy is the next stage and is apparent through the ability of the learner to use the strategy independently.

The literature presents various SRL frameworks (Oxford, 2011; Paris et al., 2001; Pintrich and Garcia, 1991; Winne and Hadwin, 1998; Zimmerman, 2000). Ziegler et al., (2003) summarize the primary components of the different SRL models using three groups: (1) planning (including goal setting, assessment of internal and external resources, and selection of appropriate strategies); (2) execution and monitoring (implementation of strategies, tracking their success, and altering strategies as needed); and (3) evaluation (of the learning outcome).

The model proposed by Winne and Hadwin (1998), on the other hand, comprises four components: (1) determining the task; (2) planning; (3) enacting study tactics and strategies; and (4) adapting study tactics for the future. Similar components are presented in a cycle in Zimmerman's (1998) model. According to this representation, learners first evaluate and monitor the learning situation. Next, they set learning goals and plan appropriate strategies. After implementing them, students monitor their performance and finish by evaluating learning outcomes.

Social learning psychologists view the structure of self- regulatory processes in terms of three cyclical phases. The forethought phase refers to processes and beliefs that occur before efforts to learn; the performance phase refers to processes that occur during behavioral implementation, and self-reflection refers to processes that occur after each learning effort. The processes that have been studied in each phase to date

are shown in Figure 2.13, and the function of each process will be described next (Pintrich & Zusho, 2002; Zimmerman, 2000).

Performance Phase

Self-control
Imagery
Self-instruction
Attention Focusing
Task Strategies

Self-observation
Self-recording
Self-experimentation

Forethought Phase

Task Analysis
Goal Setting
Strategic Planning

Self-motivation
Self-efficacy
Outcome Expectations
Intrinsic Interest
Learning Goal Orientation

Self-reflection Phase

Self-judgment
Self-evaluation
Causal Attributions

Self-reaction
Self-satisfaction/Affect
Adaptive Inferences

Figure 2.13. The structure of self- regulatory processes in terms of three cyclical phases by Social learning psychologists

Forethought phase: Forethought phase refers to processes and beliefs that occur before efforts to learn. , students analyze the learning task and set specific goals toward completing that task. There are two major classes of forethought phase processes: one is task analysis and the other is self-motivation.

Performance phase: Performance phase processes fall into two major classes: self-control and self-observation. Self-control refers to the deployment of specific methods or strategies that were selected during the forethought phase. Self-observation refers to self-recording personal events or self-experimentation to find out the cause of these

events. For example, students are often asked to self-record their time use to make them aware of how much time they spend studying. A boy may notice that when he studied alone, he finished his homework more quickly than when studying with a friend. To test this hypothesis, the boy could conduct a self-experiment in which he studied parallel lessons alone and in the presence of his friend to see whether his friend was an asset or a liability. Self-monitoring, a covert form of self-observation, refers to one's cognitive tracking of personal functioning, such as the frequency of failing to capitalize words when writing an essay.

Self-reflection phase: There are two major classes of self-reflection phase processes: self-judgment and self-reaction. One form of self-judgment, self-evaluation, refers to comparisons of self-observed performances against some standard, such as one's prior performance, another person's performance, or an absolute standard of performance. Another form of self-judgment involves causal attribution, which refers to beliefs about the cause of one's errors or successes, such as a score on a mathematics test. Attributing a poor score to limitations in fixed ability can be very damaging motivationally because it implies that efforts to improve on a future test will not be effective. In contrast, attributing a poor math score to controllable processes, such as the use of the wrong solution strategy, will sustain motivation because it implies that a different strategy may lead to success. One form of self-reaction involves feelings of self-satisfaction and positive affect regarding one's performance. Increases in self-satisfaction enhance motivation, whereas decreases in self-satisfaction undermine further efforts to learn (Schunk, 2001). Self-reactions also take the form of adaptive/defensive responses. Defensive reactions refer to efforts to protect one's self-image by withdrawing or avoiding opportunities to learn and perform, such as dropping a course or being absent for a test. In contrast, adaptive reactions refer to

adjustments designed to increase the effectiveness of one's method of learning, such as discarding or modifying an ineffective learning strategy. This view of self-regulation is cyclical in that self-reflections from prior efforts to learn affect subsequent forethought processes. (Zimmerman and Bandura, 1994). In support of this cyclical view of self-regulation, high correlations were found among learners' use of forethought, performance, and self-reflection phase processes (Zimmerman and Kitsantas, 1999). For example, students who set specific proximal goals are more likely to self- observe their performance in these areas, more likely to achieve in the target area, and will display higher levels of self-efficacy than students who do not set goals (Bandura and Schunk, 1981). Other studies have revealed that experts display significantly higher levels of self-regulatory processes during practice efforts than novices (Cleary and Zimmerman, 2004).

In this cyclical view of self-regulation, high correlations were found among learners' use of forethought, performance, and self-reflection phase processes. This cyclical process occurs when a student's purposeful actions and processes are directed towards the acquisition of information or skills. (Biemiller et al., 1998; Zimmerman and Bonner, 1996; Zimmerman and Kitsantas, 2005) suggest that self-regulatory abilities develop gradually over the course of childhood and into adolescence and self-regulatory processes are teachable and can lead to increases in students' motivation and achievement. Every self-regulatory process or belief can be learned from instruction and modeling by parents, teachers, coaches, and peers. (Bakracevic Vukman, and Licardo, 2010; Pintrich, 1999)

Pintrich (1995) believes that self-regulation is not an enduring measure of mental intelligence after a certain point in life, nor is it a personal characteristic that is genetically based or formed early in life. Students learn self-regulation through

experience and self-reflection (Zimmerman, 1998). Effective self-regulated learners actively set goals, decide on appropriate strategies, plan their time, organize and prioritize materials and information, shift approaches flexibly, monitor their learning by seeking feedback on their performance and make appropriate adjustments for future learning activities (Butler and Winne, 1995; Meltzer, 2007; Puustinen and Pulkkinen, 2001; Winne, 1995; Zimmerman, 1989, 2001). These learners commonly seat themselves toward the front of the classroom (Labuhn et al., 2010), voluntarily offer answers to questions (Elstad and Turmo, 2010), and seek out additional resources when needed to master content (Clarebout et al., 2010)

To become self-regulated leaners, teachers must teach students the self-regulated processes that facilitate learning. These processes often include: goal setting (Winne and Hadwin, 1998; Wolters, 1998), planning (Zimmerman, 2004; Zimmerman and Risemberg, 1997), self-motivation (Wolters, 2003; Zimmerman, 2004), attention control (Harnishferger, 1995; Winne, 1995), flexible use of learning strategies (van de Broek et al., 2001; Winne, 1995), self-monitoring (Butler and Winne, 1995; Carver and Scheier, 1990), appropriate help-seeking (Butler, 1998; Ryan et al., 2001), and self-evaluation (Schraw and Moshman, 1995). As shown in Table 2.1.

Table 2.1

The process of self-regulated learning in the components and phases

Components	Phases		
	Forethought phase	Performance phase	Self-reflection
Cognitive/Metacognitive regulation (Metacognitive skills)	Perceptions of previous experience Goal setting Strategic planning	Implementing strategies Monitoring and controlling progress	Performance evaluation Strategic adaptation
Affective regulation (Persistence)	Perceptions of possible outcomes and costs Motivational beliefs	Monitoring and controlling emotion and Motivation	Affective responses
Behavioral regulation (Time management and Help seeking)	Perceptions of behavioral engagement	Undertaking and controlling planned commitments Noticing behavioral changes	Behavioral adaption Defensive reactions
Environment regulation (Environmental structuring)	Observations on available resources and learning context	Management resources Identifying problems Seeking help	Environment restructuring Disengagement

Note: the four components identified are integrated in the three phases of self-regulation proposed by the cyclic model (Zimmerman & Camillo, 2003).

2.5   Social Meida Usage (SMU)

Nowadays, new technologies are causing many educators to rethink pedagogy and current learning and teaching models. Some, drawing from the term Web 2.0, have labeled new educational innovations "E-learning 2.0" (Downes, 2005). Zimmerman (2000) suggests that e-learning with social media tools and services can be seen as a promising approach to establishing an innovative learning and teaching culture that helps students cope with the changing knowledge environment and learning requirements. Thus, higher education institutions are facing the situation where the use of new technologies simultaneously creates conditions for introducing new teaching practices on the one hand, and on the other hand, revising current pedagogical approaches.

Social media are defined as

"a group of Internet-based applications that build on the ideological and technological foundations of web 2.0, which allows the creation and exchange of user-generated content"

(Kaplan and Haenlein, 2010)

Social media receive a lot of attention and stimulate debates with regard to their pedagogical value due to they have quickly gained popularity the world (Silius et al., 2010) and Social media placed at the intersection of learning and social purposes (Lamy et al., 2010; Benson and Reinders, 2011; Conole et al., 2008; Zourou, 2012). Besides, the use of mobile phone network and computer network as the main carrier of new media in universities. According to Global Social Media Research Summary (2018), the number of social media users worldwide is 3.196 billion, up 13 percent year-on-year and the number of mobile phone users in 2018 is 5.135 billion, up 4 percent year-on-year. In Malaysia, there is 9 percent up on SMU in 2018. The new

media has become a part of student daily life. In additional, social media tools also provide opportunities for language learners to enhance digital and multi-literacy skills, interact in and through the target language, work collaboratively, and enhance their linguistic and pragmatic proficiency (Blattner and Fiori, 2011; Blattner and Lomicka, 2012; Lomicka and Lord, 2012; Lomicka and Lord, 2016). Under social media context allowing learners to manage and maintain a learning space that facilitates their own learning activities and connections to peers and social networks across time and place (McGloughlin and Lee, 2010; Selwyn, 2007; Valjataga et al., 2011; van Harmelen, 2006).

In particular, they have attracted the attention of the young generation (Hamid et al., 2009) as well as university students (Brady et al., 2010). A learning via social media drives student's curiosity and improve their creativity (Ahmed and Norah, 2015). Online social network has been deeply embedded in the lifestyle of young people, especially since university students with a huge proportion of total population of online social networking websites (Madge et al., 2009; Subrahmanyam et al., 2008). Based on data project of pew research center social media and mobile internet use among teens and young adults (Lenhart and Zickuhr, 2010) as September 2009, 93% of teens ages 12-17 go online, as do 93% of young adults ages 18-29. 63% of teens go online everyday several times due to their interactive and multidimensional characteristic; these networks allow their enthusiastic users, all familiar with the fast growing world of technology and internet, to freely and quickly share, with their family, friends and colleagues, the most significant moments of their lives, in addition to their ideas, opinions and beliefs.

According to Grahl (2013) social media can be categorized into different but overlapping categories:

Social network sites: Social network (e.g., Facebook, LinkedIn, Twitter, whatsApp or WeChat) represents one aspect of social media, which has the broader focus of creating and transmitting information to others. SN is more about the tools used to make that content available to others and to allow users to connect, engage with it, and to build communities. In fact, in recent years, these social networks have been able to make a revolution in the fields of communication (Espuny et al., 2011) and information and knowledge sharing (Grosseck, 2009, Albion, 2008). Social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site7. The biggest social networks are MySpace, Facebook and Bebo. Among the most popular in Malaysia is Facebook and WhatsApp. Facebook is currently the most visited social media website in Malaysia. In total, there are 10.4 million Facebook users in Malaysia of which 3.5 million are youth aged between 18 and 24 in December 2014. WhatsApp is used by 73% of Malaysia mobile Internet population.

Forums: Areas for online discussion, often around specific topics and interests. Forums came about before the term "social media" and are a powerful and popular element of online communities.

Wikis: A wiki is "a collective website where any participant is allowed to modify any page or create a new page using her\his Web browser." One well-known example is Wikipedia, a free online encyclopedia that makes use of wiki technology.

Blogs: Short for "web log", a blog is an online journal in which pages are usually displayed in reverse chronological order. 2 Blogs can be hosted for free on websites such as WordPress, Tumber and Blogger.3

Social bookmarking: Social bookmarking sites allow user to organize and share links to websites. Examples include reddit, StumbleUpon and Digg.

Status-update services: Also known as microblogging services, social networking combined with bite-sized blogging, where small amounts of content ('updates') are distributed online and through the mobile phone network. Twitter is the clear leader in this field.10

Virtual world content: These sites offer game-like virtual environments in which user interact. One example is the imaginary world constructed in Second life, in which users create avatars (a virtual representation of the user) that interact with others.

Media-sharing sites: These sites allow users to post videos or photographs. Popular examples include YouTube, Apple ITunes, Pinterest and Instagram. As shown in Figure 2.14.
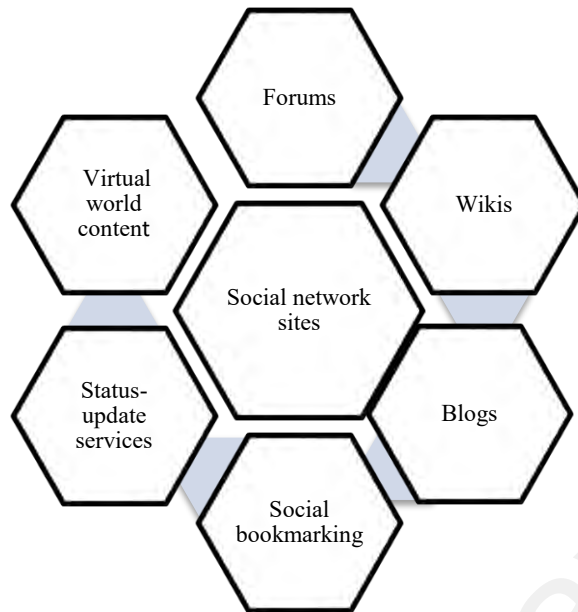
Figure 2.14. Categories of social media Grahl (2013)

At present, research on the use of social media has matured, and almost all college students use social media. Many past studies have also shown that college students use social media for some reasons, as contacting friends, family, watching videos, studying. As the increasingly been much accounted of blended learning environment (BLE) in higher education (2011; 2012; 2013; 2014; 2017; 2018), and "*incorporation of mobile devices in teaching and learning*" raised in The Top 10 Strategic Technologies for 2019 (2019), social media used as a learning tool are widespread. Even, some of researchers were worried about the use of social media, whereas the effects of social media integration strongly depend on the way students use them. Students need skill in controlling learning through multiple information and technology to avoid addictive in entertainment (Junco 2012; Junco et al., 2013; Mazer et al., 2009). Sehatzadeh & Le-May Sheffield (2014) reported majority of teachers (62.63%) were in disagreement with the use of these [social media] tools, which was similar to the students' response (66.32%) similarly, 37% students reported get

distracted by using social media in the class (Brooks & Pomerantz, 2017). The topic about social media as a learning tool is actually a quite controversial issue. However, still we belief social media will develop continually among university or college students, due to powerful functions of social media are match for undergraduate learning environment, as such Collaborating to create documents online; Sharing information online; Tracking and managing your academic schedule; Building relationships with peers; Posting/re-posting media or information found online; Creating media to share online; Commenting on media or information found online which able to fulfill student and faculty education needs in order to develop 21st-century skills for students (Smith, 2017). Chawinga reported in 2017, if properly prepared, Twitter and blogs will promote a student-led approach to teaching, because using these technologies, students can be found collaboration and discussing course materials, expressing their opinions, and among themselves and with lecturers Interacted. According to Smith (2017), numbers categories of social media for undergraduate learning, such as Google Apps (e.g., Google Calendar, Google Docs), Social networking (e.g., Facebook), File sharing (e.g., Dropbox, Google Drive, BitTorrent), Video sharing (e.g., YouTube, Vine), Wikis (e.g., Wikipedia, Wikimedia), VOIP/instant messaging (e.g., Skype, Google Talk/Chat), Image sharing (e.g., Flickr, Instagram, Pinterest), Blogs (e.g., Blogger, WordPress), Microblogs (e.g., Twitter), Location-based apps (e.g., Foursquare, Google Maps),Social news sites (e.g., Reddit).

Why use Social media in language learning?

1. Break traditional language learning methods and realize for Student-led learning. It is widely accepted by college university students (Chawinga, 2017; Ziegler, 2007; Google (Firm) Canvas8 (Firm), 2019)

2. Language learners are vary in learning styles, which involved Visual learners, Aural learners,Verbal (linguistic), Logical (mathematical), Social, Solitary, and Physical learners. This definition was typically grounded from Gardner's (1992, 1999, 2006) multiple intelligences and education. Social media can meet the requirements of students with different learning styles (KeHua, 2016).

3. Ubiquitous Learning environment, and easy to operate (KeHu, 2016)

4. Develop language learners SRL, motivation, Collaboration learning, and intercultural communication competence with native speaker (Dabbagh & Kitsantas, 2012; Tu, Yen & Sujo-Montes, 2015; Matzat & Vrieling, 2016; Google (Firm) Canvas8 (Firm), 2019; Akbari, Naderi, Simons & Pilot, 2016).

5. Social media is powerful technical, whereby assist for improve language learning skills. Able to improve language learners listening, Speaking, Reading, Writing, translating, pragmatic competence, and cross-culture skills (KeHua, 2016). As summarized in Figure 2.15.
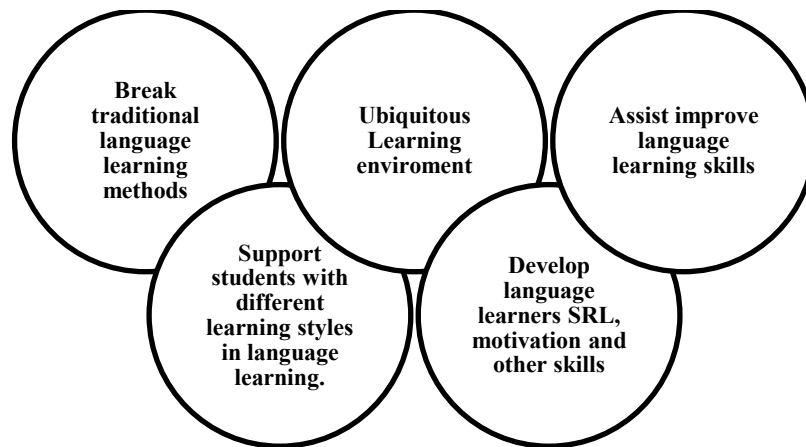
Figure 2.15. Why use Social media in language learning

2.5.1 Formal and informal learning for social media

The 2010 Educause Center for Applied Research studied of undergraduate students and information technology revealed that students' use of social media has steadily increased from 2007 to 2010 (Smith and Caruso, 2010). More details of 2010 ECAR research showed that 33.1% of the participant undergraduate student sample (N= 36,950) reported using wikis; 29.4% used SNS; 24.3% used video-sharing websites; 17.4% used web-based calendars; 11.6% used blogs; 4.3% used micro-blogs; and 2.8% used social bookmarking tools. Additionally, the percentages of those using social media for coursework related collaboration was particularly noteworthy (30.7% of wiki use, 49.4% of SNS use, 33.4% of video-sharing use, 37.6% of blog use, 40.2% of micro-blog use, and 30.5% of social bookmarking use). The founding reported that undergraduate students are integrating social media in their academic experience both formally and informally (Smith and Caruso, 2010). Learners acquire knowledge as a function of interactions between connected partners. Formal learning can be described

as the provided education by an institution or the education by following a specific curriculum basically. It defined in European education and policy terminology as:

"Learning that occurs in an organized and structured environment (such as in an education or training institution or on the job) and is explicitly designated as learning (in terms of objectives, time or resources). Formal learning is intentional from the learner's point of view. It typically leads to validation and certification."

According to European commission (2000), formal learning provides a diploma, certificate and qualifications at the end of the education process and also takes place in education and training institutions. Consequently, at school or university learning can be examples of formal learning. In this study, formal learning is the learning use social media for achieve in Arabic language course. Based on the definition of formal learning informal learning are usually thought to be the out of school learning experiences. Unlike formal learning, the definition of informal learning are diverse which lead researcher to be confused. Terminology of European education and training policy (2008) stated as unintentional and unorganized learning which takes place at work and spending time with family or friends. Additionally, informal learning refers to experiential, incidental or random learning and usually do not lead to certification.

Yaşar and Karadeniz (2011) identifies informal learning as natural way of learning process which is based on mix of accidental experiences. He believes that when people need to learn new knowledge and skills, they need to function so they gather it naturally.

Also Trinder et al., (2008) emphasized that informal learning is not provided by formal institutions and does not lead to certification. Hence it can be intentional or non-intentional activities which results from the social, leisure or educational

interactions. In addition, they state that informal learning may be structured or non-structured in terms of objectives, time or support.

Conner (2011) indicates that informal learning, which is a lifelong process, consists of the skills, knowledge and attitudes that people gain by mostly social interactions in their daily lives, or the interactions with mass media, or Similarly.

European Commission (2000) defines informal learning as:

"A natural accompaniment to everyday life. Unlike formal, informal learning is not necessarily intentional learning, and so may well not be recognized even by individuals themselves as contributing to their knowledge and skills."

When all these definitions are taken into account, it can be said that the social context is the primary characteristic and in many cases informal learning is mostly accidental. Dabbagh and Kitsantas (2012) discovered about the relationship of personal learning environments, social media, and self-regulated learning. This study suggested that social media are being increasingly used as tools for developing formal and informal learning spaces or experiences that start out as an individual learning platform, enabling individual knowledge management and construction, and evolve into a social learning platform or system where knowledge is socially mediated.

Banks and his research team (2007) studied learning in formal and informal environments. Their findings indicate that formal learning is only a small part of the lifelong experience of human learning: The role of formal learning is about 19% in the first through twelfth grades, and the percentage is reduced to 8% in undergraduate years and 5% in graduate years. As students' progress from high school to college and graduate schools, the role of informal learning becomes more and more important because learning can happen anywhere at any time.

Smith and Borreson Caruso (2010) examined the relationship between the personal value of social networking technology, the frequency of Facebook use, the frequency of Facebook activities, and group engagement. The samples were 205 pre-service teachers who participated in the six-week online group project. Questionnaires were collected after the pre-service teachers submitted the project. The data were analyzed using descriptive statistics and correlation analysis to identify relations among variables. The results showed that 58.4% of the students used Facebook many times a day, the frequency of usage was largely related to personal interests rather than being relevant to group communication and engagement with the project assignment. However, there were significant but slight correlations between the Facebook activity "view others' status to update social events" and group engagement; between "private messages" and group engagement; between "set up and share events" and group engagement; between "commenting" and group engagement; and between "clicking like" and group engagement.
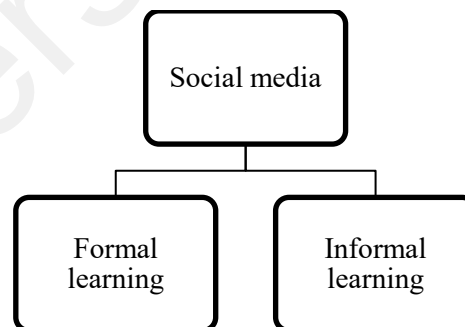
Figure 2.16. Social media and dimensions

2.6 Motivation

The word of "motivation" in Latin root means "to move"; therefore, the study of motivation is the study of action. Motivation is a series of internal drive that encourages a learner to pursue a course of action and is responsible for initiating the learning and later the driving force to sustain the learning process over the long and dull years it takes to learn a language. It is believed that without sufficient motivation no other factor on its own can ensure student achievement (Dörnyei, 2001).

Motivation plays a role in various ways in the process of learning a second language, such as classroom behaviour (Gliksman et al., 1982), persistence in language study (Clément et al., 1978), bicultural excursions (Clément et al., 1977), intensive language programs (Gardner et al., 1989), language retention (Gardner et al., 1987), and even modes of acculturation (Young and Gardner, 1990). In general, it was commonly accepted that motivation enhances foreign language acquisition, and that learners ranking high on integrative orientation work harder and learn faster than those who are low on integrative motivation (Clément et al., 1994; Tremblay and Gardner, 1995).

In all cases above proved that motivation to account for individual differences. The major point is that motivation plays a role in a number of different ways. The level of identification the learners have with bilingual or trilingual identity is quilt influenced by their motivation (Mohammad, 2005).

Social psychologists were the first to initiate serious research on motivation in language learning because of their awareness of the social and cultural effects on second language learning (Dornyei, 2003). Motivation is lots of research and studies such as, Noels et al., 2000; Masgoret and Gardner, 2003; Dörnyei and Ushioda, 2011;

Sotoodehnema and Taghipour, 2010; Shirbagi and Azizi, 2010; Seddighi and Zarafshan, 2006) have examined the role of language learning motivation in foreign language learning. There are two main reasons have been given by Dörnyei (2005) for this considerable attention to language learning motivation:

First, motivation provides the primary impetus to initiate foreign language learning and later the driving force to sustain the long and often tedious learning process; indeed, all the other factors involved in foreign language presuppose motivation to some extent.

Second, high motivation can make up for considerable deficiencies in both one's language aptitude and learning conditions; that is, although language aptitude accounts for a considerable proportion of individual variability in language learning achievement, motivational factors could override the aptitude effect.

Moreover, Dörnyei (2005) developed a more general framework of second language motivation. This framework consists of three relatively distinct levels: The first level is The Language Level which comprises the Integrative Motivational Subsystem and the Instrumental Motivational Subsystem. The second level of this motivational construct is the Learner Level, which involves various cognitive aspects of motivation which form part of the baggage that a person brings to the learning process. The third level of motivation is the Learning Situation Level which involves three sub-categories of motivational components. They are: a) Course-Specific Motivational Components, b) Teacher-Specific Motivational Components and c) Specific Motivational Components.

Dornyei's (2002) task motivation refers to a task processing system consisting of three interrelated mechanisms:1.Task execution 2.Appraisal and 3.Action control.

First, learners engage in target task, then, they try to compare,contrastande valuate the actual performances with the expecte dones and finally they use some self-regulatory strategies to sustain or enhance etheir effort in doing that particular task. As displayed in Figure 2.17.
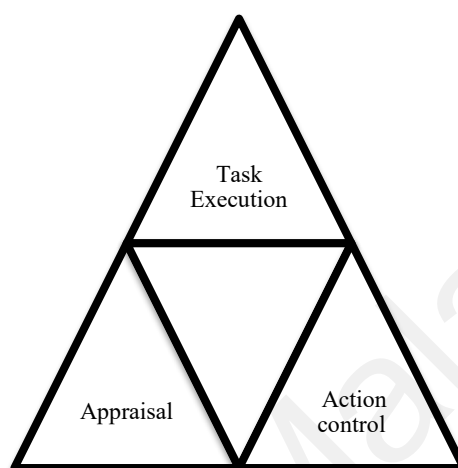
Figure 2.17. Task Motivation Phases(Dornyei, 2005)

2.6.1 Task value, Goal orientation, and Self-efficacy

In order to investigate Arabic learners' motivation towards Arabic learning. Thus, the researcher going to study Course-Specific Motivational Components, they have emphasized the importance of several motivational factors: task value, self-efficacy and goal orientations.

Task value: Task value refers to students' perceptions of the interest, usefulness, importance and cost of the target task (Wigfield, 1994; Wigfield and Eccles, 1992, 2000, 2002). Research suggest that students who attach a high value to the task will use deeper cognitive and metacognitive strategies (Pintrich, 1999; Pintrich & De Groot, 1990; McWhaw & Abrami, 2001). According to Eccles & Wigfield (2002), task value is one of the key determinants of choice for target behavior. They summarized four

components of task-value: attainment value, intrinsic value, utility value, and cost. Attainment value was defined as personal importance of doing well on the task. Markus & Wurf (1987), they also linked attainment value to the relevance of engaging in a task for confirming or disconfirming salient aspects of one's self-schema. And intrinsic value is the enjoyment the individual gets from performing the activity or the subjective interest the individual has in the subject. In addition, utility value is determined by how well a task relates to current and future goals, such as career goals. A task can have positive value to a person because it facilitates important future goals, even if he or she is not interested in the task for its own sake. For instance, students often take classes they do not particularly enjoy but that they need to take to pursue other interests, to please their parents, or to be with their friends. In one sense then this component captures the more "extrinsic" reasons for engaging in a task (Deci & Ryan 1985, Harter 1981). However, it also relates directly to an individual's internalized short- and long-term goals. Finally, Eccles and her colleagues identified cost as a critical component of value (Eccles 1987). Cost is conceptualized in terms of the negative aspects of engaging in the task, such as performance anxiety and fear of both failure and success, as well as the amount of effort needed to succeed and the lost opportunities that result from making one choice rather than another.

Goal orientation: Goal orientation is defined as an integrated pattern of motivational beliefs that is represented by different ways of approaching, engaging in, and responding to achievement activities (Dupeyrat & Mariné, 2001). On the other hand, it is the goals that individuals set that influence their actions, reactions, and motivation for learning (Shim & Ryan, 2005). Ford (1992) defined goals as desired end states people try to attain through the cognitive, affective, and biochemical regulation of their behavior. Pintrich (2000) classifies achievement goal orientation into three types:

Mastery goal orientation, which is also known as learning goal or task goal orientation (Valle et al., 2007) and task involvement (Nicholls, 1984), and emphasizes improving one's capability in the tasks. De la Fuente Arias (2004) claims that whatever arouses motivation of an academic nature and makes learners to direct their classroom behavior is defined as task goal orientation. Ability-approach goal orientation places emphasis on describing one's ability or performance to others. Students who adopt this type of goal orientation try to be higher than others. Ability-avoid goal orientation has to do wish avoiding one's lack of ability or performance. Students who select performance avoidance goal orientation tend not to be the weakest students in the class (Pintrich, 2000). Both ability-approach and ability-avoid goal orientation are also called performance goal orientation (Pintrich, 2000; Valle et al., 2007), ability goal, ego involvement (Pintrich, 2000), and self-centered goal, which refers to one's performance (Valle et al., 2007). By the same taken, Pintrich et al., (1993), Motivated Strategies for Learning Questionnaire (MSLQ), self-regulation is classified into motivational and cognitive processes, and intrinsic and extrinsic goal orientation as two factors of motivational scales among others. Ames (1992) holds that students' tendency toward academic success stems from intrinsic and extrinsic goals and, thus, refers to them as learning goals. On the whole, the motivation which originates from internal reason is called intrinsic goal orientation and the one which stems from external reason is called extrinsic goal orientation

Self-efficacy: Bandura (1977, 1997) defined self-efficacy as personal judgments of one's capabilities to organize and execute courses of action to attain target goals, and he/she sought to assess its level, generality, and strength across activities and contexts. In other words, self-efficacy is the person who judge himself of how well he/she will

be able to perform in given situations (Bandura, 1986). Within the triadic reciprocity, self-efficacy (personal) is hypothesized to influence behaviors and environments and in turn be affected by them (Bandura, 1986, 1997). In support of this assumption, students' self-efficacy perceptions have been found to be related to two key aspects of the proposed reciprocal feedback loop: students' use of learning strategies and self-monitoring. Students with high self-efficacy have displayed better quality learning strategies and more self-monitoring of their learning outcomes than have students with low self-efficacy (Kurtz & Borkowski, 1984; Kuhl, 1985). In addition, researchers have found that students' perceptions of self-efficacy are positively related to such learning outcomes as task persistence, task choice, effective study activities, skill acquisition, and academic achievement. Students' behavioral performance is assumed to influence their perceptions of self-efficacy, as well as the reverse (Bandura and Schunk, 1981; Thomas et al., 1987; Schunk, 1984). Self-efficacy has been applied to behavior in many domains including school, health, sports, therapy, and even snake phobia (Bandura 1997). In this regard, the empirical studies very supportive of the theoretical predictions. For example, high personal academic expectations predict subsequent performance, course enrollment, and occupational aspirations choice (Bandura et al. 2001).

Mustapha et al., (2013) focuses on Self-efficiency in Arabic language learning. This study concludes that measuring students' efficacy on specific language task will enhance the instrument and see its specific impact on students' achievement. This instrument would then have a direct practical impact on the teaching and learning processes. When Arabic learners believe that they are good readers, writers and able to use correct grammar in their communication, the effect of these beliefs is observed in the improvement of their performance. Finally an old study has been done by (Ismail,

1993) on teaching the Arabic language in the National University of Malaysia. This study has concerned with the teaching and learning of Arabic as a second or a foreign language in Malaysia in general and in the Faculty of Islamic Studies of the National University of Malaysia in particular. The main purpose of this study was evaluating the existing Arabic language program in the Faculty, and to provide some suggestions for its improvement.
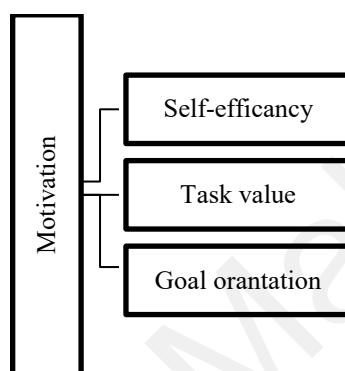
Figure 2.18. Motivation and Dimensions

2.7   Previous Studies Related to Study and Hypothesis

In this section of study, relevant studies is reviewed across three sections based on this study variables. The first presents an overview of SRLs and academic achievement. Second section provides review of SMU and academic achievement. The third section reviews of Motivation and academic achievement.

2.7.1   Previous Studies Related SRLs

Self-regulation has gained attention in the foreign language teaching and learning field over the last few decades. Languages acquisition requires a substantial investment of time on a continuous basis due to the dynamic nature of language itself, maintaining high levels of motivation and persistence is crucial. Language learners

require adequate practice inside and outside the classroom through active participation in curricular and extracurricular activities. In order to become self-regulated and autonomous, as well as learn how to make their own learning decisions, learners need assistance in planning, goal-setting, effort management, comprehension, monitoring, evaluation, and persistence throughout the learning process (Oxford, 1990; Pintrich and De Groot, 1990; Sinclair, 2000). When used effectively on a regular basis, these strategies facilitate language learning (Andrade and Bunker, 2009; Oxford, 2003, 2011) by leading to deeper learning and higher performance in language skills such as speaking (Ehrman, 1996; Ma and Oxford, 2014); reading comprehension (Ehrman, 1996); writing (Andrade and Evans, 2013; Wang et al., 2009); and vocabulary (Rasekh and Ranjbary, 2003).

In the last two decades, researchers (Malley and Chamot 1990; Oxford 1990) have attempted to identify and categorize Language Learning Strategy. These studies focused on what self-regulated learners did when studying a second or foreign language. The research findings show that attaining high level of foreign language proficiency depends on self-regulatory skills of a learner (Oxford, 2001). Foreign language educators and psychologists view learning strategies as a component of self-regulated learning, means that Self-Regulated Learning is the major points for "how to learn" techniques (Sharon, 2016). Qiufang and Haixiao (1996) found that the successful second language / foreign language learners are more frequently of using learning strategies than unsuccessful learners. There are significant research demonstrating SRLs at improving foreign language learning (Andrade and Evans, 2013; Gunning and Oxford, 2014; Ma and Oxford, 2014; Oxford, 2011; Pintrich and De Groot, 1990; Sinclair, 2000; Zimmerman and Risemberg, 1997).

Zimmerman and Martinez-Pons (1986) investigated the use of self-regulation strategies in a high school population, and the relationship between the 26 use of self-regulated strategies and achievement. From the 80 total participants, 40 of them were divided into the high achievement track group and the other 40 formed the low achievement track group. Achievement scores were obtained from the Metropolitan Achievement Test (MAT) in the subjects of English and Mathematics. Similarly, it was found that the high achiever group relied more on social sources for assistance compared to the low achiever group, particularly by seeking social assistance from their teachers, peers, and other adults. Therefore, the use of self-regulation strategies was shown to be significantly related to a higher level of academic functioning.

Zimmerman and Martinez-Pons (1988) investigated the relationship between the SRLs reported by high school students and the SRL performance observed by their teachers. Findings indicate that there is a relationship between the ratings provided by teachers with the reports given by students of their use of SRL strategies. The SRL strategies of rehearsing, organizing, and reviewing tests were the strategies that correlated the most with the teachers' ratings. Hence, good self-regulated learners use self-regulated strategies to perform their classroom activities.

By the same token, Ablard and Lipschultz (1998) investigated the relationship between SRL and achievement. A sample of 222 high-achieving seventh-grade students participated in the study; 53% were boys. Results of responses to the Self-Regulated Learning Interview Schedule indicated that the most reported strategies were self-evaluation, goal setting, planning, organization and transformation, monitoring, record keeping, seeking assistance from adults, note review and text review. However, the students only used on average one of these strategies, while the particular strategies used varied greatly. The authors concluded that being a high

achiever does not necessarily mean there will be more use of SRL strategies. Gender differences were also noted, suggesting that girls use more self-regulatory strategies than boys do when performing difficult reading and writing tasks. In addition, girls reported more personal regulation and optimization of their environment.

Sardareh et al., (2012) claimed that the relationship between the use of SRL strategies and students' academic achievement. The subjects under study were a group of male (40) and female (42) pre-university students randomly selected from two schools in Tehran, Iran. The instruments used to gather data were a translated version of the Motivated Strategies for Learning Questionnaire (MSLQ) translated by Navidi (2003) and an academic achievement test. The findings of the present study revealed that there is a strong relationship between the use of SRL strategies and students' academic achievement which is consistent with the findings of studies conducted before. However, the findings of this study also showed that there is a difference between male and females as to the use of SRL strategies. Females outperformed males in both academic achievement and the use of SRL strategies.

Abdolvahab (2012) investigated in his study about Language Learning Motivation, Self-Regulated Learning, and Foreign Language Learning among Iranian Learners. The data were analyzed using descriptive statistics and inferential statistics including Structural Equation Modeling (SEM) and stepwise regression analysis. The results also showed that SRL directly and positively predicted students' language learning and among the components of SRL, organizing and questioning and rehearsal were best predictors of learners' language learning. Moreover the results demonstrated that Language Learning motivation predicted SRL directly and positively and among the factors of Language Learning motivation, Integrativeness, Parental Encouragement, and Instrumentality were predictors of self-regulated learning.

Seker (2016) discovered about the significance of SRL in language teaching by exploring its impact on language achievement. A total of 222 undergraduate foreign language learners at a state university participated in the study. Data was collected from two sources: a five-point Likert-type self-regulated language learning questionnaire, adapted from models and research instruments used in previous studies to investigate SRL and language learning strategies, and the university's English achievement exam. Quantitative analyses indicated that although participants reported moderate to low levels of SRL use, it is a significant predictor of foreign language achievement and had significant correlations with language achievement. The results are meant to draw attention to the importance of SRL research within the foreign language teaching field as well as foster SRL implementation in language instruction.

Andrade and Bunker (2009) explored the role of learner autonomy and self-regulated learning in distance education. The result shown that the application of these concepts impacts course design and, potentially, learner achievement. Current research and discussion has not synthesized the ways in which these factors can be more fully utilized to improve distance education. The model provides guidance for course designers and assists instructors in supporting their students.

However, there are also studies indicated that there is no correlation between self-regulated learning and academic performance for second language learning, such as Mahmoodi and Ghaslani (2014) studied self-regulated learning (SRL), motivation and language achievement of Iranian EFL learners. The present study aimed to find the self-regulatory strategies that are most frequently used by Iranian EFL learners in Learning English, the relationship between motivation and SRL, and the relationship between SRL and L2 achievement. 130 EFL learners studying at two language institutes in Hamedan and Sanandaj were selected. A questionnaire including 46 items

assessing self-regulated learning and motivation was administered. Running frequency analysis, five most frequently used self-regulatory strategies by Iranian EFL learners were specified. In addition, while a significant relationship was found between motivation and SRL. Forthemore, this study also found there was no significant relationship between SRL and L2 achievement.

Yet for all that, it would be expected that persons with high degree of SRLs usage possess high academic achievement. Based on such studies, the following hypothesis is suggested. As displayed in Figure 2.19.

H4a: SRLS significant influence in Arabic learners' academic achievement (GPA).

Self-regulated learning startegies (SRLs)

Academic Achievment
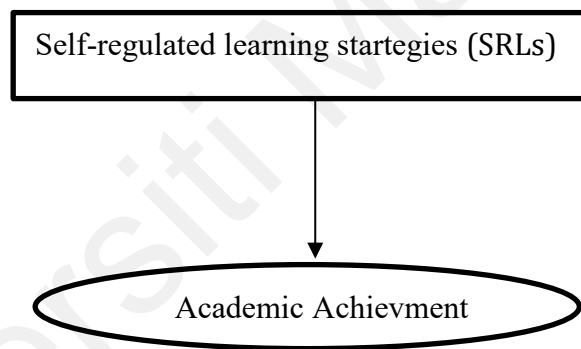
Figure 2.19. Subordinate model 4a: The influence of SRLs on Academic Achievement

2.7.2   Previous Studies Related to Social Media Usage

Social connections and networks are changing the ways we think about knowledge and learning and the ways we organize work, study and ideas. The use of social media to learn plays a variety of roles in education due to social media can provide a media to share ideas, allowing students to build their own communities to collaborate with each other, facilitating the art of learning and reaching out to the students in order to understand and teach them at the same time (Al-Khalifa and Garcia, 2013). While, social media is also generally conceded to be the most popular way to communication and learn foreign languages, students easily accept the integration of social media in educational practice (Van't Klooster and Janssen 2012). Moreover, Komatsu (2011) conducted a survey of SNSs and Web 2.0 and concluded that these networks are potential forums of learning because they can be learner-centered, active, and collaborative.

Educators, though, have claimed that relatively little empirical research exists on how social networking can facilitate language learning (Stevenson and Liu 2010; Lamy and Zourou 2013; Zourou 2012) and indicate that social media can generate meaningful output and stimulate students' interest in language learning (Chartrand 2012). Other studies have investigated socio-pragmatic competence (Blattner and Lomicka 2012; Reinhardt and Zander 2011) and the potential to develop and explore online relationships and identities where expression, interaction, and community building are all important factors in the language learning experience (Chen 2013; Klimanova and Dembovskaya 2013; Mills 2011; Reinhardt and Chen 2013; Thorne 2010).

Blyth (2008) stated four distinct categories to language learning research: technological, psycholinguistic, sociocultural, and ecological. Each of the approaches with the assist of social media will twice as much can be accomplished with half the effort. Social networking spaces can also provide virtual spaces and offer promising opportunities to learn through observation, where students can observe others, interpret their behaviours, and adjust their own styles of interacting in SNSs.

Harrison and Thomas (2009) has been claimed in their study because of languages' multicultural and interactive nature, social networks can have a direct impact on learning, notably the learning of foreign languages. This claim is supported by various other studies (Akbari et al., 2012; Lomicka and Lord, 2009; Motteram and Sharma, 2009) Social networking tools also provide opportunities for language learners to enhance digital and multiliteracy skills, interact in and through the target language, work collaboratively, and enhance their linguistic and pragmatic proficiency (Blattner and Lomicka, 2012; Mills 2011; Lomicka and Lord, 2016) which also underline the potential of social networks for teaching and learning foreign languages, for improving and enhancing learners' oral and written language skills, and for the promotion and development of language learning all over the world.

Ducate and Lomicka's (2013) study is grounded in this approach as they examine how students use a mobile device 'on the go' both within and outside of the language classroom, at a time and place that accommodates them, and suggests the types of affordances that are possible within mobile language learning. Their findings suggest that intermediate language students who are offered the use of mobile devices will take advantage of their affordances for personal and academic uses, thereby allowing themselves more exposure to the target language and culture. Although this

study did not specifically explore social media, the findings can be applicable to all virtual spaces.

Furthermore, Karpati (2009) has stated that social web tools can, in general, facilitate educators in setting up collaborative learning, as they place students at the core of the learning experience while at the same time allowing the teacher to function as the mentor and guide of knowledge construction and sharing. He also highlighted the fact that such tools provide authentic language education settings, an important consideration for achieving high communicative competence in a foreign language.

Akbari et al., (2012) investigated about students' attitudes towards using social networks in learning languages twenty Iranian PhD students were enrolled in an online English course via Facebook. Through a study composed of a set of questionnaires, researchers indicated that there is a significant difference between participants' attitudes before and after the course. After the online course, most students stated that, Facebook has high potentials for being used as effective formal educational tools and students' positive attitudes towards the usefulness of social networks increased.

Nowadays, the use of mobile phone network and computer network as the main carrier of new media in universities. The new media has become a part of student daily life. Social media provide lots of information and the tools used to make that content available to others and to allow users to connect, engage with it, and to build communities. In addition, social media tools also provide opportunities for language learners to enhance digital and multi-literacy skills, interact in and through the target language, work collaboratively, and enhance their linguistic and pragmatic proficiency (Blattner and Lomicka, 2012; Lomicka and Lord, 2012; Lomicka and Lord, 2016).

Concurrently, the researchers Haron et al., (2010) believe that the awareness contributed from the different media on different aspects of speaking skill, the extent of application of what gained from the media and the frequency of using them have influenced the results of the development of their Arabic language speaking skills.

Al-Rahmi and Othman (2013) measured social media and academic achievement, a 42 items questionnaire was developed based on past literatures. The independent variables are time appropriateness, time duration, Nature of Usage, Health Addiction, Friend People connection and security/privacy problems and the dependent variable was student academic achievement. The sample of 102 students from Erican College was selected using convenient sampling method. The data collected was analyzed using description means and regression via SPSS 21. The result indicated using the regression analysis four variables (Time appropriateness, people-friend connection, nature of Usage and health addiction) is significant. However, Time duration and security/privacy problems are not significant. Thus, it is expedient that Universities and colleges in Malaysia educate their students to positively use these platforms for educational purposes which will eventually result in a positive impact on their academic performance.

Rosli, Saleh, Aris, Ahmad, Sejzi & Shamsudin (2016), study about the usage of e-learning and social media among educational technology postgraduate students in the Faculty of Education, Universiti Teknologi Malaysia. This study had involved 70 respondents via the means of a questionnaire. Four factors have been studied, named, the factor of technology, exposure, content and social influence. The finding indicated respondents use of social media was found to be motivated by the factor of technology and social influence. A strong positive relationship exists between the usage of e-learning and social media suggesting that social media can be manipulated as

supporting material for e-learning. Yet, the finding may not be generalized to all Malaysian educational technology postgraduate students.

More notably, Rahimi, Azhan, Normeza & Baharudin (2015) studied students' feedback towards using facebook in learning arabic language. This study involved 22 students as the participants of the study conducted via a Facebook group that was specially created for this purpose. The results indicated positive response from the participants who engaged on the account to improve their language skills. The participants were also motivated to use Facebook to communicate with each other in Arabic language even though they have some setbacks due to some limitations. The participants also pointed out that they prefer Video Application or Picture Apps in giving their comments in Arabic language. The participants also agreed that Facebook can enhance their acquisition of new vocabs during discussion and conversation. Moreover, the study showed that Facebook can guide the participants in the concepts of collaborative learning in virtual world as an alternative to the face-to-face learning in classroom.

Sari & Hasibuan (2019) investigated students' perception toward social media assisted language learning for arabic learning. The study used social anthropology approach in qualitative research. 32 Arabic language education students at the State Islamic University Maulana Malik Ibrahim Malang were involved in this study. The results of the study show that social media can be used as a tool for language learning Arabic, can improve students' skills, and help them better interact with lecturers and classmates.

However, social media exist as "Double-edged sword" in students learning process. Social media has brought a lot of challenges to the students. According to

Michikyan, Subrahmanyam and Dennis (2015) investigated Facebook use and academic performance among college students. The questionnaire contained open-ended questions about participants' average daily use of Facebook measured on a 5-point Likert-style scale, 1 = not at all to 5 = very active. The researcher recruited a total of 261 college students as the sample of this study. The result indicated positive states were more frequent than negative and neutral states and students with lower GPAs expressed negative states more often. A path analysis suggested that academic performance may determine college students' Facebook use, rather than the reverse. Implications for student support services are discussed.

Tariq et al., (2012) focused on the impact of social media on the education of Pakistanni students as well as the impact on their lives. The research concluded that the use of social media by teenagers and children could ruin their lives as well as have a bad impact on their education. SM diverts the attention and concentration of students towards activities which are not educational and time wasting such as chating on non-educational topics.

Khan U (2009) reported social media users often time experience poor performance academically. Similarly, Englander, Terregrossa & Wang (2010) stated the relationship between the grade performance of 128 students in an introductory micro-economics course and the average number of hours per week these students report spending on the Internet. The study finds a negative and statistically significant impact of Internet hours on grade performance, suggesting that the distractive dimensions of Internet use outweigh the productive dimensions.

Nalwa and Anand (2003) recommended that addicted users prefer using internet setting back their personal and professional responsibilities which ultimately leads to poor academic performance.

In the same Vein et al., (2009) pointed out that social media users devoted lesser time to their studies in comparison to nonusers did and subsequently had lower GPAs. Camilia et al., (2013) looked into the role of SM in Nigerion students' studies by distributing a survey. The study found that the frequent use of SM by students had no effect on their studies.

The findings of empirical studies SMU in learning are quilt different. As is well-known, social media is best way to meaningful the learning process in this social network era. However, students with limited SRL strategies would not learn much from media environment. For example the learners who with limited SRL strategies will easy tend to addicted to play games, watching movies, shopping online and so on easily. Individuals' self-regulation capability integrated with supportive tools is important in learning.

All in all, it would be expected that learners with high degree of SMU possess high academic achievement. Based on such studies, the following hypothesis is suggested. As displayed in Figure 2.20.

H4b: SMU significant influence in Arabic learners' academic achievement (GPA).
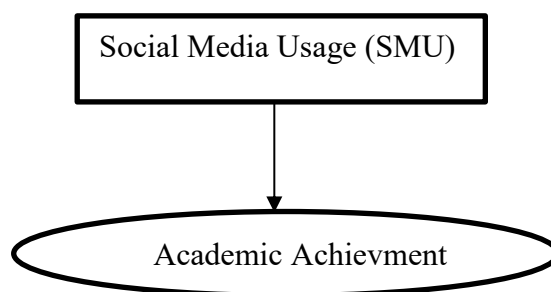
Figure 2.20. Subordinate model 4b: The influence of SMU on Academic Achievement

2.7.3 Previous Studies Related to Motivation

Mahmoodi et al., (2014) investigated the self-regulatory strategies that are most frequently used by Iranian EFL learners in Learning English, the relationship between motivation and SRL, and the relationship between SRL and L2 achievement. 130 EFL learners studying at two language institutes were selected. A questionnaire including 46 items assessing self-regulated learning and motivation was administered. The finding indicated that significant relationship was found between motivation and SRL.

As Winne and Hadwin (2008) identified motivation is involved in self-regulated learning in three ways: First, learner's motivation knowledge and beliefs influence the types of goals that are set, the strategies that are chosen, and one's persistence in a given task. Second, engagement in SRL produces new motivational knowledge and beliefs that influence engagement in current and future tasks. Third, students self-regulate their motivational states during learning.

In summary, it is certain that there are significant relationship between SRL and motivation, it can be known as self-regulation and motivation work hand in hand to clarify learners' learning and success in the classroom. Once learners' are motivated to learn, they are more likely to devote the necessary time and energy needed to learn and apply appropriate SRL skills, and if students are motivated to learn, they spend more time to learn and use more SLR strategies (Zimmerman, 2000). This statement was supported by lots of studies:

Pintrich et al., (1994) that motivation and self-regulated learning bear a complex reciprocal relation to each other. Hence, it can be concluded that the extent to which

EFL learners self- regulate their own learning is said to be determined by why they are learning and what sources of motivation are available in the context of learning English.

Kitsantas et al., (2009) presented the influence of homework experiences on students' academic grades was studied with 223 college students. The result showed that the students' homework influenced their achievement indirectly and directly via these two self-regulatory beliefs. There are significant relationships between self-regulation and motivation variables. Self-efficacy for learning, although moderately correlated with perceptions of responsibility, predicted course grades more strongly than the latter variable and there is no gender differences were found for any of the variables.

Ocak and Yamac (2013) aimed to examine predictor and explanatory relationships between fifth graders' SRLS, motivational beliefs, attitudes towards mathematics, and academic achievement. The study was conducted 204 students studying in the primary schools of Afyonkarahisar province as sample. Motivated Strategies for Learning Questionnaire (MSLQ) were used as data collection tools. The finding reported that task value, self-efficacy and intrinsic goal orientation can predicted SRLS.

Ning and Downing (2012) examined the mediator and moderator roles of self-regulation and motivation constructs in the relationship between learning experience and academic success. 384 undergraduate students from a university in Hong Kong were conducted this study. The findings of the study showed self-regulation and motivation have minor regulating effects on the relationship between academic performance and learning experiences and the association between learning experience

and cumulative GPA was stronger for students with lower levels of self-regulation and motivation.

Clark (2012) stated that SRL is predictive of students demonstrating improved motivation and academic outcomes. Likewise, Carolina et al., (2014) determined that self-regulated learning and motivation had positive effects on academic achievement.

Abdolvahab (2012) investigated about Language Learning Motivation, Self-Regulated Learning, and Foreign Language Learning among Iranian Learners. The data were analyzed using descriptive statistics and inferential statistics including Structural Equation Modeling (SEM) and stepwise regression analysis. The results revealed that Language Learning motivation directly and positively predicted students' language learning. The results also showed that SRL directly and positively predicted students' language learning and among the components of SRL, organizing and questioning and rehearsal were best predictors of students' language learning. Moreover the results demonstrated that Language Learning motivation predicted SRL directly and positively and among the factors of Language Learning motivation.

However, Cetin (2015) to determine whether academic motivation and academic self-regulated learning predicted students' GPAs in the Early Childhood Education Department. The study participants consisted of 166 early childhood education majors enrolled in the 2014 spring semester at Georgia Southern University, USA. Data were gathered using the "academic motivation scale" and the "academic self-regulated learning scale". The study's results showed that there was no correlation between GPA and academic motivation and academic self-regulation learning. In other words, the students' academic motivation and academic self-regulated learning total scores, together, did not predict their GPA.

In conclute, it would be expected that learners with high level of motivation possess high academic achievement. Based on such studies, the following hypothesis is suggested. As displayed in Figure 2.21.

H4c: Motivation significant influence in Arabic learners' academic achievement (GPA).

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┌─────────────────────┐
│     Motivation      │
└─────────────────────┘
           │
           ▼
   ╭───────────────────────╮
  (   Academic Achievment   )
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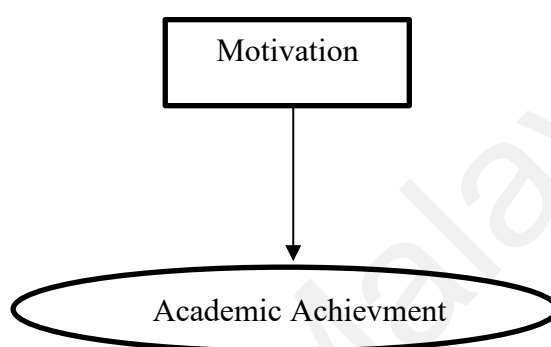
Figure 2.21. Subordinate model 4c: The influence of Motivation on Achievement

2.7.4   Previous Studies Related to Relationships between SRLS, Motivation and SMU

The following section will discuss the relationships between SRLs, motivation and social media usage. As mentioned in theoretical framework, SRLs, SMU and motivation, three variables are based on social cognitive theory in Bandura's triadic reciprocal causations. Zimmerman (1989) described self-regulated students as being metacognitively, motivationally, and behaviorally active in their own learning processes and in achieving their own goals. Zimmerman posited reciprocally related personal, environmental, and behavioral determinants of self-regulated learning that allow individuals to control the extent to which they are self-regulated through personal and behavioral actions and choices. In addition, Zimmerman acknowledged that context is important in that some environments do not allow much latitude in

choice of activities or approaches, making self-regulation more difficult. Hence, the previous studies supported the interactions between SMU, SRLs and Motivation.

2.7.4.1 Previous Studies Related to Relationship Between SMU and SRLs

Learning in the context of social media has become highly self-motivated, autonomous, and informal, as well as an integral part of the college experience (McGloughlin and Lee, 2010; Smith et al., 2009). More recently researchers have examined how social media can support or promote student self-regulated learning (Kitsantas and Dabbagh, 2011; Dabbagh and Kitsantas, 2012; Nicol, 2009). As recommended by Budiharjo (2017) concluded that the intersection of self-regulated learning and social media in education offers a grand challenge with a great impact on various stakeholders like student, teacher, policy maker and government policies.

The empirical studies proved that there are no doubt about that social media provide lots of benefits for students learning, yet under a variety of social media learning, the effects of social media integration strongly depend on the way students use them (Junco 2012; Junco et al., 2013; Ahn, 2011; Mazer et al., 2009) students need skill in controlling learning through multiple information and technology. Thus, Students with limited SRL skills would not learn much from media environment. Therefore, individuals' self-regulation capability integrated with supportive tools is important in learning under social media.

Social media exist as a "natural alliance" with self-regulated learning in the educational affair (Matzat and Vrieling, 2016). Under social media context allowing learners to manage and maintain a learning space that facilitates their own learning

activities and connections to peers and social networks across time and place (McGloughlin and Lee, 2010; Valjataga et al., 2011). Thus, a lot of self-regulated learning room with network coverage has been established in universities due to encourage college students self-regulated their learning under social media context.

Dabbagh and Kitsantas (2012) stated that social media have the potential to support the promotion of informal learning and SRL. They claim that teachers increasingly use social media, at least in higher education, to offer spaces for informal learning and SRL.

Concurrently, the researchers Haron et al., (2010) believe that the awareness contributed from the different media on different aspects of speaking skill, the extent of application of what gained from the media and the frequency of using them have influenced the results of the development of their Arabic language speaking skills.

By common of empirical research (McLoughlin and Lee, 2010; Matzat and Vrieling, 2016) SMU can result in beneficial educational outcomes if it is utilized to facilitate students' Self-regulated learning. Thus, the researcher assumed that there will be a positive relationship between SMU and SRLs in Arabic learning context. As displayed in Figure 2.22.

H3a: Self-regulated learning strategies (SRLs) siginificant positively correlated to Social media usage (SMU).
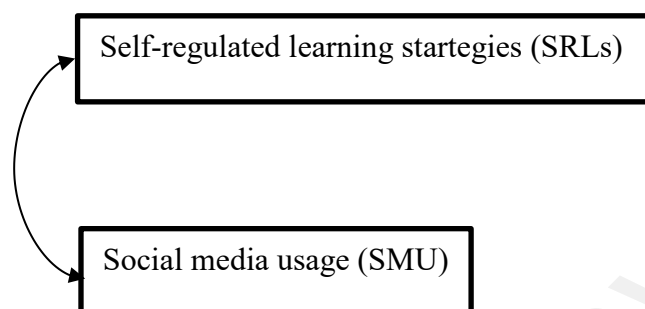
Figure 2.22. Subordinate model 3a: The relation of Self-regulated learning strategies (SRLs) and Social media usage (SMU)

2.7.4.2   Relationships of SRLs and Motivation

Self-regulated learning is controlled by an interconnected framework of factors that determine its development and sustainability (Pintrich, 2000; Zimmerman, 2008) and motivation is a critical factor in this framework (Ommundsen et al., 2005; Wang and Holcombe, 2010). Bandura (1997) indicated that self-regulation learning capabilities have been linked to motivation and achievement in school settings. According to Abdulvahab (2012) personal and environmental factors of language learning, SRL and motivation are important for having autonomous learners in language learning due to they are powerful driving forces which help learners begin and persist in language learning. Motivational control and the process of regulation lead to positive conditioned results on academic performance (Schunk, 2005). Self-regulation learning is related to motivation (Schunk and Ertmer, 2010; Pintrich, 2010; Zimmerman, 2010; Zimmerman and Schunk, 2004). Self-regulation increases learning and maintains motivation (Schunk and Ertmer, 2010). Motivation

predicts self-regulation (Schunk, 2008). School belonging, affective response, affective motivation, cognitive resources, and self-regulation are associated with academic achievement (Anderman and Freeman, 2004). Besides, discussions of self-efficacy and self-regulation emphasized the reciprocal roles of goal setting, self-evaluation, and self-efficacy (Zimmerman and Schunk, 2004).

Mahmoodi et al., (2014) investigated the self-regulatory strategies that are most frequently used by Iranian EFL learners in Learning English, the relationship between motivation and SRL, and the relationship between SRL and L2 achievement. 130 EFL learners studying at two language institutes were selected. A questionnaire including 46 items assessing self-regulated learning and motivation was administered. The finding indicated that significant relationship was found between motivation and SRL.

As Winne and Hadwin (2008) identified motivation is involved in self-regulated learning in three ways: First, learner's motivation knowledge and beliefs influence the types of goals that are set, the strategies that are chosen, and one's persistence in a given task. Second, engagement in SRL produces new motivational knowledge and beliefs that influence engagement in current and future tasks. Third, students self-regulate their motivational states during learning.

In summary, it is certain that there are significant relationship between SRL and motivation, it can be known as self-regulation and motivation work hand in hand to clarify learners' learning and success in the classroom. Once learners' are motivated to learn, they are more likely to devote the necessary time and energy needed to learn and apply appropriate SRL skills, and if students are motivated to learn, they spend

more time to learn and use more SLR strategies (Zimmerman, 2000). This statement was supported by lots of studies:

Pintrich et al., (1994) that motivation and self-regulated learning bear a complex reciprocal relation to each other. Hence, it can be concluded that the extent to which EFL learners self- regulate their own learning is said to be determined by why they are learning and what sources of motivation are available in the context of learning English.

Kitsantas et al., (2009) presented the influence of homework experiences on students' academic grades was studied with 223 college students. The result showed that the students' homework influenced their achievement indirectly and directly via these two self-regulatory beliefs. There are significant relationships between self-regulation and motivation variables. Self-efficacy for learning, although moderately correlated with perceptions of responsibility, predicted course grades more strongly than the latter variable and there is no gender differences were found for any of the variables.

Ocak and Yamac (2013) aimed to examine predictor and explanatory relationships between fifth graders' SRLs, motivational beliefs, attitudes towards mathematics, and academic achievement. The study was conducted 204 students studying in the primary schools of Afyonkarahisar province as sample. Motivated Strategies for Learning Questionnaire (MSLQ) were used as data collection tools. The finding reported that task value, self-efficacy and intrinsic goal orientation can predicted SRLs.

Ning and Downing (2012) examined the mediator and moderator roles of self-regulation and motivation constructs in the relationship between learning experience

and academic success. 384 undergraduate students from a university in Hong Kong were conducted this study. The findings of the study showed self-regulation and motivation have minor regulating effects on the relationship between academic performance and learning experiences and the association between learning experience and cumulative GPA was stronger for students with lower levels of self-regulation and motivation.

Clark (2012) stated that SRL is predictive of students demonstrating improved motivation and academic outcomes. Likewise, Carolina et al., (2014) determined that self-regulated learning and motivation had positive effects on academic achievement.

Abdolvahab (2012) investigated about Language Learning Motivation, Self-Regulated Learning, and Foreign Language Learning among Iranian Learners. The data were analyzed using descriptive statistics and inferential statistics including Structural Equation Modeling (SEM) and stepwise regression analysis. The results revealed that Language Learning motivation directly and positively predicted students' language learning. The results also showed that SRL directly and positively predicted students' language learning and among the components of SRL, organizing and questioning and rehearsal were best predictors of students' language learning. Moreover the results demonstrated that Language Learning motivation predicted SRL directly and positively and among the factors of Language Learning motivation.

However, Cetin (2015) to determine whether academic motivation and academic self-regulated learning predicted students' GPAs in the Early Childhood Education Department. The study participants consisted of 166 early childhood education majors enrolled in the 2014 spring semester at Georgia Southern University, USA. Data were gathered using the "academic motivation scale" and the "academic self-regulated

learning scale". The study's results showed that there was no correlation between GPA and academic motivation and academic self-regulation learning. In other words, the students' academic motivation and academic self-regulated learning total scores, together, did not predict their GPA.

Despite all this, the researcher assumed that there will be a positive relationship between SRLs and Motivation in Arabic learning context. As displayed in Figure 2.23.

H3b: Self-regulated learning strategies (SRLs) siginificant positively correlated to Motivation.
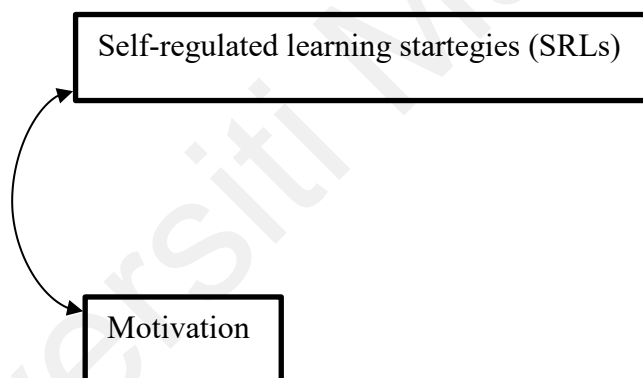
Figure 2.23. Subordinate model 3b: The relation of Self-regulated learning strategies (SRLs) and Motivation

2.7.4.3   Relationship of Social Media Usage and Motivation

"SNSs have the capacity to radically change the educational system… and to better motivate students as engaged learners" (Ziegler, 2007)

According to Ball-Rokeach (2008) Media system dependency theory (MSD) as displayed in Figure 2.24, social, media and audience are in interdependence

relation. And cognitive, affective and behavioral directly influence in society and media, society and media indirectly influence in cognitive, affective and behavioral. Thus, the researchers assumed social media usage indirect effect on motivation, and motivation direct effect on social media usage.
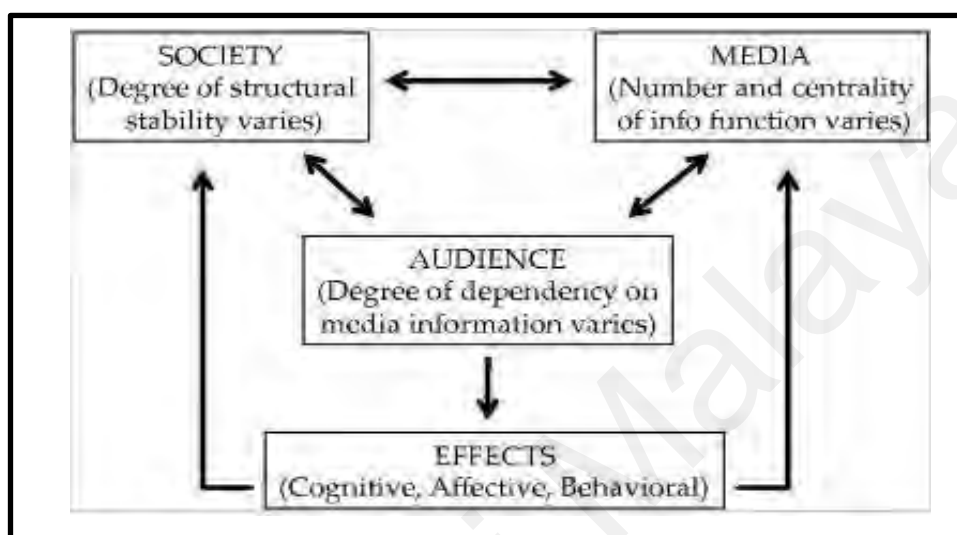
Figure 2.24. Media system dependency theory (MSD) (Ball-Rokeach, 2008)

As we mentioned before, social networks allow their enthusiastic users, all familiar with the fast growing world of technology and internet, to freely and quickly share, with their family, friends and colleagues, the most significant moments of their lives, in addition to their ideas, opinions and beliefs. Due to their interactive and multidimensional characteristic, can absolutely improve motivation. Actually, there are many studies report that SMU increased motivation for learning.

Akbari, Naderi, Simons & Pilot (2016) found students in Facebook group showed higher outcomes in the TOEFL post-test than the face to face (FTF) group. The Facebook group report significantly higher levels of engagement and motivation after the course than the face to face group. (Bugeja, 2006) suggested that informal

activities in SNSs may allow the opportunity to re-engage learners with formal education and learning promoting in learners critical thinking about their learning process. Malerba (2015) reported in study, virtual communities and platforms reproducing the social qualities of SNSs there is some potential for students to learn from informal communication and interactions.

Zhe et al., (2015) investigated about students' social media platform interactive learning motivation. After analysis 286 valid questionnaires, the result shown that there are significant positive influence between social media and each of informational motivation, instrument motivation, the entertaining motivation and social identity.

Alhaj and Banafi (2015) study about the impact of social networks on EFL medical students' academic performance at Jazan university. The participants of the study are 60 EFL medical students of the second semester from Jazan University in Saudi Arabia in this academic year 2015. All participants are Saudi and their native language is Arabic. Their average age is 20. And the researchers of this study use three instrumental tools for this study: (a) survey (b) experiments (c) Observation. The finding of the results indicate that social media have a great influence on students' integrative and instrumental motivation.

Celik et al., (2014) explored academics' current practices and perceptions towards social media, and its potential use for education in higher education. A questionnaire was developed and administrated to faculty members (n=222). However, 135 questionnaires were analyzed as the other 87 had insufficient data for analysis. The result have found that social media play an important role to increase learners' motivation, enhancing individual learning environment with innovative ways of education that altering the nature of learning boundaries and it will automatic develop

students learning. Therefore, the researcher assumed that there will be a positive relationship between SMU and Motivation in Arabic learning context. As displayed in Figure 2.25.

H3c: Social Media Usage (SMU) siginificant positively correlated to Motivation.
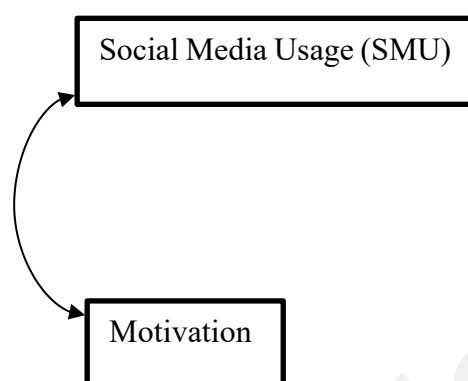
Figure 2.25. Subordinate model 3c: The relation of Social Media Usage (SMU) and Motivation

2.7.4.4 Previous Study about Gender and Study Years

As Oxford (2013) highlighted the influence of the following individual differences on language learning: (a) aptitude, seen as malleable through experience and instruction rather than a fully innate or static trait; (b) demographic factors of gender and age; (c) personal features of personality, self-esteem, self-concept, and self-efficacy; (d) culturally influenced concern for "face" (social impression) and self-construals of interdependence or independence; (e) affective variables, such as investment, motivation, emotions, and willingness to communicate; and (f) cognitive aspects, such as cognitive learning style, future time perspective, ability to manage cognitive load, and schema development.

The past studies (Panadero et al., 2017; Bidjerano, 2005; Ismail et al., 2017) has been reported, the learners may with different SRLs, motivation, and SMU due to Gender and Year of study different. In other words, gender and year of study are variables which predict learners' SRLs, motivation, and SMU.

Ismail et al., (2017) indicated Social Media Practices of Arabic Language among Malaysian Students and 386 students were randomly selected to distributed questionnaire. The finding showed that significant differences were observed among gender, marital status, and field of study variables, whereas no significant difference was identified among university, level of study.

Xuan, Ismail, Zailaini & Hussin (2014) identified Achievement Motivation Across Gender and Academic Level of Students in China. 229 Chinese students who are studying Arabic language in Islamic institutions in China were randomly selected to do questionnaire. The result of study showed Male and female students differed significantly on achievement motivation. Female is better than male in achievement motivation in areas of perseverance, self-confidence, Recognize the importance of time, the desire to master the work and enjoy it. It shows also that there is significant difference among educational level on achievement motivation. Level 4 students are much better than other level of students in achievement motivation in areas of perseverance, Competition, selfconfidence, the desire to master the work and enjoy it. This shows the development of the student's achievement motivation thorough studies.

Moreover, researches on study years and student behaviour provides insights for educators to identify aspects of the curriculum and learning environment that may be improved to generate more desirable student outcomes. Whilst past research has demonstrated the significance of learning experience on influencing students' adoption

of different approaches to learning (Richardson, 2006; Diseth, 2007; Diseth et al., 2010; Webster et al., 2009), few attempts have been made to examine its specific impact on the distinct components of motivation and self-regulation (Remedios & Lieberman, 2008) or the relative importance of these constructs as predictors of academic performance. Hence, the main objective of the current study is to address these gaps in the existing literature.

As studied by Bidjerano (2005), explored the extent to which the self-regulated learning strategies of metacognition, elaboration, critical thinking, organization, rehearsal, time and effort management, help seeking and peer learning vary with gender. The Motivated Strategies for Learning Questionnaire (MSLQ) was administered to 198 undergraduate students at a large university in Northeastern U.S. The obtained data were analyzed through multivariate analysis of variance. The finding indicated female students tended to over-report the use of rehearsal, organization, metacognition, time management skills, elaboration, and effort. No statistically significant gender differences were found with respect to studying with peers, help seeking, and critical thinking skills.

In addition, Rozendaal, Minnaert & Boekaerts (2003) conducted a mixed methodology was employed to determine if gender differences in these factors exist among Grade 9 FSL students. Approximately 500 students in Grade 9 completed a questionnaire. The significant findings of the questionnaires were then explored in interviews with students and teachers.

Therefore, the researcher assumed that there will be a significant defference in SRLs, SMU and Motivation between male and female in Arabic learning context. As displayed in Figure 2.26.

H1a: SRLs are significant defference in Gender

H1b: SMU are significant defference in Gender

H1c: Motivation are significant defference in Gender

H2a: SRLs are significant defference in study years

H2b: SMU are significant defference in study years

H2c: Motivation are significant defference in study years
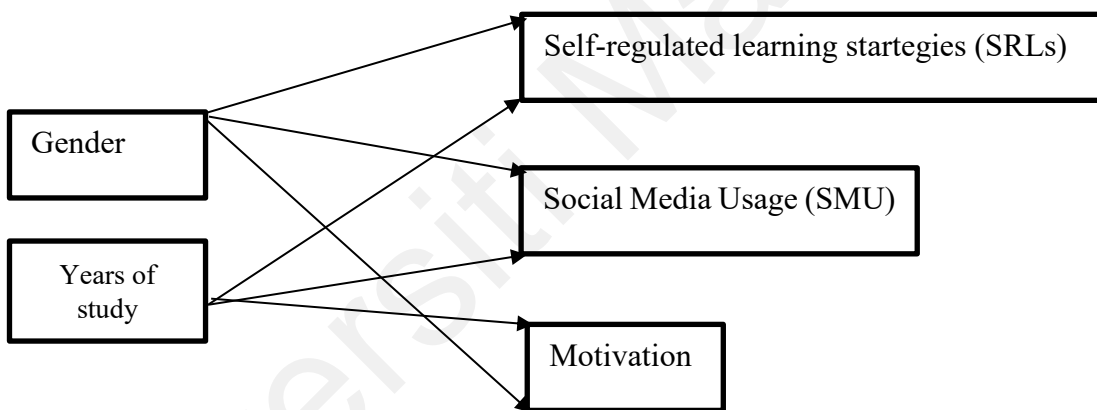
Figure 2.26. Subordinate model 1-2: The difference of SRLs, SMU and motivation between gender and study year

2.7.4.5   Previous Study about Mediator Effects of SRLs, Motivation and SMU

As James and Brett (1984) stated a particular variable may function both as a mediator and as a moderator in the same model. In the mediator scenario one can differentiate between a full and a partial mediation model (James & Brett, 1984).

Partial mediation occurs when the effect from the independent variable to the dependent variable is reduced in absolute size (but still differ significantly from zero) in the presence of mediator variable(s). Full mediation occurs when the independent variable no longer affects the dependent variable in the presence of mediator variable(s). Since the full mediation model is the most parsimonious, it is generally taken as the theoretical baseline model against which to evaluate the fit of target models (James et al., 2006).

Previous research (Ning & Downing, 2012) examined Self-regulation and motivation as moderators of learning experience on academic performance. The participants were 384 final-year undergraduate students (161 males, 223 females) from a university in Hong Kong, with an age range from 22 to 24 years. Questionnaires were conducted with the participants. The findings confirmed the postulation regarding the mediator roles of self-regulation and motivation in the relationship between learning experience and academic performance.

In the context of this study, we hypothesise that the correlation between SRLs, Social media usage and Motivation are effect via the mediation of any one of variables (SRLs, Social media usage and motivation) (Mathieu & Taylor, 2006; Wood et al., 2008). The following hypothesis is suggested. As displayed in Figure 2.26.

H$_{5a:}$ Motivation is a significant mediator on the relationship between Self-regulated learning strategies (SRLs) and Social media usage (SMU) in Malaysian Public Universities.

H$_{5b}$: Social media usage (SMU) is a significant mediator on the relationship between Self-regulated learning strategies (SRLs) and motivation in Malaysian Public Universities.

H$_{5c}$: Self-regulated learning strategies (SRLs) are a significant mediator on the relationship between motivation and Social media usage (SMU) in Malaysian Public Universities.
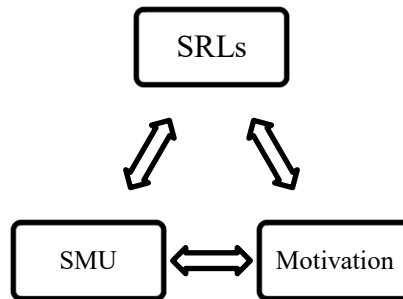
Figure 2.27. Subordinate model 5: The Mediator effect of SRLs, SMU and Motivation

2.8   Summary

In sum up, chapter two has reviewed some of the related literature about the study's variables. The chapter clearly reviewed the related theory and models for this study, which were the social cognitive theory. Hence, this chapter showed the conceptual work of this study. This chapter has also focused on the background of Arabic language learning system in Malaysia and the main outlines related to this study—for example, the basis of SRLs, SMU and motivation in details. As summarized the papers review in Table 2.2.

Table 2.2

Summarized the papers review

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
1	Validation of the self-regulated online learning questionnaire	Jansen et al.	2017	Journal of Computing in Higher Education	Quantitative	SPSS and SEM	162	
2	An achievement goal theory perspective on issues in motivation terminology, theory, and research.	Pintrich, P. R.	2000	Contemporary educational psychology, 25(1), 92-104.	Quantitative			
3	The ECAR study of undergraduate students and information technology, 2009 (Research Study, Vol. 6).	Smith, S., Salaway, G., & Borreson Caruso, J.	2009	Boulder, CO: EDUCAUSE Center for Applied Research.				
4	Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning.	Dabbagh, N., & Kitsantas, A.	2012	The Internet and higher education, 15(1), 3-8.	Qualitative			
5	The Cambridge introduction to postmodern fiction.	Nicol, B.	2009	Cambridge University Press.				

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
6	The relationship between job satisfaction, affective commitment, organizational learning climate and corporate performance.	Budihardjo, A.	2017	GSTF Journal on Business Review (GBR), 2(4).	Quantitative	SPSS	100	
7	Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance.	Junco, R.	2012	Computers in human behavior, 28(1), 187-198.			1839	
8	Putting twitter to the test: Assessing outcomes for student collaboration, engagement and success.	Junco, R., Elavsky, C. M., & Heiberger, G.	2013	British Journal of Educational Technology, 44(2), 273-287.				
9	Considering students' perspectives on personal and distributed learning environments in course design.	Väljataga, T., Pata, K., & Tammets, K.	2011	In Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching (pp. 85-108). IGI Global.				

Table 2.2 (*Continuted*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
10	A diary study focusing on listening and speaking: The evolving interaction of learning styles and learning strategies in a motivated, advanced ESL learner.	Ma, R., & Oxford, R. L.	2014	System, 43, 101-113.	personal diary			US
11	The Impact of Social Networks on EFL Medical Students' Academic Performance at Jazan University..	Alhaj, A. A., & Banafi, N. H.	2015	The Future of Education (p. 161).	Quantitative	Survey questionnaire	150	Saudi Arabia
12	Self-Regulated Learning Strategies (SRLS) and academic achievement in pre-university EFL learners.	Sardareh, S. A., Saad, M. R. M., & Boroomand, R.	2012	California Linguistic Notes, 37(1), 1-35.	Quantitative	Survey questionnaire	80	Iran
13	The weave of motivation and self-regulated learning.	Winne, P. H., & Hadwin, A. F.	2008	Motivation and self-regulated learning: Theory, research, and applications				

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
14	Examination of the relationships between fifth graders' self-regulated learning strategies, motivational beliefs, attitudes, and achievement.	Ocak, G., & Yamac, A.	2013	Educational Sciences: Theory and Practice	Quantitative	Questionnaire	204	Turkey
15	E-Learning and Social Media Motivation Factor Model.	Rosli, M. S., Saleh, N. S., Aris, B., Ahmad, M. H., Sejzi, A. A., & Shamsudin, N. A.	2016	International Education Studies, 9(1), 20-30.	Quantitative	SEM	70	Malaysia
16	Motivating self-regulated problem solvers	Zimmerman & Campillo	2003	The psychology of problem solving	Qualitative			
17	The Relation of Motivational Beliefs and Self-Regulatory Processes to Homework Completion and Academic Achievement.	Bembenutty & Zimmerman	2003	ERIC	Quantitative	path analysis		
18	Gender Differences in Self-Regulated Learning. Online Submission.	Bidjerano	2005	Online Submission	Quantitative	questionnaire, multivariate analysis	198	US

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
19	Motivation and self-regulated learning in secondary vocational education: Information-processing type and gender differences.	Rozendaal, J. S., Minnaert, A. E. M. G., & Boekaerts, M	2003	Learning and Individual Differences, 13(4), 273-289.	Mixed methodology	Interview	500	Canada
20	Construct validation of a strategy model of student self-regulated learning	Zimmerman, B. J., & Martinez-Pons, M.	1988	Journal of educational psychology	Quantitative	Factor analysis	44 male and 36 female high school students	
21	A sociocultural perspective on assessment for learning: The case of a Malaysian primary school ESL context.	Sardareh, S. A., & Saad, M. R. M.	2012	Procedia-Social and Behavioral Sciences, 66, 343-353.	Case study			
22	Self-regulated learning in high-achieving students: Relations to advanced reasoning, achievement goals, and gender	Ablard, K. E., & Lipschultz, R. E	1998	Journal of Educational Psychology	Quantitative		222	
23	Self-regulated learning (SRL), motivation and language achievement of Iranian EFL learners.	Mahmoodi, M. H., Kalantari, B., & Ghaslani, R.	2014	Procedia-Social and Behavioral Sciences, 98, 1062-1068.	quantitative		130 EFL learners studying	

131

Table 2.2 (*Continuted*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
24	The use of self-regulation strategies by foreign language learners and its role in language achievement.	Seker, M.	2016	Language Teaching Research, 20(5), 600-618.	Quantitative analyses	Interviews, questionnaire	teachers (n = 51), 222 undergradu ate	
25	A model for self-regulated distance language learning.	Andrade, M. S., & Bunker, E. L.	2009	Distance Education, 30(1), 47-61.				
26	The state of social media in Saudi Arabia's higher education.	Al-Khalifa & Garcia	2013	International Journal of Technology and Educational Marketing				
27	Identity in online communities: Social networking sites and language learning.	Harrison, R., & Thomas, M.	2009	International Journal of Emerging Technologies and Society, 7(2), 109-124.	Qualitative	observations, ethnographic approach		
28	Going mobile: Language learning with an iPod touch in intermediate French and German classes.	Ducate, L., & Lomicka, L.	2013	Foreign Language Annals, 46(3), 445-468.	Quantitative	Survey questionnaire	39	

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
29	Web 2 technologies for Net Native language learners: a "social CALL".	Kárpáti, A.	2009	ReCALL, 21(2), 139-156	Qualitative		Critical review	
30	Students' attitudes towards the use of social networks for learning the English language.	Akbari, E., Eghtesad, S., & Simons, R. J.	2012	Retrieved on.	Qualitative	questionnaires	Twenty Iranian PhD students	
31	Understanding Arabic-Speaking Skill Learning Strategies among Selected Malay Learners: A Case-Study at the International Islamic University Malaysia (IIUM).	Haron, S. C., Ahmad, I. S., Mamat, A., & Mohamed, I. H. A.	2010	Contemporary Issues in Education Research, 3(8), 9-20.	Quantitative	questionnaires		
32	The impact of social media use on academic performance among university students: A pilot study.	Al-Rahmi, W., & Othman, M.	2013	Journal of information systems research and innovation, 4(12), 1-10.	Quantitative	Pilot study	80 Undergraduate and postgraduate students	
33	Can you guess who I am? Real, ideal, and false self-presentation on Facebook among emerging adults.	Michikyan, M., Dennis, J., & Subrahmanyam, K	2015	Emerging Adulthood, 3(1), 55-64.	Quantitative	Questionnaires	261 college students	

Table 2.2 (*Continuted*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
34	The impact of social media and social networks on education and students of Pakistan.	Tariq, W., Mehboob, M., Khan, M. A., & Ullah, F.	2012	International Journal of Computer Science Issues (IJCSI), 9(4), 407.	Quantitative	Questionnaires		
35	Internet use among college students: tool or toy?	Englander, F., Terregrossa, R. A., & Wang, Z.	2010	Educational Review, 62(1), 85-96.	Quantitative	Questionnaires/ Coefficient, F-statistics	128 students	
36	The effect of social networking sites usage on the studies of Nigerian students.	Camilia, O. N., Ibrahim, S. D., & Dalhatu, B. L.	2013	The International Journal of Engineering and Science, 2(7), 39-46.	Quantitative	Questionnaire	536	Nigeria
37	Self-regulated learning (SRL), motivation and language achievement of Iranian EFL learners.	Mahmoodi, M. H., Kalantari, B., & Ghaslani, R.	2014	Procedia-Social and Behavioral Sciences, 98, 1062-1068.	Quantitative	Questionnaire	130	Iranian
38	Motivation and self-regulated learning: Theory, research, and applications.	Winne, P. H., Hadwin, A., Schunk, D., & Zimmerman, B.	2008	Erlbaum Mahwah, NJ	Qualitative			

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
39	College students' homework and academic achievement: The mediating role of self-regulatory beliefs.	Kitsantas, A., & Zimmerman, B. J.	2009	Metacognition and Learning, 4(2), 97-110.	Quantitative	Questionnaire	223 college students	
40	Examination of the relationships between fifth graders' self-regulated learning strategies, motivational beliefs, attitudes, and achievement.	Ocak, G., & Yamac, A.	2013	Educational Sciences: Theory and Practice, 13(1), 380-387.	Quantitative	Questionnaire (MSLQ)	204 students	Turkey
41	Influence of student learning experience on academic performance: The mediator and moderator effects of self-regulation and motivation.	Ning, H. K., & Downing, K.	2012	British Educational Research Journal, 38(2), 219-237.	Quantitative	Questionnaire	384 undergraduate students	Hong Kong
42	The use of social networking sites for foreign language learning: An auto ethnographic study of Live mocha.	Clark, C., & Gruba, P.	2010	In Proceedings of ASCILITE-Australian Society for Computers in Learning in Tertiary Education Annual Conference	An auto ethnographic study	thematic analysis'		Korean

Table 2.2 (*Continued*)

	Title	Author	Year	Journal	Design	Methods/ Analysis	Sample size	Country
43	Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software.	McLoughlin, C., & Lee, M. J.	2010	Australasian Journal of Educational Technology, 26(1).	Qualitative			
44	Academic Motivation and Self-Regulated Learning in Predicting Academic Achievement in College.	Cetin, B.	2015	Journal of International Education Research, 11(2), 95-106.	Quantitative	Questionnaire	166 early childhood education	USA
45	Self-regulated learning and social media–a 'natural alliance'? Evidence on students' self-regulation of learning, social media use, and student–teacher relationship.	Matzat, U., & Vrieling, E. M.	2016	Learning, Media and Technology, 41(1), 73-99.	Quantitative	Questionnaire	459 secondary school teachers	Netherlands
46	Research on University Students Social Media Platform Interactive Learning Motivation: Taking Application-oriented Courses of Microblog Platform for Example.	Zhouxiu, F. Y. X. W.	2015	Information and Documentation Services, 36(2), 101-105.	Quantitative	Questionnaire Interview	286	China

CHAPTER 3

METHODOLOGY

3.1   Introduction

This chapter describes and discusses the methodology related to the study. This includes the research design of the study, description of the population and sampling procedures, the development of the research instruments, pilot study, data collection procedures and data analysis according to the research questions.

3.2   Research design

Quantitative survey was applied by this study. Definition quantitative research (From Wikipedia, the free encyclopedia): Quantitative research is "a formal, objective, and systematic process in which numerical data are utilized to obtain information about the world" (Burns & Grove, as cited by Cormack, 1991). It is the systematic scientific investigation of quantitative properties and phenomena and their relationships. Therefore, objectivity, generalizability, and numbers are features often associated with quantitative research. When an approach is selected to investigate a problem, it should be the most suitable approach available. However, it is also reasonable to expect that it reflects the bias of the researcher. The objective of quantitative research is to develop and employ mathematical models, theories and hypotheses pertaining to natural phenomena. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical

expression of quantitative relationships. The term quantitative research is most often used in the social sciences in contrast to qualitative research.

Qualitative research is one of the two major approaches to research methodology in social sciences. Qualitative methodologies favor the view that the world is holistic and that there is not a single reality. They support the view that reality, which is based on perceptions, is different for each person, changes over time, and derives meaning primarily from context. Handbook of Qualitative Research (Denzin Lincoln 1994).

Qualitative research is multi method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional and visual texts – that describe routine and problematic moments and meanings in individuals lives. Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter.

Unlike quantitative research, qualitative research relies on reasons behind various aspects of behaviour. Simply put, it investigates the why and how of decision making, as compared to what, where, and when of quantitative research. Hence, the need is for smaller but focused samples rather than large random samples. From which, qualitative research categorizes data into patterns as the primary basis for organizing and reporting results. One way of differentiating qualitative research from quantitative research is that largely qualitative research is exploratory, while quantitative research

is conclusive. Quantitative data are measurable while qualitative data cannot be graphed or displayed as a mathematical term.

To solve the research problems,

To what extent Arabic learners' Self-regulated learning strategies, motivation, and Social media usage on Arabic learning in Malaysian Public Universities?

Is there any significant difference between gender and year of study among Self-regulated learning strategies, motivation, and Social media usage in Malaysian Public Universities?

Is there a significant correlation between Self-regulated learning strategies, motivation, and Social media usage among Arabic learners in Malaysian Public Universities?

To what extent Self-regulated learning strategies, motivation, and Social media usage influence academic achievement on Arabic learning in Malaysian Public Universities?

Is there any mediating effect of Arabic learners' motivation on the relationship between Self-regulated learning strategies and Social media usage in Malaysian Public Universities?

Is there any mediating effect of Arabic learners' Social media usage on the relationship between self-regulated learning strategies and motivation in Malaysian Public Universities?

Is there any mediating effect of Arabic learners' Self-regulated learning strategies on the relationship between motivation and Social media usage in Malaysian Public Universities?

The researcher decided quantitative survey questionnaire design is measured this study for several reasons as shown Table 3.1.

Table 3.1

Comparison between Quantitative and Qualitative

Quantitative	Qualitative	This study
Quantitative research is conclusive by numeral analysis	Largely qualitative research is exploratory	To answer the research questions, this study should conclusive by numeral analysis
Large random samples	Smaller but focused samples	This study got quilt large random samples which consist of Malay non-native Arabic speakers.
Quantitative studies emphasis the measurement and analysis of causal relationships between variables.	Qualitative research seek answers to questions that stress how social experience is created and meaning is given.	The result of this study should be measure and analysis of causal relationships among Self-regulated Learning , Social media usage and Motivation
Data are measurable	Data can not be graphed or displayed as a mathematical term.	Data are measurable and need display in a mathematical term
Surveys, Questionnaires, Measurement Scale and experimental study	Case study, personal experience, introspective, life story, interview, observational, historical, interactional and visual texts	Surveys, Questionnaires, Measurement Scale
Do surveys without direct contact with research objects	Direct contacts the sample, requires in-depth face-to-face field work	Collect data by handing out questionnaires or mailing out questionnaires

3.2.1 Variables of the Study

There are three types of variables in this study. The first is an independent variable. The independent variable is the variable that is manipulated by the researcher. The independent variable is something that is hypothesized to influence, to predict or explain a dependent variable. There are three independent variables in this study: (1) the learners' Gender; (2) the learners' level of study; (3) the general learners' SRLs; (4) the general learners' social media usage; and (5) the general learners' motivation. The researchers measure this variable from the dependent variable to identify those variables worthy of examination and study because they are expected to influence the outcomes.

The second type of variable is dependent variable, the values of dependent variables depend on the values of independent variables. It is represent the output or outcome whose variation is being studied. The dependent variable in this study are Arabic learners' academic achievement (GPA). Besides, moderating variable is the third type of variable in this study. The researcher defined it as a third variable that affects the strength of the relationship between a dependent and independent variable. The mediating variable in this study is (1) the general learners' self- regulated learning strategies; (2) the general learners' social media usage; and (3) the general learners' motivation.

3.3   Population and Sampling

A primary purpose of statistical inference is to develop estimates and test hypotheses about population parameters using information contained in a sample.

In this part, the Sampling of this study will be processed. Sampling actually is the act, process, or technique of selecting a suitable sample for this study, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. With proper sampling methods, the sample results can provide "good" estimates of the population characteristics.

There are six main reasons or advantages for sampling instead of doing a census or the population. They are economy, timeliness, the large size of many populations, inaccessibility of some of the population, destructiveness of the observation and accuracy. Obviously, the economy advantage which is cheaper to observe a part (the sample) rather than the whole population. In addition, the sample may provide the researcher with needed information quickly than the whole population. The size of population are quilt large and some of the population are not easy to access for the reason of busy in study, absence and so on. At last, accuracy and sampling a sample may be more accurate than the whole population. In other words, if the whole population are sloppily conducted that will provide less reliable information than a carefully obtained sample. As revealed by Fink (2003) "a good sample is a miniature version of the population – just like it, only smaller."

3.3.1 A target Population and Location

The population consists of a large number of people. In this study, the Malay bachelor (Year one, Year 2, Year 3 and Year 4) Arabic learners in Malaysia are populations. The Malaysian students of bachelor in Arabic language were chosen as the target population for several reasons. First, majority of the population of Arabic learners are Malaysian in Malaysia. Second, undergraduate Arabic language learners are the majority of formal Arabic language learner in Malaysia. Currently, around 10 more universities in Malaysia offered Arabic language course. The researcher selected Arabic learners in University of Malaya (UM), University Kebangsaan Malaysia (UKM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (UniSZA), Universiti Putra Malaysia (UPM) and Universiti Sains Islam Malaysia (USIM) as population of this study, because university of Malaya, University Kebangsaan Malaysia are first two universities established Arabic language department. Then, Universiti Sultan Zainal Abidin, Universiti Sains Islam Malaysia and International Islamic University Malaysia, the universities with the largest number of Arabic learners and the six universities are typical universities in Malaysia. The students there are come from different states of Malaysia, such as Kelantan, Kedah, Malacca, Terengganu and so on. In addition, there are majority population of Arabic learners in those universities in Malaysia. Therefore, the bachelor Arabic learners in those universities they are more able to represent the bachelor Arabic learners in Malaysian. The number of Arabic learners in Department Arabic language learning for each of university as shown in Table 3.2.

Table 3.2

Table for Number of Malayan Arabic language learners in UM, UKM, IIUM, UniSZA, UPM and USIM

Universities	Number of Malayan Arabic language learners
University Malaya (UM)	73
University Kebangsaan Malaysia (UKM)	226
International Islamic University Malaysia (IIUM)	672
Universiti Sultan Zainal Abidin (UniSZA)	Less than 400
Universiti Putra Malaysia (UPM)	93
Universiti Sains Islam Malaysia (USIM)	Around 300
Total number	Around 1744

3.3.2   A Sample Size

As referred to the Krejcie and Morgan's sample size table, based on the total number of population 1744 students and the minimum number of respondents needed for this study at 95% confidence level is 317 students. As shown in Appendix C Krejcie and Morgan's (1970) sample size table and Appendix D population numbers in universities. The preceding section has covered the most common problems associated with statistical studies. The desirability of a sampling procedure depends on both its vulnerability to error and its cost. However, economy and reliability are competing ends, because, to reduce error often requires an increased expenditure of resources. Of the two types of statistical errors, only sampling error can be controlled by exercising care in determining the method for choosing the sample. The previous section has shown that sampling error may be due to either bias or chance. The chance

component (sometimes called random error) exists no matter how carefully the selection procedures are implemented, and the only way to minimize chance sampling errors is to select a sufficiently large sample (sample size is discussed towards the end of this tutorial). Sampling bias on the other hand may be minimized by the wise choice of a sampling procedure.

3.3.3 Sampling Method

There are three primary kinds of samples: the convenience, the judgement sample, and the random sample. They differ in the manner in which the elementary units are chosen. The convenient sample which is results when the more convenient elementary units are chosen from a population for observation. Moreover, the judgement sample which is obtained according to the discretion of someone who is familiar with the relevant characteristics of the population. In this study, the researcher no need chose the sample for observation. Same like the judgement sample, this study does not specific any characteristic for the population, the universities Malay Arabic learner all got chance be selected. Therefore, the simple random sample which is a sample every element in the population has an equal chance of being selected could be the best way to selected samples in this study. It allows a known probability that each elementary unit will be chosen. For instance, the researcher will be randomly chose around 317 Arabic learners participates from each of the specified universities. Moreover, a simple random sample is free from sampling bias and easy for researcher to practice.

The procedure of selecting random samples are deviated into four, in the beginning, the researcher went to each of the specified university in person and randomly selected samples in Arabic language faculty, library or learning

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room/classroom and The lecture of the specified university assisted selected sample and distribute questionnaire to them. Then, the researcher asked for join some classes WhatsApp groups or ask the group manager sent the questionnaire in google form to the students. For some more samples, the researcher mailing the google from questionnaire to them.

3.4   Research Instrument

In order to investigate learners' SRLs, motivation, SMU and the relationship among them. There are 3 instruments were used in this study. The self-regulated online learning questionnaire (SOL-Q) (Jansen et al., 2017) was used to measure SRLs among Arabic learners in Malaysia. Pintrich et al., (1991) Motivated Strategies for Learning Questionnaire (MSLQ) was used to measure Arabic learners' motivation. And the items of SMUquestionnaire was adapted from data language technologies for lifelong learning (2008) to determine Arabic language learners' SMU level for formal and informal learning.

The questionnaire developed for this study was adapted to and adopted for collecting quantitative data (see Appendix E) for the English version and (Appendix F) for the Malay version). This questionnaire was divided into four main sections, which were personal information, learners' SRLs, learners' motivation and learners' social media usage. The first section were built from the researcher. The remaining parts of section two, section three and section four were developed, adapted and adopted from previous instruments and then developed by the researcher.

The first section, Section A, included the participants' demographic and personal information related to the study. This part of the questionnaire had three questions regarding the participants' demographic information, which are (1) learner's gender,

(2) learners' level of study (3) learner's academic achievement. Importantly, both the Teaching and Learning International Survey (TALIS, 2009) included gender and year of learning as a part of the demographic questions.

Section two is about to measure learners' SRLs, an instrument is needed. There are several questionnaires are available to measure SRLs. These include the Motivated Strategies for Learning Questionnaire (Pintrich et al., 1991) which the most widely cited one by SRL studies (Duncan and McKeachie 2005), MSLQ is a measure developed by Pintrich and his colleagues. The MSLQ is a self-report instrument used by students to rate themselves on various cognitive and motivational items. In addition, the MSLQ which includes a range of scales from the performance phase, but does not measure self-regulatory behaviour in the preparatory and appraisal phases. More than that, there are also the Metacognitive Awareness Inventory (MAI) Schraw and Dennison (1994), the Learning Strategies questionnaire (LS) Warr and Downing (2000) and the self-regulated online learning questionnaire (Jansen et al., 2017). After compared existing questionnaires, none of them exactly fit current study except the self-regulated online learning questionnaire (SOL-Q). Jansen et al., (2017) was developed the self-regulated online learning questionnaire (SOL-Q) with a deliberate process and has been validated in the context of MOOCs.

Jansen et al., (2017) developed self-regulated online learning questionnaire (SOL-Q) based on existing SRL questionnaires such as the Motivated Strategies for Learning Questionnaire (MSLQ), the Online Self-regulated Learning Questionnaire (OSLQ), the Metacognitive Awareness Inventory (MAI), and the Learning Strategies questionnaire (LS). After deleted the overlapping items and added the phrase ''in this online course'' to all items to define the focus of the questionnaire. The final questionnaire contained 53 items divided over eleven scales. These scales/ dimensions

are task definition, goal setting, strategic planning (preparatory phase), environmental structuring, time management, task strategies, help seeking, comprehension monitoring, motivation control, effort regulation (performance phase), and strategy regulation (appraisal phase). Yet, the result of Exploratory factor analysis (EFA) indicated a factor model different from the model theoretically specified. In the theoretical model eleven scales were specified, while only five (metacognitive skills, environmental structuring, time management, help seeking, and persistence) 35 items were found with EFA model due to: Task strategies scales scattered over all factors. This made it impossible to interpret the resulting factor structure. Moreover, Task definition, goal setting, strategic planning, comprehension monitoring and strategy regulation combined into one large scale in the exploratory model: metacognitive skills even they are in different phrases.

At last, clustering of items belonging to motivation control and effort regulation into single scale persistent. Then, confirmatory factor analysis (CFA) was conducted on a second dataset to compare the fit of the theoretical model and the exploratory obtained model. The result of the confirmatory factor analysis (CFA) obtained exploratory model provided much better fit to the data CFI=.777 bigger than the theoretical model CFI=.666 and Exploratory model AIC=1230 smaller than theoretical model AIC=2852 also indicate that the exploratory model shows the best fit. The self-regulated online learning questionnaire (SOL-Q) is quilt new and with very strong empirical test. The finding of Jansen et al. (2017) suggested for future research is to examine the transferability of the developed questionnaire to other contexts than MOOCs. Hence, the researcher apply Jansen et al., (2017) the self-regulated online learning questionnaire (SOL-Q) and developed it into self-regulated Arabic language learning questionnaire (SAL-Q).

In the following, the self-regulated Arabic language learning questionnaire (SAL-Q) was developed from items of Jansen et al. (2017) the self-regulated online learning questionnaire (SOL-Q) in this study. The phrase "in this online course" was replaced with "in Arabic learning" in all items to defines the focus of the questionnaire, thereby informing students of what context the questions related to. For example, the item "I think about what I really need to learn before I begin a task in this online course" was changed into "I think about what I really need to learn before I begin a task in Arabic learning". In some cases, just add at the end of the questions. Such as "I kept a list of the words I got wrong" was changed into "I kept a list of the Arabic words I got wrong". After deleted some overlapping items, such as item "I communicate with my classmates to find out how I am doing Arabic leaning." is quilt reduplicative with item 34 "When I am not sure about some material in Arabic language learning, I check with other people to get as much information as possible concerning the material." Thus, the researcher deleted item overlapping.

The final self-regulated Arabic language learning questionnaire (SAL-Q) contained 36 items divided over 5 scales. These scales are metacognitive skills (18 items), environmental structuring (5 items), time management (3 items), help seeking (5 items), and persistence (5 items). An overview of these scales and the number of items contained in each scale can be found in Table 3.4 All items have to be answered on a 5-point Likert scale, ranging from "Strongly Disagree (=1); Disagree (=2); Neutral (=3); Agree (=4); to Strongly Agree (=5)" which is employed by the MAI, the OSLQ, and the LS. The researcher chose 5-point Likert scale for several reasons: With a 5-point Likert scale, it is quite simple for the participants to read out the complete list of scale descriptors. Due to the big amount of questions in this research. Moreover,

5 - point Likert-type scale was used to increase response rate and response quality along with reducing respondents' "frustration level" (Babakus and Mangold, 1992).

Table 3.3

The items of self-regulated Arabic language learning questionnaire (SAL-Q)

Cognitive/Metacognitive regulation	Affective regulation	Behavioral regulation	Environment regulation
Metacognitive skills (18 items)	Persistence (5 items)	Time management (3 items) Help seeking (4 items)	Environmental structuring (5 items)

Besides, section three of the questionnaire are discussed about the instruments of motivation. As the researcher mentioned in Chapter two, motivation was operationalized as encompassing three componence which is Self-efficacy, task value and Goal Orientations. Pintrich et al., (1991) Motivated Strategies for Learning Questionnaire (MSLQ) was used to measure non-native Arabic learners' motivation. MSLQ is recognized to have high validity and reliability that can be applied in students' level of motivation at Malaysian university (Hashemyolia et al., 2014). As displayed in Table 3.4.

Table 3.4

The measurement of Motivation for each of the component

Componence Motivation	Authors	Year	Name of Instrument	α
Self-efficacy,	Pintrich et al.,	1991	MSLQ	α = .93
Task Value	Pintrich et al.,	1991	MSLQ	α = .90
Goal Orientations	Pintrich et al.,	1991	MSLQ	Intrinsic goal orientation (α = .74); Extrinsic goal orientation (α = .62)

A subscale that measures academic self-efficacy, task value and Goal Orientations was adopted from Motivated Strategies for Learning Questionnaire (MSLQ). The subscale self-efficacy consisted of eight items that measure students' perceptions of their competence to do their class work. Because the study aimed to measure Arabic learners' efficacy towards Arabic language learning, 8 items has been rephrased. For instance, "I believe I will receive an excellent grade in this class", was rephrased as "I believe I will receive an excellent grade in Arabic language course", "I'm certain I can understand the most difficult material presented in the readings for this course", was modified to "I'm certain I can understand the most difficult material presented in the readings for Arabic course". The rest of self-efficacy items modification as showed in Table 3.5.

Table 3.5

The items of self-efficacy modification

Original self-efficacy items from MSLQ	Rephrased as/ Modified to
I believe I will receive an excellent grade in this class.	I believe I will receive an excellent grade in Arabic language course.
I'm certain I can understand the most difficult material presented in the readings for this course.	I'm certain I can understand the most difficult material presented in the readings for Arabic language course.
I'm confident I can understand the basic concepts taught in this Course.	I'm confident I can understand the basic concepts taught in Arabic language Course.
I'm confident I can understand the most complex material presented by the instructor in this course.	I'm confident I can understand the most complex material presented by the instructor in Arabic language course.
I'm confident I can do an excellent job on the assignments and tests in this course.	I'm confident I can do an excellent job on the assignments and tests in Arabic language course.
I expect to do well in this class.	I expect to do well in Arabic language course.
I'm certain I can master the skills being taught in this class.	I'm certain I can master the skills being taught in Arabic language course.
Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.	Considering the difficulty of Arabic language course, the teacher, and my skills, I think I will do well in this class.

Furthermore, Task Value sub-scale adopted from the Motivated Strategies for Learning Questionnaire (MSLQ) was designed to measure how important, interesting, or useful the Arabic language learning was seen by non-native Arabic learners. A total of 6 items were used to measure task value, such as "I think I will be able to use what I learn in this course in other courses" and "it is important for me to learn the course material in this class." The items of Task Value were modified as the following Table 3.6.

Table 3.6

The items of Task Value modification

Original Task Value items from MSLQ	Rephrased as/ Modified to
I think I will be able to use what I learn in this course in other courses.	I think I will be able to use what I learn in Arabic language learning in other courses.
It is important for me to learn the course material in this class.	It is important for me to learn the course material in Arabic language learning.
I am very interested in the content area of this course	I am very interested in the content area of Arabic language learning.
I think the course material in this class is useful for me to learn.	I think the course material in Arabic language learning is useful for me to learn.
I like the subject matter of this course.	I like the subject matter of Arabic language learning.
Understanding the subject matter of this course is very important to me.	Understanding the subject matter of Arabic language learning is very important to me.

For the last of motivation instrument, Goal Orientations were adopted from Motivated Strategies for Learning Questionnaire (MSLQ). The Goal Orientations scale was comprised of 8 items, four items for intrinsic goal orientation ($\alpha = .74$) and four items for extrinsic goal orientation ($\alpha = .62$). Items goal Orientation have been adapted to measure domain-specific goals. The research have to modify the question of items sustain with the Arabic language learning context. For instance, the first item of intrinsic "In a class like this, I prefer course material that really challenges me so I can learn new things", was rephrased as "In Arabic language learning, I prefer course material that really challenges me so I can learn new things". Moreover, "In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn", as modified to "In Arabic language learning, I prefer course material that arouses my curiosity, even if it is difficult to learn". For the rest of the items will be show in Table 3.7.

Table 3.7

The items of Goal Orientations modification

Original Goal Orientations items from MSLQ	Rephrased as/ Modified to
In a class like this, I prefer course material that really challenges me so I can learn new things.	In Arabic language learning, I prefer course material that really challenges me so I can learn new things.
In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn.	In Arabic language learning, I prefer course material that arouses my curiosity, even if it is difficult to learn.
The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.	The most satisfying thing for me in Arabic language learning is trying to understand the content as thoroughly as possible.

Table 3.7 (*Continued*)

Original Goal Orientations items from MSLQ	Rephrased as/ Modified to
When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade.	When I have the opportunity in Arabic language learning, I choose course assignments that I can learn from even if they don't guarantee a good grade.
Getting a good grade in this class is the most satisfying thing for me right now.	Getting a good grade in Arabic language learning is the most satisfying thing for me right now.
The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.	The most important thing for me right now is improving my overall grade point average, so my main concern in Arabic language learning is getting a good grade.
If I can, I want to get better grades in this class than most of the other students.	If I can, I want to get better grades in Arabic language learning than most of the other students.
I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.	I want to do well in Arabic language learning because it is important to show my ability to my family, friends, employer, or others.

The section four of the questionnaire is SMU instruments, it was developed into two dimensions: formal and informal Arabic language learning. In this study social media refers to Facebook, WhatsApp, Wechat, Youtub, Instagram, Twitter, blogging, LinkedIn and other social software which is quilt popular social media tools among university students. The researcher adapted the instrument from Monachesi et al., (2008) data language technologies for lifelong learning to determine Arabic language learners' SMU level for formal and informal learning. The items are contained six different categories social networks, bookmarking sites, social news, media sharing, microblogging and blogging, particularly comments and forums which

quite frequently used by students. There are 10 items which divided into two main purposes: formal Arabic learning (5 items) and informal Arabic learning (5 items) such as "I am using social media to create or work on my own online journal or blog for Arabic learning purposes. I am using social media to watch Arabic teaching and learning videos or related Islamic lectures videos for Arabic language improving purposes. As the items shown in Table 3.8.

Table 3.8

The items of social media usage for formal and informal learning

Social media use for formal learning	Social media use for informal learning
I am using social media...	I am using social media...
To create or work on my own online journal or blog for Arabic learning purposes.	To take material find online like Arabic songs, Nasheed, text or images.
To watch Arabic teaching and learning videos or related Islamic lectures videos for Arabic language improving purposes.	To share updates about myself, share photos, stories, videos or to see updates about others in Arabic language.
To read Arabic language news or information about current events and polices for Arabic learning purposes.	To buy or find target Arabic language books.
To search Wikipedia, ResearchGate or related media to complete Arabic course assignment.	To communicate with others in Arabic.
To search Arabic journals to do research.	To post comments in Arabic language to groups, blogging or photo site.

3.4.1 Questionnaire Design

The instruments were developed containing two sections of items. Section one is about demographic information such as gender, Year of study, frequency of social media use. There are there parts in section two: part one is about items of self-regulated learning strategies, part two is about items of motivation and part three is about items of social media usage. For the consistency the questionnaires of this study, the self-regulated leaning strategies, motivation and social media usage questionnaire were developed into 5 point Likert Scale, the instrument used in this study is a 5 point Likert Scale which was adapted from the original 7-point Likert Scale format, ranged from 'Strongly Agree' to 'Strongly Disagree' (Gardner, 1960). Items on the scales were anchored at 1 = "Strongly disagree," 2 = "Disagree," 3 = "Neutral," 4 = "Agree," and 5 = "Strongly agree." The evaluate each item using the following scale:

1 = agreeing indicates the respondent is very low in the measured attribute

2 = agreeing indicates the respondent is below average in the measured attribute

3 = agreeing does not tell anything about the respondent's level of the attribute

4 = agreeing indicates the respondent is above average in the measured attribute

5 = agreeing indicates the respondent is very high in the measured attribute

3.4.2 Questionnaire Translation and Instrument Revision

Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text (The Oxford Companion to the English Language, Namit Bhatia, ed., 1992). In this study, questionnaire translation is change the questionnaire language (English) into the target participants' language (Malay language). The sample in this study are Malayu, The national and official language of

Malaysia is Bahasa Melayu (Malay). The original of the questionnaire was in English, within this framework and therefore assumes that the questions in the source questionnaire should know to be suitable for the Malaysia cultures and participants language required. In consideration of the participants are Malayan those university students who studying Arabic language and the researcher found some of participants do not understand English. Furthermore, the questions of the questionnaire in mother tongue of the participants will be avoid the error of non-understanding the problem, and easy get touch with participants heart. Thereby, translate of the questionnaire into Malay language (Bahasa) is necessary.

3.4.2.1   Procedure of Questionnaire Translation

Three different sets of people involved in produce the final version of the translated questionnaire in current study: translators, translation reviewers and the last translation adjudicators.

First the researcher selected two Malaysian translators are the main translator for the instrument from English version to Malay (Bahasa) version.

Second the researcher sent the readied questionnaire to the two reviewers, one of them is Malay language teacher in Islamic Adni school and the other is Research Fellow / Senior Lecturer in UKM. The reviewers modified in some items as shown in Appendix A. At last, the researcher handed the final edit questionnaire to adjudicators, both of them are Malaysian and Senior Lecturer in University of Malaya. The adjudicators gave some advises and decided to use (see Appendix C).

3.5 Pilot Study

After the survey instrument was refined, a pilot study should be done in order to eliminate the ambiguity of individual questions, evaluate feasibility, time, cost, adverse events, and improve upon the study design prior to performance of a full-scale research instruments. In addition to this, the reliability of the instrument will be test by the pilot study result. There are 35 Arabic learners in Malaysia were chosen randomly to do the pilot test. The participants in the pilot study were not a part of the final study. The pilot test is carried out to ensure the clarity of the word of each item to avoid subjects of this study encounter any difficulty in answering the questionnaire. Besides, it served as a trial run to provide useful information on any unexpected problems that might arise in the actual study. Pilot test participants were asked to point out any ambiguous items by underline words and sentences that they find difficult to understand so that those items could be modified or deleted for the final survey instrument.

3.5.1 Descriptive of Participants' Demographic Information

This section will report the description of the respondents in this study, as a result, the following sections describe the characteristics of the respondents that participated in the pilot study based on their demographic variables.

3.5.1.1 Respondents' Gender

Respondents were asked to choose from their gender (Male or Female). However, the male respondents were less than the females as the males were 12 respondents with a percentage of 34.3% and the females were 23 respondents with

a percentage of 65.7%. The following table (Table 3.9) shows a summary of the frequencies and percentages of the respondents' gender.

Table 3. 9

Respondents' Gender (n=35)

Respondents' Gender	Frequency	Percentages (%)
Male	12	34.3 (%)
Female	23	65.7 (%)
Total	35	100 (%)

3.5.1.2   Respondents' Level of study

Respondents were asked to choose from their level of study (year one, year two, year three and year four). Yet, there are no year one Arabic learners' participant current survey. Year two and year four learners with same percentage which is 14 responders. However, year three participants are less than year two and year four with a frequency of 7. The following table (Table 3.10) shows a summary of the frequencies and percentages of the respondents' level of study.

Table 3. 10

Respondents' level of study (n=35)

Respondents' level of study	Frequency	Percentages (%)
Year 2	14	41.2
Year 3	7	17.6
Year 4	14	41.2
Total	35	100.0

3.5.1.3   Respondents' Academic achievement (GPA)

The demographic variables showed the responders Academic achievement (GPA) (A, B, C and D) in Arabic language. The table showed 11 responders achieved A level and 13 responders achieved B level. However, there are 7 responders achieved C level and 4 responders got D level which are consider as low level achievement. The following table (Table 3.11) shows a summary of the frequencies and percentages of the respondents' Academic achievement (GPA).

Table 3.11

Respondents' Academic achievement (GPA)

Respondents' Academic achievement (GPA)	Frequency	Percentages (%)
D level	4	12.5 (%)
C level	7	18.8 (%)
B level	13	37.5 (%)
A level	11	31.3 (%)
Total	35	100.0 (%)

3.5.2   Assessing Content Validity

Content Validity is evidence from qualitative research demonstrating that the instrument measures the concept of interest including evidence that the items and domains of an instrument are appropriate and comprehensive relative to its intended measurement concept, population, and use. In other words, content validity refers to what extent can the measurement represent the content aspect measured (Chua, 2012). Testing other measurement properties will not replace or rectify problems with content

validity. To test the survey instrument for content validity, three experts examined the instrument. (See Appendix B)

3.5.3 Reliability

Cronbach's Coefficient Alpha is the most popular method to test the reliability of items. When multiple-item measures of a concept or construct are employed. This is because it is easier to use in comparison to other estimates as it only requires one test administration. Cronbach's coefficient alpha which is the researcher applied to text the reliability of the questionnaire. According to Chua (2013), the value of Cronbach's alpha it shown in Table 3.12.

Table 3. 12

Interpretation for reliability according to Cronbach's alpha

Cronbach's alpha	Internal consistency
.96 to .99	Unaccepted reliability
.80 to .95	High reliability
.65 to .79	Average reliability
.50 to .64	Low reliability
.01 to .49	Unaccepted reliability

3.5.3.1 Reliability of items SRLs

To test the reliability of these questionnaires, the researcher applied SPSS process it. As it shown in Table 3.13.

Table 3. 13

Reliability of Dimension SRLs

Dimensions	Cronbach's Alpha	N
Metacognitive skills	.921	18
Environmental structuring	.881	5
Time management	.466	3
Persistence	.611	5
Help seeking	.800	4
Total SRLs	.952	35

As can be seen in Table 3.6 the 35 items of SRLs α=.952 with excellent reliability in general. Moreover, the dimensions of MS with quilt high reliability too (α ＞0.9). However, items TM showed unacceptable reliability (α < 0.5). Thus, the researcher did further analysis in order to enhance the reliability of TM. As shown in Table 3.14.

Table 3. 14

Item-Total Statistics for Time Management

Items Time Management	Cronbach's Alpha（if item deleted）
SRLtm1	.445
SRLtm2	.636
SRLtm3	-.197a

In Table 3.14 presented that if item 2 of Time Management deleted the reliability for this domain will rise to α=.636. However, there are no items delete can

help domains of Persistent enhance reliability α < .6. Thus, the researcher deleted item 2 for time management. As Table 3.15 summarized.

Table 3. 15

Reliability of SRLs after deleted item 2 for time management

Dimensions	Cronbach's Alpha	N
Metacognitive skills	.921	18
Environmental structuring	.881	5
Time management	.600	2
Persistence	.611	5
Help seeking	.800	4
Total SRLs	.952	34

As shown in Table 3.15, the reliability of overall SRLs items α=.952 as usual, quilt excellent. Even though, the dimension of time management items and dimension of persistent with questionable reliability $0.6 < α < 0.7$. Nevertheless, an acceptable level of internal consistency reliability should be dependent on a function of the context in which the value will be used. While interpretation resulting from this component should be exercised carefully, for time management items and persistence items are consider to be promising for an exploratory purpose. Overall, the total items of self-regulated learning questionnaire become 35 items.

3.5.3.2   Reliability of items Motivation

To test the reliability of items motivation, the researcher applied SPSS process it. There are four domains for motivation instrument. As shown in Table 3.16.

Table 3. 16

Cronbach's Alpha Coefficient of Motivation (N=35)

Dimension of Motivation	Cronbach's Alpha	Number of Items
Self-efficiency	.736	8
Task Value	.859	6
Goal orientation	.836	11
Total motivation	.915	25

From Table 3.16 showed that the total motivation items with very good reliability. α＞0.9. Especially, domain of Task value with Cronbach's Alpha up to α=.859 and domain of Goal orientation with Cronbach's Alpha α=.836. However, the domain of Self-efficiency is lower a bit α=.736, but still reliable.

3.5.3.3   Reliability of SMU

As remind before, the researcher applied SPSS to test reliability of items social media usage. As shown in Table 3.17

Table 3. 17

Reliability of Dimension SMU (N=35)

Dimension of Social media Usage	Cronbach's Alpha	Number of Items
SMU informal learning	.759	5
SMU formal learning	.846	5
SMU	.935	10

In the view of Table 3.17, Cronbach's Alpha of items SMU is 0.935 and it is excellent reliability. Moreover, the domains of SMU (SMU formal learning α=0.846,

SMU informal learning α=0.759) also showed quilt reliable α＞0.7. To summarize, the reliability of the instruments of this study as it shown in Table 3.11.

Table 3. 18

Cronbach's Alpha Coefficient of the Pilot Test (N=35)

Section/ variable	Dimension	No of items	Cronbach's alpha
Self-regulated learning strategies	Metacognitive skills	19	.921
	Time management	2	.636
	Environmental structuring	5	.881
	Persistence	5	.611
	Help seeking	4	.800
Motivation	Self-efficiency	8	.736
	Task Value	6	.859
	Goal orientation	11	.836
Social media usage	Informal learning	5	.759
	Formal learning	5	.846

From Table 3.18 we can see, it was identified that the Cronbach's Alpha for SRLs dimensions was in the range of .611 to .921. Next, Motivation dimensions were in the range of .736 to .859. Lastly, SMU dimensions were in the range of .759 to .846. Based on the reliability test, the researcher concluded that the instrument developed for this study showed a very good level of internal consistency reliability.

3.6 Distribution and Collection of Questionnaires

The instruments distribution and collection from 6 universities: University of Malaya (UM), International Islamic University Malaysia (IIUM or UIA), The National University of Malaysia (UKM) in Malaysia, Universiti Sultan Zainal Abidin (UniSZA), Universiti Putra Malaysia (UPM), and Universiti Sains Islam Malaysia (USIM)

In the begging, the researcher got approve letter, timetable, lectures contact number from the three sample universities Arabic language learning department to distribution the questionnaire to Malay Non-native Arabic speakers. Then, the researcher discussed with the staff about the methods distribution in the following:

First, the researcher got promising from lecture to attend classes follow the timetable for distribute questionnaire and the questionnaire will be collected by next day in the same class. If some of the students forget to bring will be asked sent me pictures of the questionnaire by WhatsApp or Email.

Second, the researcher got promising from lecture to attend classes follow the timetable for sent google form online questionnaire to the participants. The researcher will ask contact number or E-mail from participants and sent google form online questionnaire to them. Once they finished, just submit.

The participants of this study got enough and flexible time to do the questionnaire. They are allowed to ask questions if they do not understand the items. They will get a gift from researcher whenever they get the questionnaire. As shown in Figure 3.1.
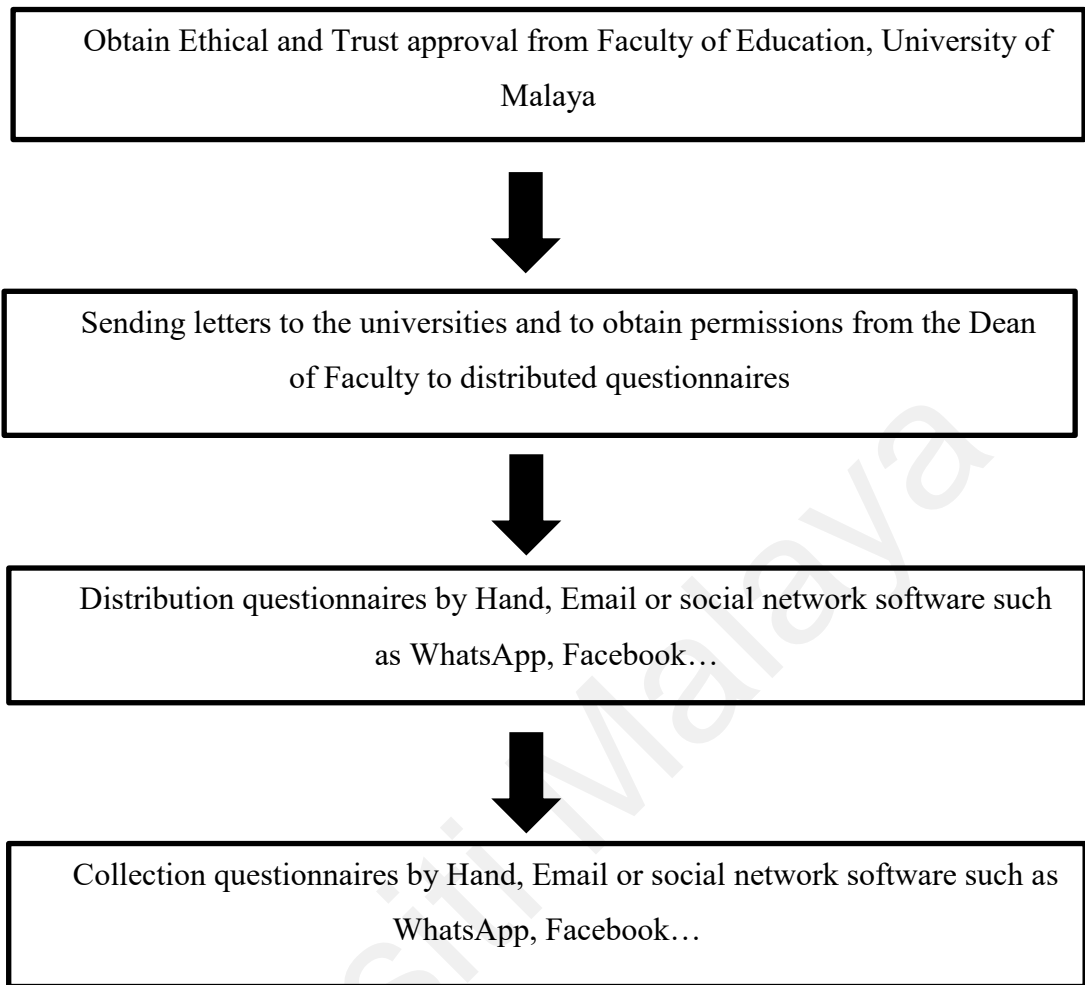
Figure 3.1. Distribution and Collection data Flowchart

3.7 Analysis of Data

The data analysis will be use the SPSS version 22 software and SmartPLS 3 software. Both descriptive and inferential statistics were used to analyze the data. This study sought to examine the relationship between learners' SRLs, motivation and social media usage, learners' Gender and Year of study (independent variable) and learners' academic achievement (dependent variable). The data of SRLs, motivation and SMUin Likert scale.

Generally, three different statistical analysis procedures would be carried out to answer each of the research questions. The first research questions to be answered by descriptive statistics in term of mean, standard deviation, frequency and percentage. Research question two and three is to be answered by the inferential statistic in term of independent sample T test, ANOVA, Spearman's rho Correlation which help to identify the relationship between SRLs, motivation and social media usage. Structural equation modeling (SEM) procedures with SmartPLS 3 were carried out to answer research questions four, five, six and seven.

3.7.1 Descriptive statistics

Descriptive statistics includes frequencies, means, modes, medians, range, standard deviations, cross-tabulations and standardized scores (Cohen, 2011). The finding of the descriptive statistics do not use to generalize to all the population (Chua, 2013). In this study, the first research questions to be answered by descriptive statistics in term of mean, standard deviation, frequency and percentages.

3.7.2 Spearman's Rho

Chua (2013) stated that Pearson correlation is used to parametric test identify correlation between parametric scale and the Spearman's Rho correlation test is used to identify the relationship between variables non-parametric. The normality Test for this study presented non-parametric test should be used to analysis the data. Thus, Spearman's Rho inferential statistic was used to analysis research questions four and five in this study. The correlation coefficient (r) is a measure of the direction and strength of the relationship between variables (Chua, 2013). The value of r as shown in Table 3.19.

Table 3. 19

The Strengths of Correlation Coefficient Values

Correlation Coefficient (r)	Strength of Correlation
.91 to 1.00 or -.91 to -1.00	Very Strong
.71 to .90 or -.71 to -.90	Strong
.51 to .70 or -.51 to -.70	Average/ Moderate
.31 to .50 or -.31 to -.50	Weak
.01 to .30 or -.01 to -.30	Very Weak
.00	No Correlation

3.7.3 Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) with SmartPLS 3 is used to address research questions four, five, six and seven. "Are there any mediating effect of Arabic learners' SRLs, motivation and SMU on the relationship among SRLs, motivation and SMU in Malaysia?" and "What extent SRLs, SMU and motivation influence academic achievement among Arabic learners in universities?"

The mediating effect is measured the correlation of independent variables (SRLs and motivation; SRLs and social media usage; SMU and motivation) through the third variable (SRLs, SMU and motivation). In addition, there are Muijs's Beta Value and Strength of Effect Size (Muijs, 2011) used to measure the strength of SRLs, SMU and motivation effect on academic achievement. As it showed in Table 3.20.

Table 3. 20

The Muijs's Beta Value and Strength of Effect Size (Muijs, 2011)

Beta (β)	Strength of Effect Size
> .50	Strong Effect
.30 to .50	Moderate Effect
.10 to .30	Modest Effect
0 to .10	Weak Effect

3.8 Summary

To summa up, the types of statistical analysis for this study based on the seven research questions are as shown in Table 3.21.

Table 3. 21

Statistical Analysis based on Research Questions

No.	Research questions	Variables	Measurement Scale	Type of Analysis
1	To what extent Arabic learners' SRLs on Arabic learning in Malaysian universities?	IV: Self-regulated learning strategies, SMU and motivation	Ordinal	Descriptive statistic: Mean , Std. deviation and Percentage
2	Are there any significant difference between gender among self-regulated strategies, motivation and SMU in Malaysia?	IV: Gender DV: Self-regulated strategies, Motivation and social media usage	Nominal Ordinal	Inferential statistic: Independent sample T-test, Kruskal Wallis Test and ANOVA

Table 3.21 (*Continued*)

No.	Research questions	Variables	Measurement Scale	Type of Analysis
3	Are there any significant difference between year of study among self-regulated strategies, motivation and SMU in Malaysia?	IV: Level DV: Self-regulated strategies, Motivation and social media usage	Nominal Ordinal	Inferential statistic: Independent sample T-test, Kruskal Wallis Test and ANOVA
4	Does self-Regulated Learning strategies, motivation and social media usage significantly correlated to each other among Arabic learners in Malaysia?	IV: SRLs, Motivation DV: Motivation and social media usage	Ordinal Ordinal	Inferential statistic: Spearman's rho Correlation
5	To what extent SRLs, SMUand motivation influence academic achievement on Arabic learning in Malaysia universities?	IV: SRLs, Motivation and social media usage DV: Academic achievement	Ordinal Interval	Inferential statistic: SEM with PLS
6	Are there any mediating effect of Arabic learners' motivation on the relationship among self-regulated and social media usage in Malaysia?	Med: Motivation IV: Self-regulated learning strategies, and social media usage	Ordinal Ordinal	Inferential statistic: SEM with PLS
7	Are there any mediating effect of Arabic learners' self-regulated learning strategies on the relationship among motivation and SMU in Malaysia?	Med: SRLs IV: Motivation and Social media usage	Ordinal Ordinal	Inferential statistic: SEM with PLS
8	Are there any mediating effect of Arabic learners' social media usage on the relationship among self-regulated learning strategies and motivation in Malaysia?	Med: Social media usage IV: Self-regulated learning strategies, and motivation	Ordinal Ordinal	Inferential statistic: SEM with PLS

Note: DV: Dependent Variable; IV: Independent variable; Med: Mediating Variable

CHAPTER 4

RESEARCH RESULTS

4.1 Introduction

This chapter discusses the results of the analysis of quantitative data. The target population for this study was limited to university level students studying in Arabic language department in six public universities: University of Malaya (UM), University Kebangsaan Malaysia (UKM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (UniSZA), Universiti Putra Malaysia (UPM) and Universiti Sains Islam Malaysia (USIM) in Malaysia. Three different types of surveys (SRLs, motivation and social media usage) with Malay version were distributed among 350 university level Malaysian students. These 350 students were randomly selected among year one, year two, year three and year four students in the six typical universities. The returned responses were initially screened and 317 responses have been selected for the future analysis. To analysis the data, the researcher applied SPSS 22 version and Smart-PLS 3 software to do Descriptive and Inferential statistic.

To sum up, the types of statistical analysis for this study based on the seven research questions are as shown in Table 3.21.

4.2   Data Preparation Prior to Analysis

There are a few data preparation procedures prior to the preliminary data analysis conducted in current study in order to eliminate errors made by participants and to validate the completeness and accuracy of the basic data screening step (Cohen et al., 2011).

Firstly, the data collected was screened through and those participants who completed at least 75% of the questionnaire are included and excluded those with more than 25% unanswered questions from the data set for further data analysis (Sekaran, 2003). Subsequently, data entry procedure was automatically generated to Excel file from google form into the SPSS Data Editor. The survey data such as the responses to the demographic variables, itemizing the question numbers, variable names, labels and value labels were coded accordingly. Human errors might not occur during the data entry procedure. Additionally, outliers of the data collected were examined through SPSS by checking the minimum and maximum values, means and standard deviations of each of the survey items until all values were deemed reasonable. Besides, SPSS missing values analysis procedure was performed to estimate the missing values and to detect the patterns within these missing data. As stated by Tabachnick and Fidell (2012), missing data with less than 5% of the total data and if it is missing in a random pattern from a large data set yielded similar results regardless of how the missing data is being handled. Hence, in this study, cases with more than 5% of obvious errors were removed from the data set for further analysis. Besides, the polarity of the negative questions in the survey instrument was reversed for further analysis.

4.3 Preliminary Data Analysis

Survey response rate, participants' demographic characteristics, normality test for the data collected through SPSS, and construct validity and reliability are reported in the following subsection.

4.3.1 Survey Response Rate

A total of 350 questionnaires were distributed to the respondents and a total of 330 subjects responded to the study. The data collected from 6 universities. According to Krejcie & Morgan (1970), based on the total number of Population (1743 students) in the target population of this study, the minimum number of participants needed for current study at 95% confidence level is 317 students. Hence, only 317 questionnaires collected were randomly selected using select cases program in SPSS for analysis.

4.3.2 Respondents' Demographic Characteristics

Participants' demographic characteristics were described by 317 valid responses. The demographic characteristics of respondents in current study comprised of gender, level of study and GPA. All these variables were measured as nominal data and descriptive statistics using frequency and percentage are reported. The demographic characteristics of the subjects in this study are presented in Table 4.1.

Table 4.1

Profiles of Respondents according to Demographic Characteristics (N=317)

Variables	Characteristics	Frequency	Percent (%)
Gender	Male	45	14.2
	Female	272	85.8
Year of study	Year 1	69	21.7
	Year 2	161	50.9
	Year 3	38	11.8
	Year 4	49	15.6
GPA	A	111	34.9
	B	188	59.4
	C	18	5.7

As shown in Table 4.1, the total number of female respondents (85.8%; n= 272) is higher than male respondents (14.2%, n=45). The distribution of respondents by year of study group indicated that majority of the respondents were in second year of study (50.9%; n=161); followed by those in year one (21.7%, n=69); subsequently those study in years four (15.6%, n=49), and lastly those study in year three (11.8%, n=38). In terms of previous GPA, 188 out of 317 respondents (59.4%) achieved B. A total of 34.9% of respondents (n=111) achieved A, and for the rest 5.7% (n=18) achieved C.

4.3.3 Normality Test for the Data Distribution

The normality test for each of the dimensions in measuring each of the main variables (SRLs, motivation and social media usage) of the study is conducted through SPSS and is reported in Table 4.2.

Table 4. 2

Value of the Normality Z-value for Each Variable

Variables	Skewness (Z)	Kurtosis (Z)	Kolmogorov - Smirnov Sig
SRLs	0.74	4.60	.00
Metacognitive skills	2.39	1.35	.04
Time management	-0.89	-1.08	.14
Environmental structuring	-2.50	1.85	.00
Persistence	0.71	-0.10	.20*
Help seeking	-0.48	-0.11	.13
Motivation	-0.47	0.94	.57
Self-efficiency	0.50	1.55	.12
Task Value	0.42	-0.55	.10
Goal orientation	0.52	0.33	.20*
SMU	-1.05	1.38	.99
Informal learning	-0.25	0.33	.20*
Formal learning	-1.24	0.59	.15

Table 4.2 indicated that the data for the variables motivation and SMU are normally distributed for univariate normality (skewness, kurtosis values) which is in the range of -2 to +2 and Kolmogorov –Smirnov value are greater than 0.05 (Chua, 2013). However, SRLs are not normality distributed in value of kurtosis 4.60 greater than +2 and value of Kolmogorov -Smirnov less than 0.05. Moreover, the dimensions of SRLs Metacognitive skills and Environmental structuring data are not normally distribute due to Kolmogorov –Smirnov value are less than 0.05. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. Thus, can be presented the data of current study are normally distributed Sig. greater than 0.05 in motivation and SMU data. Yet, the current study was not

normal distributed in SRLs data. In other words, SRLs data are different from normal, motivation and SMU data are not different from normal distributed. As recommended by Ringle et al., (2011) Amos should be prioritized if the data that meet normal assumption since this method was initiated as a parametric test. Otherwise, SmartPLS was suggested to process the data. Therefore, SmartPLS 3 need to apply to do SEM analysis in this study.

4.3.4 Validity and Reliability of the Constructs

According to Chua & Chua (2017), validity and reliability of the constructs (variables) in the model using Smart-PLS analysis should be established prior to further data analysis. Validity refers to the truthfulness of a measure whether or not it measure what it intends to measure and reliability refers to the consistency of the measurement.

Construct validity represents the extent to which a measure assesses the theoretical construct it is designed to assess and it is determined by assessing the convergent validity and discriminant validity. Validity and reliability of the variables in the model using Smart-PLS analysis are divided into two stages. Firstly, the convergent validity and discriminant validity for all variables in the model should be examined and followed by examined the composite reliability and Cronbach's alpha internal consistency reliability of the variables. Validity and reliability of variables in the model should be established in order to ensure that all the items are validly and reliably represented the concepts of all the variables in the model. Next, the relationship between the variables is identified and reported in the results section. In order to achieve convergent validity, the average variance extracted (AVE) for the variable should be greater than .50 (Hair et al., 2016). Discriminant validity can be

identified by assessing the inter-correlations among the variables in a reflective model (Garson, 2016).

According to Chua & Chua (2017), in order to achieve discriminant validity of a construct, the inter-correlations among the variables in the model should be smaller than .90. With the value of inter-correlations among the variables in the model smaller than .90 indicated that there is no overlapping of concept and the variables do not have a significant multi-collinearity problem. If the model has multi-collinearity problem it means that the model has very strong inter-correlation coefficients ($r \geq .90$) between each of the variable (Bryne, 2010).

4.3.4.1 Validity and Reliability of SRLs

In order to achieve reliability, both the values of composite reliability and Cronbach's alpha should be greater than .60 (Chua, 2012). The output of the validity and reliability analysis for the variables SRLs, motivation and SMUamong Arabic learner are discussed in details in the section below.

4.3.4.1.1 Convergent Validity of SRLs

The output of the validity analysis for the variables SRLs among Arabic learner are discussed in details in Table 4.3.

Table 4. 3

Factor loading for All Items of SRLs

Dimensions Self-regulated learning strategies	Items	loading
Metacognitive skills	M1	0.68
	M2	0.68
	M3	0.72
	M4	0.73
	M5	0.65
	M6	0.57
	M7	0.72
	M8	0.75
	M9	0.66
	M10	0.72
	M11	0.68
	M12	0.70
	M13	0.66
	M14	0.63
	M15	0.66
	M16	0.63
	M17	0.61
	M18	0.58
	M19	0.60
Environmental structuring	ES1	0.36
	ES2	0.17
	ES3	0.36
	ES4	0.72
	ES5	0.57
Time management	TM1	0.50
	TM3	0.91
Persistence	P1	0.61
	P2	0.72
	P3	0.78
	P4	0.33
	P5	0.27
Help seeking	HS1	0.35
	HS2	0.74
	HS3	0.82

As shown in Table 4.3, all items for Arabic learners' SRLs dimension passed the acceptance level with factor loadings between 0.50 to 0.91 which is more than 0.50. However, item ES1, ES2, ES3, P4, P5 and HS1 had factor loading less than 0.50 which is .36, .36, 0.17, 0.33, 0.27 and 0.35, respectively. Hence, ES1, ES2, HS1，ES3, P4 and P5 are deleted. The following Table 4.4 shown convergent validity of Arabic learners' SRLs were evaluated using Average Variance Extracted (AVE).

Table 4. 4

Average Variance Extracted (AVE) of Arabic learners' SRLs

Latent	AVE	AVE after Item ES1, ES2, ES3, HS1, P4 and P5 deleted
Metacognitive skills	0.67	0.67
Environmental structuring	0.45	0.60
Time management	0.71	0.71
Persistence	0.54	0.70
Help seeking	0.68	0.68

As illustrated in Table 4.4, the AVE for Environmental structuring is .45 which is lower than .50 as well. Therefore, items with low factor loading (ES1, ES2, ES3, HS1, P4 and P5) should be removed from the model. Researcher analyzed the model each time after one item is deleted from the model until the AVE of all the dimensions of Arabic learners' SRLs deemed acceptable which is larger than .50. Lastly, after item ES1, ES2, ES3, HS1, P4 and P5 deleted from the model, the AVE of Arabic learners' Environmental structuring increased to .60 which is greater than .50. Hence, convergent validity for Arabic learners' SRLs is achieved.

4.3.4.1.2 Discriminant Validity of SRLs

The next step in the construct validation process is to check for discriminant validity. Discriminant validity reflects the extent to which the measure is unique and different from one another even though each reflects a portion of that construct. Discriminant validity is evaluated by examining the squared-correlations among the variables in the model. Table 4.5 showed the squared-correlations of Arabic learners' SRLs.

Table 4.5

Squared-correlation of Arabic learners' SRLs

Latent	MS	TM	ES	P	HS
Metacognitive skills	(.67)				
Environmental structuring	0.042	(.71)			
Time management	0.46	0.005	(.50)		
Persistence	0.32	0.007	0.417	(.54)	
Help seeking	0.39	0.053	0.383	0.306	(.68)

According to Table 4.5, the squared-correlation coefficients among all dimensions SRLs were less than .90 indicated that all the indicators in measuring Arabic learners' SRLs do not have significant multicollinearity problem. Thus, the discriminant validity of all the items in measuring Arabic learners' SRLs is achieved.

4.3.4.1.3 Reliability of SRLs

After assessing the convergent and discriminant validity of Arabic learners' SRLs, the final step is to determine the reliability of the construct items. In order to achieve reliability, both the values of composite reliability and

Cronbach's alpha should be greater than .60 (Chua, 2012). Table 4.6 is the results of reliability (composite reliability and Cronbach's alpha) of Arabic learners' SRLs.

Table 4. 6

Composite reliability and Cronbach's alpha of Arabic learners' SRLs

Dimensions self-regulated learning strategies	Composite reliability (CR)	Cronbach's Alpha Reliability
Metacognitive skills	0.97	.94
Environmental structuring	0.68	.61
Time management	0.94	.64
Persistence	0.79	.70
Help seeking	0.84	.74

Table 4.6 shown that all the items Arabic learners' SRLs for yielded composite reliability between .68 Environmental structuring to .97 Metacognitive skills. Moreover, Cronbach's alpha between .61 Environmental structuring to .94 Metacognitive skills which is arrived acceptance level. Thus, the reliability of Arabic learners' SRLs are achieved.

4.3.4.2   Validity and Reliability of Motivation

Arabic learners' motivation is a latent construct measured by three dimensions which are Self-efficiency, Task Value and Goal orientation. Validity (convergent validity and discriminant validity) and reliability (composite reliability and Cronbach's alpha internal consistency reliability) of Arabic learners' motivation through Smart-PLS analysis is presented in the following subsection.

4.3.4.2.1   Convergent Validity of Motivation

The validity is achieved when all the collapsed items in a measurement model are statistically significant and with factor loading of .50 or above for an indicator (Bryne, 2010; Hair et al., 2016). The factor loading for all the items of Arabic learners' motivation is assessed and those items with factor loading less than .50 are deleted from the model. Table 4.7 shows the factor loading for all items for Arabic learners' motivation in the model.

Table 4. 7

Factor loading for All Items of Motivation

Dimensions Motivation	Items	Squared loading
Self-efficiency	SE	0.76
	SE	0.61
	SE	0.78
	SE	0.59
	SE	0.71
	SE	0.53
	SE	0.75
	SE	0.61
Task Value	TV	0.75
	TV	0.83
	TV	0.83
	TV	0.73
	TV	0.75
	TV	0.56
Goal orientation	O1	0.41
	O2	0.60
	O3	0.53
	O4	0.38
	O5	0.66
	O6	0.62
	O7	0.51
	O8	0.59
	O9	0.58
	O10	0.67
	O11	0.48

As shown in Table 4.7, all items for Arabic learners' motivation dimension passed the acceptance level with factor loadings between 0.51 to 0.83 which is more than 0.50. However, item O1, O4 and O11 for Goal orientation dimension have factor loading less than 0.50 which is 0.412, 0.38 and 0.485, respectively. As Hair et al, (2006) commended that factor loadings greater than 0.40 are acceptable for sample size 200 or greater than 200. Hence, only item O4 should be deleted. The following Table 4.8 shown convergent validity of Arabic learners' motivation were evaluated using Average Variance Extracted (AVE).

Table 4. 8

Average Variance Extracted (AVE) of Arabic learners' Motivation

Dimensions motivation	AVE	AVE after Item O4 and deleted
Self-efficiency	0.66	0.66
Task Value	0.74	0.74
Goal orientation	0.54	0.57

As illustrated in Table 4.8, the AVE for all dimensions of motivation was arrived acceptance level which is greater than .40 as well. However, there are one items of goal orientation O4 are lower than 0.4 in loading, refer Table 4.8. Therefore, items O4 should be removed from the model. Lastly, after item O4 deleted from the model, the loading of Arabic learners' motivation are greater than .5 and the AVE is increased than before. Hence, convergent validity for Arabic learners' motivation is achieved.

4.3.4.2.2   Discriminant validity of SRLs

The next step in the construct validation process is to check for discriminant validity. Discriminant validity reflects the extent to which the measure is unique and different from one another even though each reflects a portion of that construct. Discriminant validity is evaluated by examining the squared-correlations among the variables in the model. Table 4.9 showed the squared-correlations of Arabic learners' motivation.

Table 4. 9

Squared-correlation of Arabic learners' motivation

Latent	Self-efficiency	Task Value	Goal orientation
Self-efficiency	(.67)		
Task Value	0.45	(.74)	
Goal orientation	0.54	0.41	(.58)

According to Table 4.9, the squared-correlation coefficients among all dimensions Arabic learners' motivation were less than .90 indicated that all the indicators in measuring Arabic learners' motivation do not have significant multicollinearity problem. Thus, the discriminant validity of all the items in measuring Arabic learners' motivation is achieved.

4.3.4.2.3   Reliability of Dimension Motivation

After assessing the convergent and discriminant validity of Arabic learners' motivation, the final step is to determine the reliability of the construct items. In order to achieve reliability, both the values of composite reliability and Cronbach's alpha should be greater than .60 (Chua, 2012). Table 4.10 is the results

of reliability (composite reliability and Cronbach's alpha) of Arabic learners' motivation.

Table 4. 10

Composite reliability and Cronbach's alpha of Arabic learners' Motivation

Latent	Composite reliability (CR)	Cronbach's Alpha Reliability
Self-efficiency	0.92	.87
Task Value	0.95	.88
Goal orientation	0.90	.81

Table 4.10 shown that all the items Arabic learners' motivation for yielded composite reliability between .90 (Goal orientation) to .95 (Task Value) which all bigger than 0.6. The next Cronbach's alpha between .81 (Goal orientation) to .88 (Task Value) which is arrived acceptance level either. Thus, the reliability of Arabic learners' motivation are achieved.

4.3.4.3 Validity and Reliability of SMU

Arabic learners' SMU for learning is a latent construct measured by two dimensions which are (i) SMU informal learning (ii) SMU formal learning Validity (convergent validity and discriminant validity) and reliability (composite reliability and Cronbach's alpha internal consistency reliability) of Arabic learners' SMU for learning through PLS analysis is presented in the following subsection.

4.3.4.3.1 Convergent Validity of SMU

The validity is achieved when all the collapsed items in a measurement model are statistically significant and with factor loading of .50 or above for an indicator (Bryne, 2010; Hair et al., 2016). The factor loading for all the items of Arabic learners' SMU is assessed and those items with factor loading less than .50 are deleted from the model. Table 4.11 shows the factor loading for all items for Arabic learners' SMU in the model

Table 4. 11

Factor loading for All Items of social media usage

Dimensions social media usage	Items	Squared loading
Social media for formal learning	SMF1	0.62
	SMF2	0.69
	SMF3	0.55
	SMF4	0.52
	SMF5	0.38
Social media for informal learning	SMI1	0.49
	SMI2	0.72
	SMI3	0.80
	SMI4	0.64
	SMI5	0.60

As shown in Table 4.11, all items for Arabic learners' SMUdimension arrived the acceptance level, except SMF5 and SMI1 have factor loading less than 0.50 which is 0.38 and 0.49, respectively. As mentioned before, Hair et al, (2006) suggested that factor loadings greater than 0.40 are acceptable for sample size 200 or greater than 200. Hence, item SMF5 should be removed. The following Table 4.12 shown convergent

validity of Arabic learners' SMU were evaluated using Average Variance Extracted (AVE).

Table 4. 12

Average Variance Extracted (AVE) of Arabic learners' social media usage

Dimensions social media usage	AVE	AVE after Item SMF5 deleted
Social media for formal learning	0.65	0.65
Social media for informal learning	0.55	0.59

As illustrated in Table 4.12, the AVE for all dimensions of SMUwas arrived acceptance level which is greater than .50, except SMF5 and SMI1. As mentioned by Hair et al., (2006) with the sample size more than 200, the loading can be accept with 0.4. Thus, items SMI1 stay, SMF5 should be removed from the model. Lastly, the loading of Arabic learners' SMU are greater than .5 and the AVE is increased than before.

4.3.4.3.2 Discriminant validity of SMU

The next step in the construct validation process is to check for discriminant validity. Discriminant validity reflects the extent to which the measure is unique and different from one another even though each reflects a portion of that construct. Discriminant validity is evaluated by examining the squared-correlations among the variables in the model. Table 4.13 showed the squared-correlations of Arabic learners' social media usage.

Table 4.13

Squared-correlation of Arabic learners' social media usage

Dimensions SMU	SMI	SMF
Social media for informal learning	.55	
Social media for formal learning	.54	.65

According to Table 4.13, the squared-correlation coefficients among all dimensions Arabic learners' SMU were less than .90 indicated that all the indicators in measuring Arabic learners' SMU do not have significant multicollinearity problem. Thus, the discriminant validity of all the items in measuring Arabic learners' SMU is achieved.

4.3.4.3.3 Reliability of Dimension SMU

After assessing the convergent and discriminant validity of Arabic learners' social media usage, the final step is to determine the reliability of the construct items. In order to achieve reliability, both the values of composite reliability and Cronbach's alpha should be greater than .60 (Chua, 2012). Table 4.14 is the results of reliability (composite reliability and Cronbach's alpha) of Arabic learners' social media usage.

Table 4.14

Composite reliability and Cronbach's alpha of social media usage

Dimensions social media usage	Composite reliability (CR)	Cronbach's Alpha Reliability
SMU for formal learning	0.79	.78
SMU for informal learning	0.78	.70

Table 4.14 shown that all the items Arabic learners' SMU for yielded composite reliability between .78 to .79 which all bigger than 0.6. The next Cronbach's alpha between .70 to .78 are arrived acceptance level, respectively. Thus, the reliability of Arabic learners' SMU are achieved.

4.4   Results of the Study and Test of Hypothesis

The results of this study based on each of the research questions proposed in chapter one would be presented in the section below. Generally, three different statistical analysis procedures would be carried out to answer each of the research questions. The first research questions to be answered by descriptive statistics in term of Mean, Std. Deviation, frequency and percentage. By the way, to test research hypothesis 1-3 inferential statistic were applied in terms of Independent Sample T-Test, ANOVA and Kruskal-Wallis Test which help to identify the significant difference between variables. Moreover, research hypothesis 4-6 are to be answered by inferential statistic in term of Sperman's correlation which help to identify the relationship between variables. Lastly, structural equation modeling (SEM) procedures with Smart-PLS were carried out to answer research questions four to seven which are Hypothesis 7-12.

4.4.1 Arabic learners' SRLs, SMU and Motivation

Descriptive statistic was used to analyze the data collected from 317 Arabic learners in Malaysian universities. The dependent variable, Arabic learners' SRLs, SMUand motivation. The following section will discuss in detail.

4.4.1.1 Self-regulated learning strategies (SRLs)

The dependent variable, Arabic learners' SRLs comprised of five dimensions: Metacognitive skills, Environmental structuring, Time management, Persistence and Help seeking. The mean and standard deviation for SRLs, as well as frequency and percentage for each of the Arabic learners' SRLs dimensions be calculated using SPSS. At last, the mean and standard deviation for each items of SRLs would explain in detail. Based on the value for each of dimensions and the overall SRLs, the result for each of the SRLs dimensions as well as the overall SRLs be reported. The results as shown in Table 4.15.

Table 4. 15

Mean and Std. Deviation of using SRLs in Arabic learning

Dimensions SRLs	Mean	Std.
Metacognitive skills	3.92	.49
Environmental structuring	3.58	.52
Time management	2.72	.86
Persistence	3.88	.70
Help seeking	4.12	.52
Total SRL	3.65	.39

Referring to Table 4.15, the overall mean of Arabic learners using SRLs for Arabic learning is 3.65. This could be interpreted as medium degree of usage for SRLs among Arabic learners. That is to say, the Malaysian university Arabic learners with medium level of SRLs usage. Furthermore, help seeking is the most frequently strategy used by Arabic learners (M=4.12, SD=.38) which could be interpreted as high level of usage. In other words, Arabic learners in Malaysia are quilt good in help seeking strategy whatever from lecture, library, internet or etc. Metacognitive skills is the second strategy which is frequently used by Arabic learners (M=3.92, SD=.485) which is also quilt popular strategy applied by Arabic learners. It is also with almost high level of usage. However, time management strategy is the lowest one used by Arabic learners (M=2.72, SD=.857) and with low degree of usage compare with persistence strategy used by learners (M=3.88, SD=.70) and Environmental structuring strategy used by learners (M=3.58, SD=.519) in Arabic language learning. In other words, Arabic learners used Persistence and environmental structuring strategies more frequently than time management strategy.

More specifically, percentage and frequency for each of the dimensions based on Arabic learners' SRLs and means and standard deviations for each of the items based on each of Arabic learners' SRLs dimensions would be reported in the following section. There are 5 dimensions and 31 items in the questionnaire to measure Arabic learners' SRLs usage in Malaysian universities.

4.4.1.1.1 Dimension 1: Metacognitive skills

The percentage and frequency for dimension of Arabic learners' SRLs would reported in Table 4.16.

Table 4.16

Percentage and frequency of using Metacognitive skills in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	4	1.3%
	Disagree	34	10.7%
Metacognitive skills	Neutral	88	27.9%
	Agree	120	37.8%
	Strongly agree	71	22.4%
	Total	317	100

Table 4.16 clearly highlights the responders with a high level of Metacognitive skills strategy usage because 60.2% responders either agree or strongly agree to the statement which is use metacognitive skills during Arabic learning. In other words, 191 participants are agree with using Metacognitive skills during their Arabic learning. In addition, 12% participants disagree with Metacognitive skills use. This can be indicated as 38 participants do not use Metacognitive skills in their Arabic learning. Besides, 27.9% of responders select "Neutral". It can be revealed that over 88 responders are not sure about whether he/she used Metacognitive skills during Arabic learning or not.

The following will discuss more specifically in Arabic learners Metacognitive skills usage. Metacognitive skills comprised of 19 items. The means and standard deviations for all the three items are arranged in Table 4.17.

Table 4. 17

Mean and Standard Deviation for Each of the Items in Metacognitive skills Dimension (N=317)

Items Metacognitive skills	Mean	SD
Item 1	4.12	.66
Item 2	4.06	.67
Item 3	3.97	.74
Item 4	3.98	.72
Item 5	3.71	.80
Item 6	4.15	.60
Item 7	4.03	.69
Item 8	3.97	.68
Item 9	3.91	.73
Item 10	3.96	.74
Item 11	3.63	.79
Item 12	4.00	.66
Item 13	3.97	.69
Item 14	3.61	.93
Item 15	3.98	.67
Item 16	3.97	.68
Item 17	3.72	.70
Item 18	3.91	.73
Item 19	3.87	.77
Overall mean	3.92	.49

The descriptive statistics in Table 4.17 showed that item 6 (M=4.15, SD=.60) have highest degree of agreement for Metacognitive skills strategy. These indicated that the respondents agreed to use alternative ways to solve a problem and choose the best one for their own Arabic learning progress. Moreover, item 1 (M=4.12, SD=.66), Item 2 (M=4.06, SD=.67), Item 7 (M=4.03, SD=.69) and Item 12 (M=4.00, SD=.66) also got high degree of agreement to use during the participants' Arabic learning. That is to say, the respondents good at strategy planning such as before start a task think about what I really need to learn and try to use strategies that have worked in the past,

regularly to check my comprehension of Arabic learning. However, Item 14 and 11 with medium degree of agreement (M=3.61, SD=.93) (M=3.63, SD=.79). Both items with lowest degree compare with the rest of other items. It is indicated that the participants with medium agreement with Organizing and Self-evaluating strategies such like I think periodically review to help me understand important relationships for Arabic grammar and morphology learning and ask their own questions about how well I am doing while learning something in Arabic language.

4.4.1.1.2   Dimension 2: Time management

The percentage and frequency for dimension of Arabic learners' Time management strategy usage would reported in Table 4.18.

Table 4.18

Percentage and frequency of using Time management in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
Time management	Strongly disagree	13	4.1%
	Disagree	70	22.2%
	Neutral	80	25.3%
	Agree	129	40.6%
	Strongly disagree	25	7.8%
	Total	317	100

As mentioned before, the responders have a low degree of time management strategy use. Table 4.18 clearly answered why the responders with a low degree of time management strategy usage because there are 26.3% responders either disagree or strongly disagree to the statement which is use time management strategy during Arabic learning. In other words, 83 participants are disagree with using time management strategy during their Arabic learning. Unlike, 48.4% of responders agree

or strongly agree with use time management strategy during Arabic learning. It can be indicated that 154 responders use time management strategy in their Arabic learning. Moreover, there are 25.3% responders select Neutral which can be revealed that the participants do not make sense about whether they used time management strategy or not. These could be explained as over 80 participants do not that sure whether they had applied time management strategy or not.

The following will discuss more specifically in Arabic learners time management strategy. Time management strategy comprised of 2 items. The means and standard deviations for all the three items are arranged in Table 4.19.

Table 4. 19

Mean and Standard Deviation for Each of the Items in Time management Dimension (N=317)

Items Time management	Mean	SD
Item 1	2.64	.98
Item 3	2.79	1.07
Overall mean	2.72	.86

As illustrated in Table 4.19, the dimension Time management strategy (M=2.72, SD=.86) with low degree of agreement. In other words, the participants are not good at time management strategy use. Furthermore, Item 1 and Item 2 both are negative items. After transform the items into same value with the other items, Item 1 (M=2.64, SD=.98) and Item 2 (M=2.79 SD=1.06) indicated that the respondents with low time management ability. They are not good at stick to a study schedule for learning Arabic and always don't spend very much time on learning Arabic because of other activities.

4.4.1.1.3   Dimension 3: ES

The percentage and frequency for dimension of Arabic learners' Environmental structuring strategy usage would reported in Table 4.20.

Table 4. 20

Percentage and frequency of using Environmental structuring in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
Environmental structuring	Strongly disagree	9	2.9%
	Disagree	69	21.8%
	Neutral	75	23.7%
	Agree	115	36.2%
	Strongly agree	49	15.4%
	Total	317	100

As shown in Table 4.20, there are 51.6% of participants agree or strongly agree with environmental structuring strategy use. This can be indicated that 164 participants are using environmental structuring strategy in their Arabic learning. However, there are also 24.7% of learners disagree or strongly disagree with environmental structuring strategy use. In other words, there are 78 participants don't use environmental structuring strategy during Arabic learning. Besides, there are 23.7% responders not sure whether they applied environmental structuring during their Arabic learning. It can be indicated that 75 participants may don't know environmental structuring is one of the learning or teaching strategy.

Furthermore, Environmental structuring dimension comprised of 4 items. The means and standard deviations for all the three items are arranged in Table 4.21.

Table 4.21

Mean and Standard Deviation for Each of the Items in Environmental structuring Dimension (N=317)

Items Environmental structuring	Mean	SD
Item 1	3.66	.95
Item 2	3.54	.99
Item 3	3.69	.81
Item 4	3.81	.73
Overall mean	3.58	.52

According to Table 4.21, the dimension Environmental structuring strategy (M=3.58, SD=.52) with medium degree of agreement for usage during Arabic learning. It is indicated the Environmental structuring strategy are not really widespread use by participants. Moreover, Item 4 with highest degree of agreement (M=3.81, SD=.73) which means the participants know what the instructor expects them to learn in Arabic learning and they were influenced by the instructor. However, Item 2 with lowest degree of agreement (M=3.54, SD=.99). It was indicated that the participants with medium agreement in set a regular place set aside for learning Arabic.

4.4.1.1.4   Dimension 4: Persistence

The percentage and frequency for dimension of Arabic learners' Persistence strategy usage would reported in Table 4.22.

Table 4.22

Percentage and frequency of using Persistence in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	17	5.3%
	Disagree	53	16.8%
Persistence	Neutral	62	19.6%

Table 4.22 (*Continued*)

Variables	Characteristics	Frequency	Percent (%)
	Agree	127	40.0%
	Strongly agree	58	18.3%
	Total	317	100

In the view of Table 4.22, 68.3% of participants agree and strongly agree with persistence strategy use. In other words, 185 participants are agree with using persistence strategy during their Arabic learning. However, there are also 22.1% of participants disagree with the usage of persistence strategy. It can be indicated that 70 responders do not use persistence strategy in their Arabic learning. Besides, 19.6% responders do not have sense about whether they promoted persistence strategy. In other words, 62 participants do not know they had applied persistence strategy in their Arabic learning or not. They may even do not know about much about persistence strategy.

For more details, Table 4.23 will reveal more detail about persistence dimension. The dimension was comprised to 3 items. The means and standard deviations for all the three items are arranged in Table 4.23.

Table 4. 23

Mean and Standard Deviation for Each of the Items in Persistence Dimension

Items Persistence	Mean	SD
Item 1	4.17	.75
Item 2	3.89	.90
Item 3	3.57	.96
Overall mean	3.88	.70

The descriptive statistics in Table 4.23 showed that the participants with almost high degree of overall persistence strategy (M=3.88, SD=.70). These indicated that the respondents agreed to use persistence strategy during Arabic learning. Persistence was one of the popular strategies applied by Arabic learners. Besides, Item 1 with high degree of agreement (M=4.17, SD= .75). It indicated the participants are highly agree that they make a special effort to keep concentrating when their mind begins to wander during a learning session for Arabic learning. However, they have a medium degree of agreement in Item 3 (M=3.57, SD=.96) "When I am feeling bored studying for Arabic learning, I force myself to pay attention." In other words, the respondents with medium agreement in force self to pay attention in learning.

4.4.1.1.5   Dimension 5: Help Seeking

The percentage and frequency for dimension of Arabic learners' Help seeking strategy usage would reported in Table 4.24

Table 4. 24

Percentage and frequency of using Help seeking in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	2	0.6%
	Disagree	14	4.4%
Help seeking	Neutral	46	14.5%
	Agree	168	53.1%
	Strongly agree	87	27.4%
	Total	317	100.0%

According to Table 4.24, the responders are quilt genius in help seeking strategy use in Arabic learning. There are 80.5% students are agree or strongly agree

with help seeking strategy use in their Arabic learning. In other words, 255 participants use help seeking strategy in Arabic learning. Besides, there are 5% participants disagree with using help seeking strategy in Arabic leaning. This can be say, 16 responders do not use help seeking strategy in Arabic learning. In addition, there are 14.5% participants do not sure whether they had applied help seeking strategy.

Moreover about help seeking strategy, Table 4.25 will reveal more detail. The dimension of help seeking was comprised to 3 items. The means and standard deviations for all the three items are arranged in Table 4.25.

Table 4. 25

Mean and Standard Deviation for Each of the Items in Help seeking Dimension (N=317)

Items Help seeking	Mean	SD
Item 2	4.25	.64
Item 3	4.24	.58
Overall mean	4.25	.52

The descriptive statistics in Table 4.25 showed that the participants with high degree of overall Help seeking strategy (M=4.25, SD=.52). These indicated that the respondents agreed to use Help seeking strategy during Arabic learning and it is the highest compare with other dimensions of SRLs. On the other hand, Item 2 (M=4.25, SD= .64) and Item 3 (M=4.24, SD= .58) with higher degree than overall mean of help seeking dimension. These indicated the participants are highly agree that they will ask help When they are not sure about some material in Arabic language learning and persistent in getting help from the classmates, instructor or supervisor.

4.4.1.2 Social Media Usage

Descriptive statistic was used to analyze the data collected from 317 Arabic learners in Malaysian universities. The dependent variable, Arabic learners' SMU comprised of two dimensions: formal and informal. First, the mean and standard deviation for each of the Arabic learners' SMU dimensions as well as the overall score of Arabic learners' SMU will be calculated using SPSS. Then, Percentage and frequency for using social media in formal and informal Arabic learning among Arabic learners' be reported. At last, the mean and standard deviation score for each of items of SMU be reported either. As shown from Table 4.26.

Table 4. 26

Mean and Std. Deviation of using social media in Arabic learning among Arabic learners (N=317)

Dimensions social media usage	Mean	SD
SMU formal learning	3.90	.53
SMU informal learning	3.48	.73
Social media usage	3.69	.54

Referring to Table 4.26, the overall Arabic learners' SMU for Arabic learning is 3.69. This could be interpreted as medium level of usage for SMU among Arabic learners. Besides, Arabic learners applied Social media in formal Arabic learning (M=3.91, SD=.54) was in high level, it is higher than the usage of social media in informal Arabic language learning among Arabic learners in Malaysia (M=3.48, SD=.73).

In the following section, Percentage and frequency for each of dimensions based on Arabic learners' SMU would be reported.

The Percentage and frequency for using social media in formal Arabic learning among Arabic learners' will be report in Table 4.27.

Table 4. 27

Percentage and frequency of using social media in formal Arabic learning among Arabic learners (N=317)

Social media usage	Characteristics	Frequency	Percent (%)
	Never	5	1.6%
	Occasionally	34	10.7%
SMU for Formal learning	Uncertain	72	22.6%
	Often	132	41.8%
	Very often	74	23.3%
		317	100

According to Table 4.27, 65.1% of participants are agree or strongly agree with using social media in formal Arabic learning. In other words, 206 participants used social media tools in their formal Arabic learning, such as using Facebook or other social networks tools to discuss about Arabic assignment, search materials from website to complete Arabic learning and so on. Besides, there are 12.3% of participants disagree or strongly disagree with using social media in formal Arabic learning. This can be say, 39 of responders do not use social media for their formal Arabic learning. In addition, there are 22.6% of participants do not sure whether they used social media for formal Arabic learning. This can be indicated 72 participants may do not know whether they used social media for formal Arabic learning or not.

In addition, there are 4 items in the questionnaire to measure Arabic learners' SMU in formal learning. The means and standard deviations for all the three items are arranged in Table 4.28.

Table 4. 28

Mean and Standard Deviation for Each of the Items in SMU formal learning Dimension (N=317)

SMU formal learning	Mean	SD
Item 1	3.77	.89
Item 2	4.01	.79
Item 3	3.82	.77
Item 4	4.33	.61
Overall mean	3.90	.53

As view of Table 4.28, the participants with high level of SMU (M=3.90, SD=.53) in formal Arabic learning. These indicated that participants agree with use social media in formal Arabic learning. In other words, they may frequently use social media to learn Arabic language. In addition to know about participants' SMU in formal Arabic learning, Item 4 with highest level of agreement (M=4.33, SD=.61) which means the responders are highly agree with use social media to search Wikipedia, ResearchGate or related media to complete Arabic course assignment. Besides, Item 2 with highest level of agreement (M=4.01, SD=.79). This indicated they were highly agree with they read Arabic language news or information about current events and polices for Arabic learning purposes.

4.4.1.3.2   Dimension 2: SMU Informal learning

The Percentage and frequency for using social media in informal Arabic learning among Arabic learners' will be report in Table 4.29.

Table 4. 29

Percentage and frequency of using social media in informal Arabic learnin (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Never	16	5.1%
	Occasionally	57	18.0%
SMU informal learning	Uncertain	85	26.9%
	Often	113	35.4%
	Very often	46	14.6%
		317	100

Table 4.29 indicated 50% of participants are agree or strongly agree with using social media in informal Arabic learning. In other words, 159 participants used social media tools in informal Arabic learning, such as listening Quran, Nasheet, Islamic lectures, watching Arabic movies, communicate with Arabic friends using Youtube or any other social media tools. Besides, there are 23.1% of participants disagree or strongly disagree with using social media in informal Arabic learning. This can be say, 73 of responders do not use social media for informal Arabic learning. In addition, there are 26.9% of participants do not sure whether they used social media for informal Arabic learning. This can be indicated 85 participants do not know whether they used social media for informal Arabic learning or not.

Moreover, SMU for informal Arabic learning comprised of 5 items. The means and standard deviations for all the three items are arranged in Table 4.30.

Table 4. 30

Mean and SD for Each of the Items in SMU informal learning Dimension (N=317)

SMU informal learning	Mean	SD
Item 1	4.04	.77
Item 2	3.40	.96
Item 3	3.52	1.03
Item 4	3.04	1.14
Item 5	3.39	1.06
Overall mean	3.48	.73

As view of Table 4.30, the participants with medium level of SMU (M=3.48, SD=.73) in informal Arabic learning. These indicated that participants not really agree with use social media in formal Arabic learning. In other words, they may not really frequently use social media to learn Arabic language. In addition to know about participants' SMU in informal Arabic learning, Item 1 with highest level of agreement (M=4.01, SD=.79). This indicated that even the participants not fully agree with social media use in informal Arabic learning, but they were highly agree with use social media to take material find online like Arabic songs, Nasheed, text or images in Arabic. On the other hand, Item 4 with low level of agreement (M=3.04, SD=1.14). This indicated that the participants not really agree with use social media to communicate with others in Arabic. In other words, the rarely use Arabic to communicate in social media.

4.4.1.3   Motivation

Descriptive statistic was used to analyze the data collected from 317 Arabic learners in Malaysian universities. The dependent variable, Arabic learners' motivation comprised of three dimensions: Self-efficiency, Task Value and Goal orientation. The mean and standard deviation for each of the Arabic learners' motivation dimensions as well as the overall mean of Arabic learners' motivation be calculated using SPSS. The next, percentage and frequency for each of the dimensions based on Arabic learners' motivation would be reported. At last, the mean standard deviation value for each of items motivations would be reported in detail.

The result for each of the motivation dimensions as well as the overall motivation be reported. The results as shown in Table 4.31.

Table 4. 31

Mean and SD of using motivation strategies in Arabic learning (N=317)

Dimensions motivation	Mean	SD
Self-efficiency	3.94	.53
Task Value	4.18	.48
Goal orientation	4.14	.44
Total motivation	4.08	.41

Referring to Table 4.31, the overall degree for Arabic learners' motivation for Arabic learning extent to 4.08. This could be interpreted as high level of motivation among Arabic learners. Furthermore, Task Value is the most frequently strategy used by Arabic learners (M=4.18, SD=.48) which interpreted as high level of Task value strategies usage in Arabic learning. Goal orientation is the second strategy which is

used by Arabic learners (M=4.14, SD=.44) and the next Self-efficiency strategy is used by Arabic learners (M=3.94, SD=.53) in Arabic language learning. All three dimensions of motivation with high level usage by Arabic learners in Malaysia.

In the following section, percentage and frequency for each of the dimensions based on Arabic learners' motivation would be reported.

4.4.1.3.3 Dimension 1: Self-efficacy

The percentage and frequency scores for dimension of Arabic learners' self-efficacy will be reported in Table 4.32.

Table 4. 32

Percentage and frequency forSelf-efficacy in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	4	1.3%
	Disagree	27	8.5%
Self-efficiency	Neutral	78	24.5%
	Agree	133	42.1%
	Strongly agree	75	23.6%
	Total	317	100.0%

In the view of Table 4.32, there are 65.7% students are agree or strongly agree with self-efficacy items in their Arabic learning. In other words, 208 participants with high self-efficacy in Arabic learning. Besides, there are 31% participants disagree or strongly disagree with self-efficacy items in their Arabic learning. This can be say, 31 responders with low self-efficacy in Arabic learning. In addition, there are 24.5% participants do not sure about self-efficacy items. This can be indicated 78 participants do not confidence about themselves in Arabic learning.

Moreover about self-efficacy, Table 4.33 will reveal more detail. The dimension of self-efficacy was comprised to 8 items. The means and standard deviations for all the three items are arranged in Table 4.33.

Table 4. 33

Mean and Standard Deviation for Each of the Items in Self-efficacy Dimension (N=317)

Items self-efficacy	Mean	SD
Item 1	4.01	.76
Item 2	3.54	.89
Item 3	4.02	.69
Item 4	3.56	.85
Item 5	3.91	.72
Item 6	4.33	.59
Item 7	4.01	.73
Item 8	4.18	.66
Overall mean	3.94	.53

The descriptive statistics in Table 4.33 showed that the participants with high degree of overall Self-efficacy (M=3.94, SD=.53). These indicated that the participant with high level of self judgement about how well he/she will be able to perform in Arabic learning. In other words, they believe that they can do it well in Arabic learning. Besides, Item 6 with highest level (M=4.33, SD=.59). It means the participants highly expect to do well in Arabic language course. The following is Item 8 with highest level (M=4.18, SD=.66) which indicated that the responders agree they will do well in this class after considering the difficulty of Arabic language course, the teacher, and his/her skills. On the other hand, Item 2 (M=3.54, SD= .89) and Item 4 (M=3.56, SD= .85) with medium level. These indicated the participants not that confidence in "I'm certain I can understand the most difficult material presented in the readings for Arabic language course" and "I'm confident I can understand the most complex material

presented by the instructor in Arabic language course".

4.4.1.3.4 Dimension 2: Task Value

The percentage and frequency scores for dimension of Arabic learners' Task Value will be reported in Table 4.34.

Table 4. 34

Percentage and frequency for Task Value in Arabic learning (N=317)

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	1	0.3%
	Disagree	10	3.2%
Task Value	Neutral	45	14.1%
	Agree	169	53.4%
	Strongly agree	92	29%
	Total	317	100

As showed in Table 4.34, 82.4% of participants are agree or strongly agree with Task Value items in their Arabic learning. In other words, 261 participants with high Task value in Arabic learning which means the responders are interested in Arabic language, they know why they learn it and what they want to achieved during Arabic learning. Besides, there are 3.5% participants disagree or strongly disagree with task value items in their Arabic learning. This can be say, 11 responders with low Task value level in Arabic learning which can be indicated that they may do not like Arabic language, they may do not know what they want to obtain and they may even do not know why they learn Arabic language. In addition, there are 14.1% participants do not sure about their task value. This can be indicated 45 participants do not sure about their task value in Arabic learning.

Furthermore, this dimension comprised of 6 items. The means and standard deviations for all the three items are arranged in Table 4.35.

Table 4. 35

Mean and Standard Deviation for Each of the Items in Task Value Dimension (N=317)

Items Task Value	Mean	SD
Item 1	4.03	.65
Item 2	4.23	.57
Item 3	4.17	.62
Item 4	4.22	.62
Item 5	4.14	.66
Item 6	4.27	.57
Overall mean	4.18	.48

Result from Table 4.35 showed that the participants with high level of Task Value (M=4.18, SD=.48). These indicated that the participant with high level of interest, usefulness, importance and cost of Arabic learning. In other words, they know the value of Arabic language, they have a great interest in Arabic, they believed that they can overcome whatever they may face during Arabic learning. It worth to mention, all the items in Task value dimension with high level of agreement: Item1 (M=4.03, SD=.65), Item 2 (M=4.23, SD=.57), Item 3 (M=4.17, SD=.62), Item 4 (M=4.22, SD=.62), Item 5 (M=4.14, SD=.66) and Item 6 (M=4.27, SD=.57). Besides, Item 6 with highest level (M=4.27, SD=.57). In other words, the participants highly agreed Understanding the subject matter of Arabic language learning is very important. The following is Item 4 with high level (M=4.22, SD=.617) either which indicated that the responders agree the course material in Arabic language learning is useful to learn.

4.4.1.3.5　　　Dimension 3: Goal orientation

The percentage and frequency scores for dimension of Arabic learners' Task Value will be reported in Table 4.36.

Table 4. 36

Percentage and frequency for Task Value in Arabic learning

Variables	Characteristics	Frequency	Percent (%)
	Strongly disagree	5	1.7%
	Disagree	31	9.7%
Goal orientation	Neutral	66	20.7%
	Agree	128	40.4%
	Strongly agree	87	27.5%
	Total	317	100.0%

According to Table 4.36, 67.9% of participants are agree or strongly agree with Goal orientation items in their Arabic learning. In other words, 215 participants with high Goal orientation in Arabic learning which means the responders know why they learn Arabic language, what they want to achieved at present and in the future during Arabic learning . Besides, there are 11.4% participants disagree or strongly disagree with the items of goal orientation in their Arabic learning. This can be say, 37 responders with low goal orientation level in Arabic learning which can be indicated that they may do not set goals for their Arabic language, they may even do not know why they learn Arabic language. In addition, there are 20.7% of participants do not sure about their goal orientation. This can be indicated 66 participants do not sure about their goals in Arabic learning.

More specifically, goal orientation dimension comprised of 11 items. The means and standard deviations for all the three items are arranged in Table 4.37.

Table 4. 37

Mean and Standard Deviation for Each of the Items in Goal orientation Dimension (N=317)

Items goal orientation	Mean	SD
Item 1	4.01	.72
Item 2	4.23	.64
Item 3	4.13	.79
Item 4	4.32	.69
Item 5	3.94	.94
Item 6	4.24	.72
Item 7	4.45	.62
Item 8	4.21	.77
Item 9	4.25	.74
Overall mean	4.14	.44

In the view of Table 4.37 showed that the participants with high level of goal orientation (M=4.14, SD=.44). These indicated that the participant with clear goals for Arabic learning and they know what they want during Arabic learning. In addition to know about participants' goal orientation, Item 9 with highest level of agreement (M=4.45, SD=.62). This indicated the responders highly agreed they want to do well in Arabic language learning because it is important to show my ability to my family, friends, employer, or others. In other words, the participants are beliefs that good Arabic achievement can prove himself to other specific individuals or groups. The next, Item 6 with high level of agreement also (M=4.32, SD=.69). It indicated the participants agree with The most important thing for them right now is improving my overall grade point average, so my main concern in Arabic language learning is getting a good grade. Moreover, Item 11 also with high level of agreement (M=4.25, SD=.74)

which indicated that participants totally agree with "I want to do well in Arabic language learning because learning Arabic enables me to appreciate Islamic arts, Nasheed and literature". In other words, the purpose of Arabic learning for participants more likely to understand more about their religion Islam.

4.4.2 Test of Hypothesis: H1 (H1a, H1b, H1c), and H2 (H2a, H2b, and H2c): The Differences Between Gender and Levels in SRLs, Motivation and SMU

Inferential statistic was used to analyze the data in this question. The dependent variables, Arabic learners' SRLs, motivation and social media usage, the independent variables are Arabic learners' gender and study levels. First of all, the normality test based on Gender for each of dimensions SRLs, motivation and SMU were conducted through SPSS and reported in the following section.

4.4.2.1 Normality Test for Gender Difference in SRLs, Motivation and SMU

The normality test based on Gender for each of dimensions SRLs were conducted through SPSS and reported in Table 4.38.

Table 4. 38

Value of the Normality Z-value for SRLs in Gender difference

Variables	Gender	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Metacognitive	Male	-2.57	1.42	.02
skills	Female	-.89	1.85	.07
Environmental structuring	Male	4.66	-.19	.01
	Female	.403	-.29	.05

Table 4.38 (*Continued*)

Variables	Gender	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Help seeking	Male	-2.53	1.36	.00
	Female	.77	.10	.18
Persistence	Male	-2.00	4.40	.00
	Female	-1.94	.02	.33
Time management	Male	0.76	.51	.20
	Female	1.16	.64	.07

Table 4.38 indicated that the data female responders' SRLs are normally distributed for univariate normality (skewness and kurtosis values) which is in the range of -2 to +2 (Chua, 2013). However, the data for male responders' Metacognitive skills for male, Persistence, Environmental structuring, and Help seeking are not normally distributed which is out of the range of -2 to +2 (Chua, 2013). To conform the normality of the variables, the Kolmogorov-Smirnov scale was double checked by researcher. As presented in Table 4.38, the value of Kolmogorov -Smirnov are greater than 0.05 for each of female responders' SRLs, and the value of Kolmogorov -Smirnov are less than .05 in Metacognitive skills for male, Persistence, Environmental structuring, and Help seeking. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. Therefore, the researcher treat them as not normal distribute. Thus, can be concluded the data of current case are not normally distributed. In other words, these data are different from normal, then

non-parametric tests Mann-Whitney U Test should be apply to analyze the data in this case.

The following, normality test based on Gender for each of dimensions motivation is conducted through SPSS and reported in Table 4.39.

Table 4. 39

Value of the Normality Z-value for Motivation in gender difference

Variables	Gender	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Self-efficiency	Male	.38	.15	.05
	Female	-1.79	2.00	.45
Task Value	Male	-.65	-.38	.07
	Female	-6.05	5.28	.02
Goal orientation	Male	-1.38	0.69	.12
	Female	-1.78	-.38	.09

Table 4.39 indicated that the data for the variables motivation are normally distributed for univariate normality (skewness and kurtosis values) which is in the range of -2 to +2 (Chua, 2013), except Task value for female skewness and Kurtosis Z score are -6.05 and 5.28. To conform the normality of the variables, the Kolmogorov-Smirnov scale was double checked by researcher. As presented in Table 4.39, the value of Kolmogorov -Smirnov for Task value female is .02 less than 0.05. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. However, for the rest of items are all normally distributed. Thus, can be conducted the data of current case are normally distributed. In other words, these data are not different from normal, Yet, Self-efficiency for male are not normal distributed in

Kolmogorov–Smirnov .01. The research treat it as normally distributed due to skewness and kurtosis values .38, .15 are normally distributed. Therefore, parametric tests Independent Sample T-Test should be apply to analyze the data to analyze gender difference in motivation.

Moreover, the following Table 4.40 will present the normality test for SMU in gender difference.

Table 4. 40

Value of the Normality Z-value for SMU in gender difference

Variables	Gender	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
SMU for formal learning	Male	-1.99	1.52	.14
	Female	-.42	-.05	.10
SMU for informal learning	Male	-1.04	1.01	.99
	Female	.23	1.37	.06
Social media usage	Male	-1.89	1.76	.20
	Female	.43	.25	.08

Table 4.40 indicated that the data for male and females' SMU are normally distributed for univariate normality (skewness and kurtosis values) which is in the range of -2 to +2 (Chua, 2013). To double check the normality of the variables, the Kolmogorov-Smirnov scale was checked by researcher. As presented in Table 4.40, the value of Kolmogorov -Smirnov for each variables are greater than 0.05. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. Thus, can be conducted the data of current case are normally distributed.

In other words, these data are not different from normal. Therefore, parametric tests Independent Sample T-Test should be apply to analyze the data to analyze gender difference in social media usage.

4.4.2.2 **Mann-Whitney U Test for SRLs, Independent Sample T-test for Motivation and SMU Between Male and Female**

Mann-Whitney U Test which is performed to analysis significant difference between male and female in SRLs, the self-regulated leaning strategies comprised of 5 dimensions. Independent sample T-test which is performed to analysis significant difference between gender in SRLs among Arabic learners and its dimensions between Male and Female are arranged in Table 4.41.

Table 4. 41

Mann-Whitney U Test for SRLs between Male and Female

	Gender	Mann-Whitney U	Z	P
Metacognitive skills	Male	6547.000	-1.30	.642
	Female			
Environmental structuring	Male	7031.000	-.449	.654
	Female			
Help seeking	Male	6433.000	-1.48	.139
	Female			
Persistence	Male	6533.000	-1.00	.330
	Female			
Time management	Male	6873.500	-.627	.531
	Female			
Self-regulated learning strategies	Male	6101.000	-.784	.433
	Female			

As shown in Table 4.41, A Mann-Whitney U test was conducted to determine whether there was a difference in SRLs between male and female Arabic learners. Results of that analysis indicated that the usage of SRLs were not significant different between male and female Arabic learners Z= -.784, p>.05. These indicated that male and female Arabic learners with same degree of SRLs agreement. In other words, there is no such difference between male and female in SRLs usage in Arabic learning. More specifically, the table also indicated there are not significant different between male and female learners in each of dimensions SRLs, namely, Metacognitive skills U=6547, p>.05, Environmental structuring U=7031, p>.05, Time management U=6873, p>.05, Persistence U=6533, p>.05 and Help seeking U=6433, p>.05. Therefore, the male and female Arabic leaners with same degree of Metacognitive skills, Environmental structuring, Time management, Persistence and Help seeking strategies use.

In the following section, independent sample test for the difference between gender for each of dimensions Arabic learners' motivation and the overall motivation would be reported. Besides, the mean scores of each of the items for dimension of Arabic learners' motivation and reported in Table 4.42.

Table 4.42

Independent Sample T test for motivation between Male and Female

Variable	Gender	Mean	SD	P
Self-efficiency	Male	3.8671	.58238	.762
	Female	3.9543	.51931	
Task Value	Male	4.1556	.58220	.044
	Female	4.1837	.46184	

Table 4.42 (*Continued*)

Variable	Gender	Mean	SD	P
Goal orientation	Female	4.1837	.46184	
	Male	4.1065	.44974	.971
Motivation	Female	4.1444	.43587	
	Male	4.0461	.46875	.566
	Female	4.0884	.40235	

In the view of Table 4.42, the independent sample test indicated that motivation were not significant different between male (M= 4.05, SD=.469) and female (M= 4.09, SD=.402) Arabic learners in Arabic learning p>.05. These indicated that male and female Arabic learners with same level of motivation. In other words, there is no such different of motivation level between male and female in Arabic learning. More specifically, the table also indicated there are not significant different between male and female learners in dimension Self-efficiency p = .762 and dimension goal orientation p = .971, p>.05. These can be indicated that male and female Arabic learners with almost same high level of Self-efficiency and goal orientation. However, there are significant difference in Task Value, which means Male and female students with difference cognition in the value, interest and importance of Arabic learning. Therefore, the male and female Arabic leaners with same level motivation in total and even two dimensions Self-efficiency and goal orientation, but on the other hand, they are difference in Task Value Male (M= 4.15, SD=.582), Female (M= 4.18, SD=.462) which means female Arabic learners are significant higher than male Arabic learners in Task vale.

In the following section, independent sample test for the difference between gender for each of dimensions Arabic learners' SMU and the overall SMUwould be reported. Besides, the mean scores of each of the items for dimension of Arabic learners' SMU and reported in Table 4.43.

Table 4.43

Independent Sample T test for SMU between Male and Female

Variable	Gender	Mean	SD	P
Social media usage formal learning	Male	3.83	.62	.40
	Female	3.91	.52	
Social media usage informal learning	Male	3.43	.85	.58
	Female	3.49	.71	
Social media usage	Male	3.65	.66	.37
	Female	3.69	.52	

In the view of Table 4.43, the independent sample test indicated that SMU were not significant different between male (M= 3.65, SD=.665) and female (M= 3.69, SD=.520) Arabic learners in Arabic learning p>.05. These indicated that male and female Arabic learners with same degree of SMU in Arabic learning agreement. In other words, there is no such different of SMU between male and female in Arabic learning. More specifically, the table also indicated there are not significant different between male and female learners in each of dimensions motivation formal learning p = .402 and informal learning, p>.05. These can be indicated that male and female Arabic learners with almost same level of agreement of SMU in both formal and informal learning. Therefore, H1 (H1a, H1b, H1c) were rejected.

4.4.2.3 Normality Test for Level difference in SRLs, Motivation and SMU

In the beginning, the normality test based on Level for each of dimensions SRLs, motivation and SMU were conducted through SPSS and reported in Table 4.44.

Table 4.44

Value of the Normality Z-value for Level difference in SRLs

Variable	Year of study	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Metacognitive	1	1.74	-3.30	.00
skills	2	.25	2.83	.02
	3	-2.10	2.38	.00 .01
	4	-.37	2.31	
Environmental	1	1.96	-.12	.05
structuring	2	.68	.46	.06
	3	-.54	-1.32	.05 .08
	4	-.57	-.26	
Help seeking	1	.58	4.02	.00
	2	3.84	.34	.00
	3	-2.49	2.82	.00
	4	.54	-5.46	.00
Persistence	1	-.22	-1.18	.09
	2	-2.80	.43	.00
	3	-3.30	3.86	.00
	4	-1.00	0.03	.06
Time management	1	-4.97	.19	.00
	2	.63	-5.02	.00
	3	-.80	.07	.20
	4	-1.69	.74	.20

Table 4.44 indicated that the data of level difference in SRLs are not normally distributed for univariate normality (skewness and kurtosis values) which is out of the

range of -2 to +2 (Chua, 2013) in Metacognitive skills level three -2.10, 2.38，level one kurtosis -3.30 and level four kurtosis 2.31; Help seeking level three -2.49, 2.82, level one level two skewness 3.84 and Persistence level three -3.30, 3.86. To conform the normality of the variables, the Kolmogorov-Smirnov scale was double checked by researcher. As presented in Table 4.44, the value of Kolmogorov -Smirnov for Metacognitive skills and Help seeking are not normally distributed in four different levels due to values less than .05. Moreover, Persistence level three are not normally distributed either Kolmogorov –Smirnov value less than .05. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. Therefore, it can be concluded the data of current case are not normally distributed. In other words, these data are different from normal, then non-parametric tests Kruskal-Wallis Test would be apply to analyze the data in this case.

Following, normality test of level difference for each of dimensions motivation are conducted through SPSS and reported in Table 4.45.

Table 4.45

Value of the Normality Z-value for Level difference in Motivation

Variable	Level	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Self-efficiency	1	-2.31	3.27	.28
	2	-.35	.85	.00
	3	-1.53	3.34	.09
	4	-.46	-.51	.20

Table 4.45 (*Continued*)

Variable	Level	Skewness (Z)	Kurtosis (Z)	Kolmogorov –Smirnov Sig
Task Value	1	-5.32	11.34	.00
	2	.68	1.82	.00
	3	-1.18	.07	.12
	4	-.87	-.55	.09
Goal orientation	1	-.59	-.12	.00
	2	1.01	.63	.00
	3	.44	-1.12	.00
	4	-2.50	1.44	.09

Table 4.45 indicated that the data of level difference in motivation are not normally distributed for univariate normality (skewness and kurtosis values) which is out of the range of -2 to +2 (Chua, 2013) such as Self-efficiency level one -2.31, 3.27 and level three kurtosis 3.34; Task Value level one -5.32, 11.34 and Goal orientation level four Skewness -2.50. To conform the normality of the variables, the Kolmogorov-Smirnov scale was double checked by researcher. As presented in Table 4.45, the value of Kolmogorov -Smirnov for Self-efficiency level one .28 and level three .09; Task Value level one .00 and Goal orientation level four .09. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. Consider there are few items normal distributed and few more items not normal distributed, these data are different from normal. Therefore, the researcher applied non-parametric tests Kruskal-Wallis Test to analyze the data. Following, normality test of level difference for each of dimensions SMU are conducted through SPSS and reported in Table 4.46.

Table 4.46

Value of the Normality Z-value for Level difference in Social Media Usage

Variable	Levels	Skewness (Z)	Kurtosis (Z)	Kolmogorov – Smirnov Sig
SMU for formal learning	1	.72	-.17	.20
	2	-1.08	.19	.01
	3	-2.00	1.74	.05
	4	.31	.05	.10
SMU for informal learning	1	-.23	.92	.20
	2	.56	1.23	.07
	3	-1.39	2.00	.20
	4	-.39	.39	.20

Table 4.46 indicated that the data for different level students' SMU are normally distributed for univariate normality (skewness and kurtosis values) which is in the range of -2 to +2 (Chua, 2013). To double check the normality of the variables, the Kolmogorov-Smirnov scale was checked by researcher. As presented in Table 4.46 the value of Kolmogorov -Smirnov for each variables are greater than 0.05, except SMU for formal learning level two students .01. According to (Chua, 2012) if the Sig. value of the Kolmogorov-Smirnov Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution. The researcher will treat SMU for formal learning level two as normal distributed due to skewness and kurtosis values both normally distributed. Thus, can be conducted the data of current case are normally distributed. In other words, these data are not different from normal. Therefore, parametric tests ANOVA should be apply to analyze the data to analyze level difference in social media usage.

Kruskal-Wallis Test for SRLs, Motivation and ANOVA for SMU among Arabic learners from different study levels

The self-regulated leaning strategies comprised of 5 dimensions. The Kruskal-Wallis Test for SRLs and its dimensions among Arabic learners from different study levels are arranged in Table 4.47.

Table 4.47

Kruskal Wallis Test for SRLs among Arabic learners different study levels

Variable	Year of study	Mean Rank	df	Chi-Square	P
Metacognitive skills	1	123.27	3	8.68	.03
	2	98.27			
	3	89.96			
	4	119.15			
Environmental structuring	1	108.17	3	5.75	.12
	2	101.03			
	3	94.94			
	4	127.45			
Help seeking	1	102.39	3	10.02	.02
	2	98.97			
	3	102.52			
	4	136.47			
Persistence	1	106.23	3	4.65	.20
	2	99.76			
	3	107.84			
	4	124.53			

Table 4.47 (*Continued*)

Variable	Year of study	Mean Rank	df	Chi-Square	P
Time management	1	115.53	3	4.07	.25
	2	98.11			
	3	110.68			
	4	114.74			
SRLs	1	118.36	3	11.75	.01
	2	96.23			
	3	94.10			
	4	132.97			

In the view of Table 4.47, Kruskal Wallis Test was conducted to examine the differences on Arabic learners' SRLs among level one, level two, level three and level four students. The results were indicated that Arabic learners' SRLs were significant different between level one, level two, level three and level four students (Chi square =11.75, p = .01, df = 3). More specifically, level four students (M=132.97) are much more good at use SRLs compare to level one (M=118.36) and level two (M=96.23). However, level there students (M=94.10) with lowest frequency to use SRLs.

Additionally, the results were also indicated that there are significant difference in Arabic learners' Metacognitive skills p ＜.05 among level one, level two, level three and level four students (Chi square =8.68, p = .03, df = 3). These can be indicated that the Arabic learners with different Metacognitive skills usage within different level of study. Level one students (M=123.27) with highest Metacognitive skills compare to level four (M=119.15) and level two (M=98.67). However, level three students (M=89.96) with lowest motivation level in Arabic language learning. Moreover, help seeking strategies usage are not significant difference in level either, p ＜.05. In other

words, Level four students (M=136.47) with highest Help seeking usage compare to level three (M=102.52) and level one (M=102.39). Besides, Level two students (M=98.97) with lowest help seeking level in Arabic language learning.

At last, the results of Table 4.47 was also indicated that Arabic learners' Environmental structuring (Chi square =5.75, p = .12, df = 3), Persistence (Chi square =4.65, p = .20, df = 3) and time management (Chi square =4.07, p = .25, df = 3) strategies usage are not significant difference in levels, respectively, p>.05. In other words, the four level of Arabic learners with no different Environmental structuring, Persistence and time management strategies usage.

Next, the Kruskal Wallis Test for Motivation among Arabic learners in different study levels will be discussed in the following.

Table 4.48

Kruskal Wallis Test for Motivation among Arabic learners in different study levels

Variable	Year of study	Mean Rank	df	Chi-Square	P
Self-efficiency	1	118.51	3	4.87	.18
	2	97.18			
	3	111.08			
	4	113.30			
Task Value	1	115.26	3	7.30	.06
	2	96.23			
	3	105.70			
	4	125.00			

Table 4.48 (*Continued*)

Variable	Year of study	Mean Rank	df	Chi-Square	P
Goal orientation	1	112.04	3	5.42	.14
	2	97.09			
	3	111.00			
	4	122.68			
Motivation	1	115.83	3	6.98	.73
	2	95.78			
	3	108.50			
	4	123.55			

In the view of Table 4.48 Kruskal Wallis Test was conducted to examine the differences on Arabic learners' motivation among level one, level two, level three and level four students. The finding showed that motivation was no significant different among Arabic learners from different study levels (Chi square =6.98, p = .73, df = 3) p>.05. These indicated that year one, year two, year three and year four Arabic learners with same level of motivation in Arabic learning. Besides, the table also indicated there are no significant different in each of dimensions of motivation: Self-efficiency (Chi square =4.87, p = .18, df = 3), Task Value (Chi square =7.30, p = .06, df = 3) and Goal orientation (Chi square =5.42, p = .14, df = 3) p>.05 which means the level of Self-efficiency, Task Value and Goal orientation are not different among year one, year two, year three and year four Arabic learners.

The following Table 4.49 will indicate the SMU among Arabic learners from different study levels in detail.

Table 4.49

ANOVA for SMU among Arabic learners different study levels

Variables	df	Mean Square	F	Sig.
Formal learning	3	.186	.649	.584
Informal learning	3	.595	1.117	.343
Total social media usage	3	.300	1.021	.384

In the view of Table 4.49, ANOVA Test was conducted to examine the differences on Arabic learners' SMU among level one, level two, level three and level four students. The results were indicated that Arabic learners' SMU was no significant different between level one, level two, level three and level four students. These indicated the participants with same degree of SMU in Arabic learning among different level learners. More specifically, the two dimensions of SMU are not significant difference between level one, level two, level three and level four students. In other words, the Arabic learners' SMU for Arabic learning are not increase or reduce by year of study.

As a conclude, SRLs, SMU and motivation were not significant difference between male, female, and different year of study Arabic learners. Therefore, H2a, was supported, whereas, H2b and H2c were rejected,

4.4.3 Test of H3 (H3a, H3b, and H3c): The correlation between SRLs, Motivation and SMU

Inferential statistic was used to address this research question and Spearman's rho correlation test was performed to examine the relationship between SRLs,

motivation and SMU among Arabic learners in Malaysia. The mean for SRLs, motivation and SMU were compute using SPSS prior to the analysis. Next, the correlation analysis was performed by comparing the means of these two variables. The analysis yield results are presented in Table 4.50.

4.4.3.1 Spearman's rho Correlation between SRLs, Motivation and SMU among Arabic learners in Malaysia

Spearman's rho correlation test was performed to examine the relationship between SRLs, motivation and social media in Table 4.50.

Table 4.50

Spearman's rho Correlation Analysis between SRLs, motivation and SMU

Variable		Motivation	Social media usage
SRLs	Spearman's rho Correlation	.66	.44
	Sig. (2-tailed)	.00	.00

Based on Table 4.50, there is statistically significant positive correlation (r=.66, p<.01) between Arabic learners' SRLs and motivation. Correlation coefficient of r=.66 indicated that the correlation strength between SRLs and motivation is Moderate. On the other hand, Table 4.50 also showed the significant correlation (r=.44, p<.01) between Arabic learners' SRLs and SMU are significant positive correlated. The Correlation coefficient of r=.44 indicated that the correlation strength between SRLs and SMU is weak. Hence, H3a and H3b were supported.

After that, researcher would analyze the relationship between each of the mean SRLs dimensions with the mean of motivation dimensions. The analysis yield results are presented in Table 4.51.

4.4.4.1.1 SRLs and Motivation Dimensions

The researcher analyzed the relationship between mean of SRLs dimensions with the mean of motivation dimensions.

Table 4.51

Spearman's rho Correlation Analysis between SRLs dimensions and motivation dimensions

SRLs dimensions	Motivation			Sig.		
	SE	TV	GO			
	Spearman's rho Correlation					
MS	.63	.49	.46	.00	.00	.00
TM	-.12	-.11	-.09	.09	.11	.21
ES	.47	.44	.42	.00	.00	.00
Persistence	.30	.36	.41	.00	.00	.00
HS	.48	.55	.44	.00	.00	.00

According to Table 4.51, there are four SRLs dimensions Metacognitive skills, Environmental structuring, Persistence and Help seeking were statistically significant and positively correlated with all the three dimensions of Arabic learners motivation at significant level of p<.01. Time management, Persistence and Help seeking dimensions of SRLs demonstrated weak but statistically significant correlation with all the three motivation dimensions, namely, self-efficiency, Task Value and Goal orientation. Moreover, Metacognitive skills dimensions and self-efficiency dimensions (r= .63, p=.00), help seeking dimension and task value dimension (r= .55,

p=.00) with significant positive moderate effect. Furthermore, Time management was negatively but very weak correlated with all the three dimensions of Arabic learners' motivation self-efficiency (r= -.12, p=.09), Task Value (r= -.11, p=.11) and Goal orientation (r= -.09, p=.21).

Furthermore, the r of Metacognitive skills dimension with Task Value and Goal orientation are .49, and .46 respectively, with p-values for all the dimensions equal to .00. Besides, the r of Environmental structuring with self-efficiency, Task Value and Goal orientation are .42, .44 and .42 respectively, with p-values for all the dimensions equal to .00. On the other hand, persistence dimension with self-efficiency (r= .30, p=.00), Task Value (r= .35, p=.00) and Goal orientation (r= .41, p=.00). Help seeking dimension with self-efficiency(r= .48, p=.00) and Goal orientation (r= .44, p=.00) showed weak but statistically significant correlation at the significant level of p<.01.

In conclusion, based on the results in Table 4.51, it can be concluded that there is statistically significant weak and positive correlation between Arabic learners' SRLs dimensions (Metacognitive skills, Environmental structuring, Persistence and Help seeking) and motivation dimensions (self-efficiency, Task Value and Goal orientation). On the other hand, there are very weak negative correlation between Time management dimension with the three dimensions of Arabic learners' motivation self-efficiency, Task Value and Goal orientation.

Following this, researcher would analyze the relationship between each of the mean SRLs dimensions with the mean of SMU dimensions. The analysis yield results are presented in Table 4.52.

4.4.4.1.2   SRLs and SMU Dimensions

The researcher analyzed the relationship between mean of SRLs dimensions with the mean of dimensions SMU among Arabic learners.

Table 4.52

Spearman's rho Correlation Analysis between SRLs dimensions and SMU dimensions

SRLs dimensions	SMU		Sig.	
	Informal	Formal		
	Spearman's rho Correlation			
MS	.54	.39	.00	.00
TM	-.13	-.05	.06	.49
ES	.36	.27	.00	.00
Persistence	.24	.23	.00	.00
HS	.35	.13	.00	.07

Note: SRL= Self-regulated learning strategies; MS= Metacognitive skills; TM = Time management; ES= Environmental structuring; SMU=Social media usage

According to Table 4.52, there are four SRLs dimensions Metacognitive skills (r= .54, p=.00), Environmental structuring (r= .36, p=.00), Persistence (r= .24, p=.00) and Help seeking (r= .35, p=.00) were statistically significant and positively correlated with informal learning dimensions of Arabic learners social media usage. Moreover, there SRLs dimensions Metacognitive skills(r=.39, p=.00), Environmental structuring (r= .27, p=.00), Persistence (r= .23, p=.00) were statistically significant and positively correlated with formal learning dimensions of Arabic learners SMU at significant level of p<.01.

Besides, Time management dimensions of SRLs demonstrated non-significant negative but very weak correlation with all the two SMU dimensions

namely, social media used for informal learning (r= -.13, p=.06) and social media used for formal learning (r= -.05, p=.49). Moreover, Metacognitive skills dimensions and informal dimensions (r= .54, p=.00) with significant positive moderate effect. Furthermore, Environmental structuring (r= .27, p=.00) was positively significant correlated with formal dimensions of Arabic learners' SMU but very weak. Persistence dimension was positively significant correlated with both formal dimension (r= .23, p=.00) and informal dimension (r= .24, p=.00) of Arabic learners' SMU at the significant level of p<.01 but very weak too.

In conclusion, based on the results in Table 4.52, it can be concluded that there is statistically significant very weak and positive correlation between Arabic learners' SRLs dimensions (Persistence) and SMU two dimensions. Environmental structuring with formal dimension. On the other hand, there are weak and positive correlation between Metacognitive skills dimension with the formal dimensions of Arabic learners' social media usage, Environmental structuring and Help seeking dimensions with informal dimension. Besides, there are negative correlation between time management dimension and both SMU dimensions.

4.4.4.1.3 Motivation and SMU Dimensions

The inferential statistic was used to address this research question and Spearman's rho Correlation was performed to examine the relationship between motivation and SMU among Arabic learners in Malaysia.

Table 4.53

Spearman's rho Correlation Analysis between motivation and SMU

Variable		Social media usage
Motivation	Spearman's rho Correlation	.48
	Sig. (2-tailed)	.00

Based on Table 4.53, there is statistically significant positive correlation (r=.48, p<.01) between Arabic learners' motivation and SMU. Correlation coefficient of r=.48 indicated that the correlation strength between SRLs and motivation is weak. Hence, H3c was supported.

After that, researcher would analyze the relationship between each of the mean motivation dimensions with the mean of SMU dimensions. The analysis yield results are presented in Table 4.54.

Table 4.54

Spearman's rho Correlation Analysis between Arabic learners' motivation dimensions and SMU dimensions

Motivation	SMU			Sig.
	Informal		Formal	
	Spearman's rho Correlation			
SE	.48	.35	.00	.00
TV	.34	.22	.00	.00
GO	.40	.24	.00	.00

According to Table 4.54, the three motivation dimensions were statistically significant and week positively correlated with both SMU dimensions at the significant

level of p<.01. The r of self-efficiency dimension with both dimensions SMU formal and informal learning are .48, and .35 respectively, with p-values for all the dimensions equal to .00. Besides, the r of Task Value with both dimensions SMU formal and informal learning are .34 and .22 respectively, with p-values for all the dimensions equal to .00. On the other hand, the r of Goal orientation with both dimensions SMUformal and informal learning are .40, and .24 respectively, with p-values for all the dimensions equal to .00. While, the r of take value and goal orientation dimensions showed very week significant positive correlation with formal dimension. Therefore, the H6 is supported which conducted statistically significant positive correlation between Motivation and SMU.

4.4.4 Test of H4 (H4a, H4b, and H4c): The influence of SRLs, SMU and Motivation on GPA

This research question intended to address the effect of Arabic learners' SRLs, SMU and motivation in their GPA. SRLs, SMU and motivation (independent variable) and GPA (dependent variable) in a model. Smart-PLS 3 was used to perform the analysis in this study. It was utilized to test the effect of SRLs, SMU and motivation in their GPA. As shown in Table 4.55.

Table 4.55

T-statistics of influence of Arabic learners' SRLs, motivation and SMU on GPA

Regression			Estimate	T	P	R^2
Dependent variable		Independent variables	(β)			
GPA	<---	SRL	.20	2.78	.01	.04
GPA	<---	M	.00	.05	.96	
GPA	<---	SMU	.01	.06	.95	

By referring to Table 4.55, SEM analysis with PLS shows that Arabic learners' SRLs t-statistics values are significant effect GPA (β= .20, t= 2.78, p<.05). However, motivation and SMU are not statistically significant influence in GPA p >.05. Moreover, the individual path between SMU -GPA (β= .01, t= 0.06, p>.05) and Motivation-GPA (β= .00, t=.05, p>.05). Besides, the individual path SRLs-GPA R^2=.04. It is interpreted as, at least 4% of Arabic learners' (GPA) was influenced by their SRLs use. Hence, the H4a, H4b, and H4c were not supported.

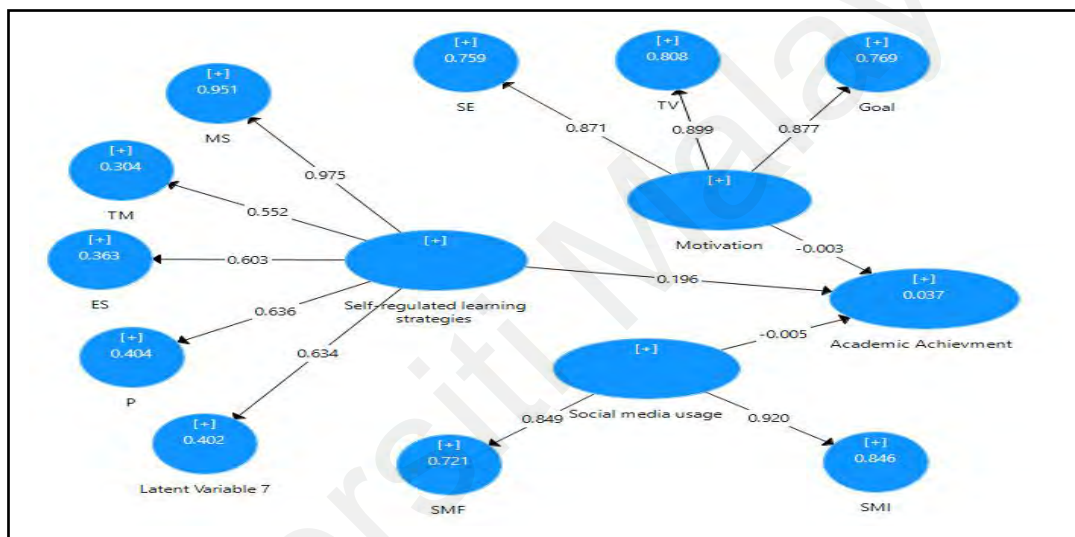*Figure 4.1*. SEM Model for the influence of SRLs, SMU and motivation on GPA

4.4.4.1   SRLs influence Academic Achievement (GPA)

The SEM model for the effect of Arabic learners' self-regulated leaning strategy on their academic achievement (GPA) in Malaysia. SRLs' dimensions (independent variable) and academic achievement (dependent variable) in a model. SmartPLS was applied to perform the analysis. As shown in Table 4.56.

Table 4.56

T-statistics of influence dimensions of Arabic learners' SRLs on GPA

	Regression					
Dependent variable		Independent variables	Estimate (β)	T.	P	R^2
GPA	<---	MS	.14	3.48	.00	.04
GPA	<---	TM	-.09	1.48	.14	
GPA	<---	ES	.02	1.80	.07	
GPA	<---	P	-.03	1.20	.23	
GPA	<---	HS	.11	3.12	.00	.03

By referring to Table 4.56, SEM analysis with PLS showed that t-statistics with values more than 1.96 for individual path between Metacognitive skills and GPA (β= .14, t= 3.48, p <.05) and Help seeking with GPA (β=.18, t= 3.12, p<.05). However, Time management and GPA (β= -.09, t= 1.48, p >.05); Environmental structuring and GPA (β= .02, t= 1.80, p >.05); Persistence and GPA (β= -.03, t= 1.20, p >.05) are not statistically significant influence in academic achievement at the level of p>.05. In other words, Arabic learners Metacognitive skills and Help seeking strategies usage will influence their Academic achievement at least 4% and 3%, respectively. According to Hair et al., (2011), the effect of Arabic learners' Metacognitive skills and Help seeking strategies on academic achievement (GPA) is considered quilt weak. Besides, Time management, Environmental structuring and Persistence strategies will not influence learners' achievement.
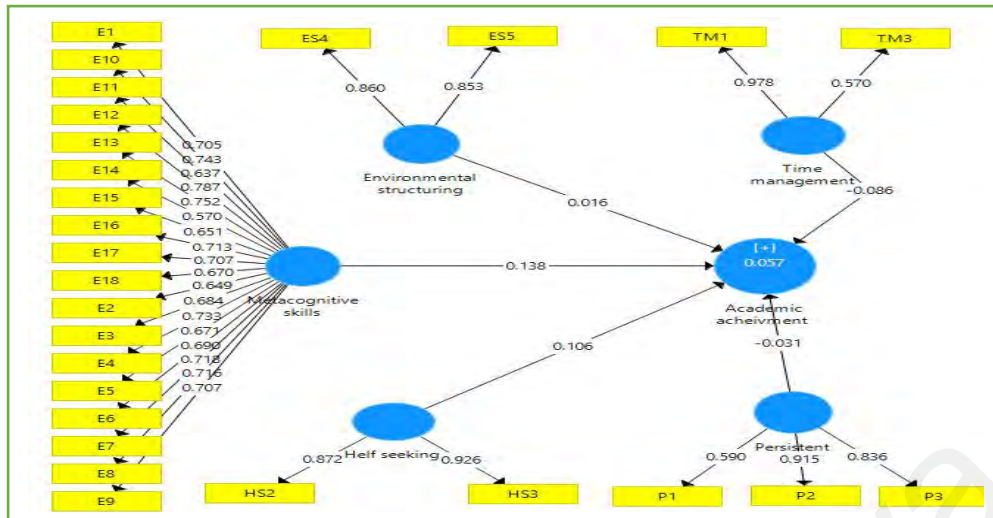
Figure 4.2. SEM Model for the influence of dimensions SRLs on GPA

4.4.4.2   Motivation Influence Academic Achievement

The SEM model for the effect of dimensions Arabic learners' motivation on their academic achievement (GPA) in Malaysia. Motivation's dimensions (independent variable) and academic achievement (dependent variable) in a model. SmartPLS was applied to perform the analysis. As shown in Table 4.57.

Table 4.57

T-statistics of influence dimensions of Motivation on Academic achievement

Dependent variable	Regression	Independent variables	Estimate (β)	T	P	R^2
GPA	<---	SE	.17	3.17	.00	.04
GPA	<---	TV	-.04	.35	.73	
GPA	<---	O	.11	.89	.37	

Note: SE=Self-efficiency; TV= Task Value; O= Goal orientation; GPA= Academic Achievement

By referring to Table 4.57, SEM analysis with PLS shows that t-statistics values for the influence of Arabic learners' dimensions motivation on their academic achievement. The result indicated there are not significant effect between task value

dimension (β=- .04, t= 0.35) and Goal orientation dimension (β= .11, t= .89) on Arabic learners academic achievement p>.05. However, the individual path between Arabic learners' self-efficiency and academic achievement (β= .17, t= 3.17) with significant effect p<.05. By referring to Table 4.57, R square for self-efficiency and academic achievement is equal to .04, it is interpreted as, with the help of self-efficiency, Arabic learner's academic achievement would be maximized to 4%. In other words, a total of 4% Arabic learners' academic achievement is due to their self-efficiency. The effect of Arabic learners' self-efficiency on academic achievement (GPA) is considered quilt weak (Hair et al., 2011).
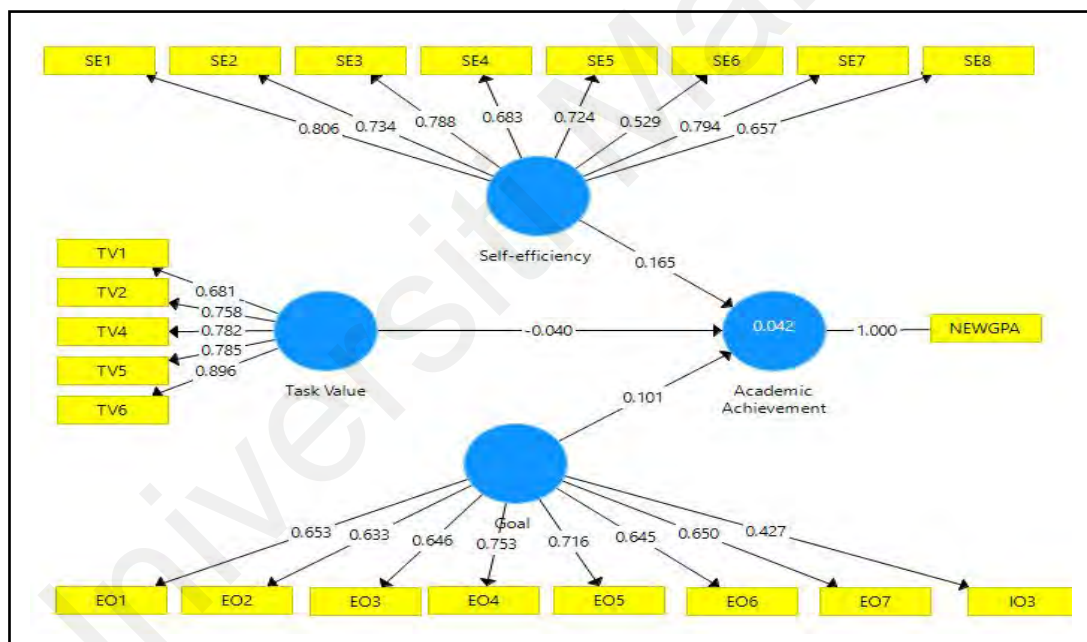
Figure 4.3. SEM Model for the influence of dimensions of Motivation on GPA

4.4.4.3   SMU influence Academic Achievement (GPA)

The SEM model for the effect of dimensions Arabic learners' SMU on their academic achievement (GPA) in Malaysia. SMU dimensions (independent variable) and academic achievement (dependent variable) in a model. SmartPLS was

applied to perform the analysis. As shown in Table 4.58.

Table 4.58

T-statistics of influence dimensions of SMU on academic achievement

Regression			Estimate (β)	T	P
Dependent variable		Independent variables			
GPA	<---	SMI	.19	1.68	.10
GPA	<---	SMF	-.04	.36	.72

Note: SMI=Social media usage for Informal Learning; SMF= Social media usage for Formal Learning; GPA= Academic Achievement

By referring to Table 4.58, SEM analysis with SmartPLS showed that t-statistics values for social media for informal learning and social media for formal learning effect Arabic learners' academic achievement or not. The individual path between social media for informal learning- GPA (β=.19, t= 1.68) and social media for formal learning- GPA (β=-.04, t=.36) with no significant effect p>.05. It is interpreted as, the dimensions of SMU are not significantly effect on academic achievement among Arabic learners in Malaysia.
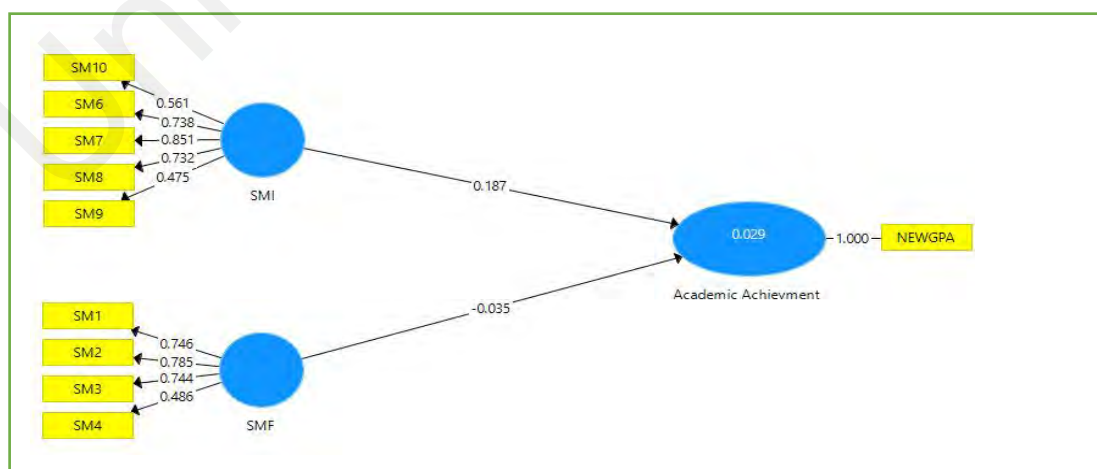
Figure 4.4. SEM Model for the influence of dimensions of SMU on GPA

4.4.5 Test of H5a : Mediating effect of Arabic learners' Motivation on the Relationship among SRLs and SMU

This research question intended to address the effect of motivation as a mediator variable in the relationship between SRLs and SMU in a model. Thus, Structural Equation Modeling (SEM) analysis was used to test the Mediation model with data collected from the target six universities in Malaysia. SmartPLS 3 were used to perform the mediation analysis in current study. Following the guidelines from James et al. (2006) and Wood et al. (2008), we assessed the hypothesised full mediation model based on the following conditions: (1) the independent variable X (SRLs, Social media usage and motivation) has direct effect on the mediators M (SRLs, Social media usage and motivation); (2) the mediators have direct effects on the dependent variable Y (SRLs, Social media usage and motivation); (3) the inclusion of the independent variable adds nothing to the prediction of the dependent variable over that already explained by the mediators (R^2 y.mx is not significantly greater than R^2 y.m); and (4) the mediators add uniquely to the prediction of the dependent variable in relation to the independent variable (R^2 y.mx is significantly greater than R^2 y.x).

The total effect are presented in the following section. T-statistics, standardized regression weight, (β) and R^2 of path coefficients of Arabic learners' SRLs on SMU as shown in Table 4.59.

Table 4.59

T-statistics, Standardized regression weight (β) and R^2 of Path Coefficients of SRLs and social media usage

	Regression		Estimate	T-statistics	R^2
Independe nt variable	Path	Dependent variable	(β)	(Bootstrapping value)	
SMU	<---	SRLs	.55	9.75	.30

Note: SMU=Social Media Usage; SRLs=Self-regulated learning strategies

Based on Table 4.59, it shows that the effect of SRLs to SMU were significant (β= .552, t= 9.75) at the .05 level (p<.05). In other words, there are significant positive effect of participants' SRLs on SMU which can be indicated that whenever participants' self-regulated learning increased, their SMU will be increase. By referring to Table 4.59, R^2 for responders' SMU is equal to .30, it is interpreted as, with the help of SRLs, learners' SMU would be maximized to 30%. In other word, only 30% of learners' SMU is due to SRLs practices. Figure 4.5 illustrated the total effect model of Arabic learners' SRLs on social media usage.
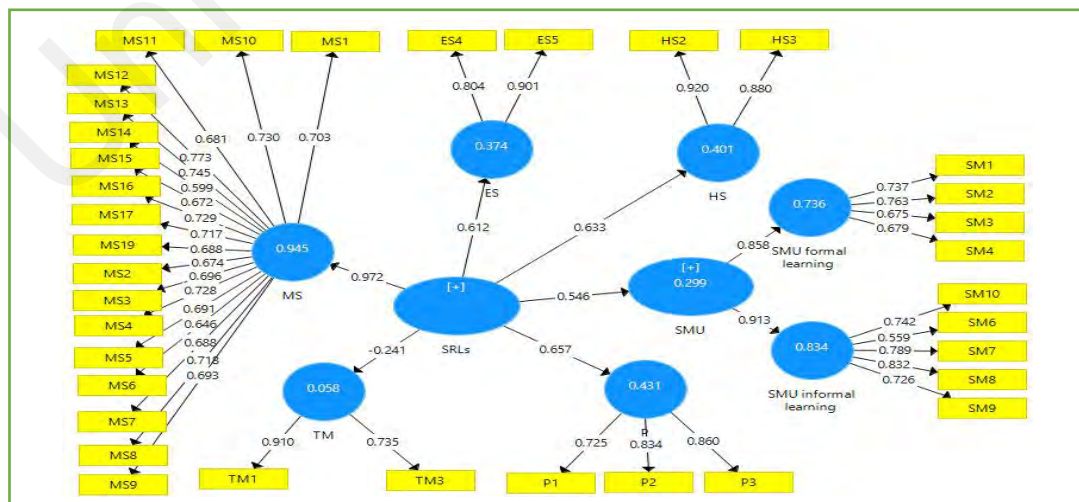
Figure 4.5. The Total Effect Model of Arabic learners' SRLs and SMU

4.4.5.1 **Direct Effect and Mediating Effect of leaners'**
motivation on the Relationship between SRLs and
SMU for Arabic learning

The mediating variable of current study is Arabic learners' motivation is enter into the model and obtained an output as shown in Figure 4.2. In addition, t-statistics, standardized regression weight (β) and R^2 of the relationship between learners' motivation, SMU and SRLs for Arabic learning are as illustrated in Table 4.48.
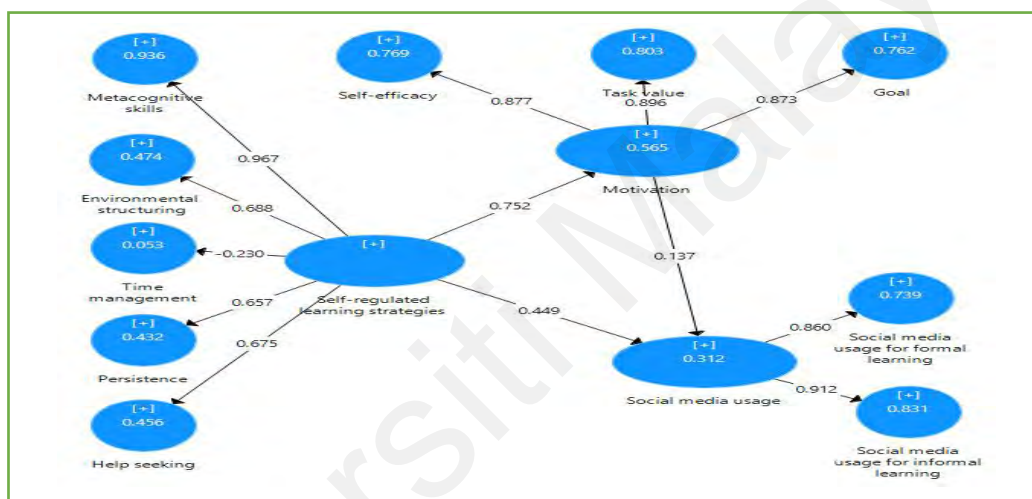
Figure 4.6. Mediation Model for Arabic learners' motivation on the Relationship between SRLs and SMU

Table 4.60

T-statistics, Standardized regression weight (β) and R^2 of the relationship between SRLs, motivation and social media usage

Independent variable	Regression Path	Dependent variable	Estimate (β)	Result	T-statistics	R^2
SRLs		Motivation	.75	Significant	20.52	.57
Motivation		SMU	.14	No significant	1.37	.31
SRLs		SMU	.45	Significant	4.71	.31

Note: SMU=Social Media Usage; SRLs=Self-regulated learning strategies

As shown in Table 4.60, SEM analysis with Smart PLS shows that t-statistics values for the individual path SRLs-Motivation (β= .75, t= 20.52, p<.05) and SRLs-SMU (β= .45, t= 4.71, p<.05) are greater than 1.96 and it is statistically significant. However, Motivation – SMU (β= .14, t= 1.37, p＞.05) yield not statistically significant results at the level of p>.05.

Based Table 4.60 also indicated, R^2 for Arabic learner's SMU is equal to .31, it is interpreted as, with the help of Arabic learners' SRLs and motivation, learners' SMU would be maximized to 31%. In other word, only 31% of SMU for Arabic learning is due to Arabic learners' SRLs practice and motivation level. Moreover, 57% of Arabic learners' motivation is due to learners' SRLs practices.

Table 4.61

Bootstrapping the total indirect effect for SRLs- SMU via motivation

Total indirect effect			Estimate (β)	Result	T-statistics
Independent variable	Path	Dependent variable			
SRLs		SMU	.09	No Significant	1.41

However, by referring to Table 4.61, it indicated there is no significant indirect effect of the relationship between SRLs practice and SMU via Arabic learners' motivation on (β= .09, t= 1.41, p>.05). In other words, Arabic learners' motivation have no statistically significant mediating effect on the relationship between SRLs practice and SMU among Arabic learners. As a result, the H5a is rejected.

4.4.6 Test of H5b: The Mediating effect of Arabic learners' SMU on the relationship among SRLs and Motivation

The total effect are presented in the following section. T-statistics, standardized regression weight, (β) and R^2 of path coefficients of Arabic learners' SRLs on motivation as shown in Table 4.62.

Table 4.62

T-statistics, Standardized regression weight (β) and R^2 of Path Coefficients of SRLs and Motivation

Regression			Estimate (β)	T-statistics (Bootstrapping value)	R^2
Independent variable	Path	Dependent variable			
SRLs		M	.75	19.98	.57

Note: M=Motivation; SRLs=Self-regulated learning strategies

Based on Table 4.62, it shows that the effect of SRLs to motivation were significant (β= .75, t= 19.98) at the .05 level (p<.05). In other words, there are significant positive effect of participants' SRLs on motivation which can be indicated that whenever participants' self-regulated learning increased, their motivation will be increase. By referring to Table 4.62, R^2 for responders' motivation is equal to .57, it is interpreted as, with the help of SRLs, learners' motivation would be maximized to 57%. In other word, 57% of learners' motivation is due to SRLs practices. Figure 4.7 illustrated the total effect model of Arabic learners' SRLs on motivation.
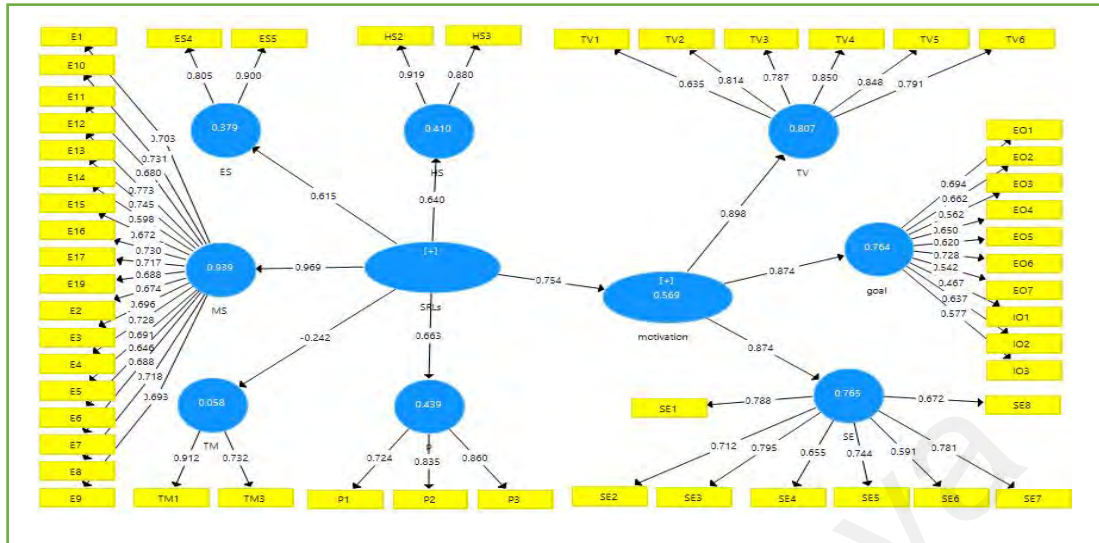
Figure 4.7. The Total Effect Model of Arabic learners' SRLs and motivation

4.4.6.1   Direct Effect and Mediating Effect of leaners' SMU on the relationship between SRLs and Motivation for Arabic learning

Once the significance of the total effect between SRLs and motivation is established, the mediating variable of this study which SMU enters into the model and obtained an output as shown in Figure 4.7. In addition, t-statistics, standardized regression weight (β) and R^2 of the relationship between learners' motivation, SMU and SRLs for Arabic learning are as illustrated in Table 4.48.
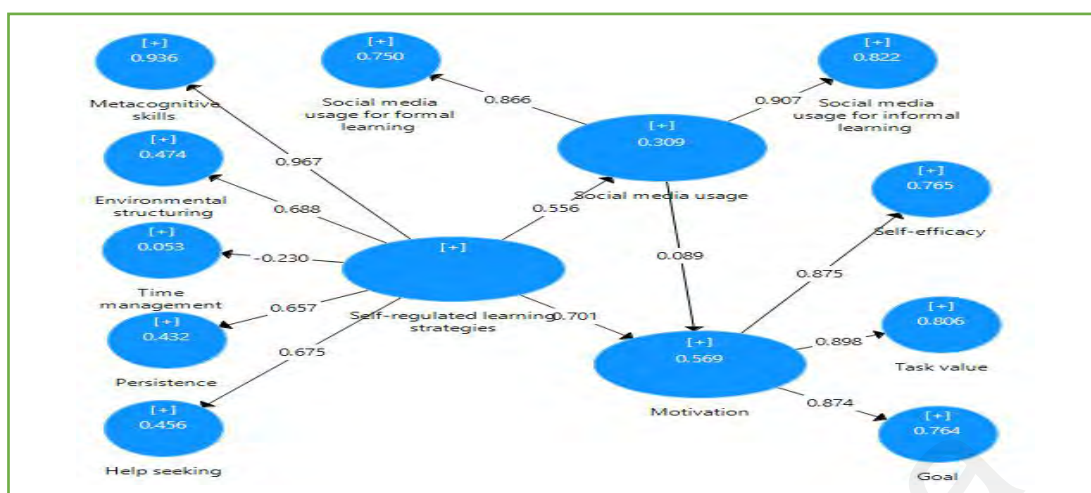
Figure 4.8. Mediation Model for SMU on the Relationship between SRLs and motivation

Table 4.63

T-statistics, Standardized regression weight (β) and R^2 of the relationship between SRLs, motivation and social media usage

Regression			Estimate (β)	Result	T-statistics	R^2
Independent variable	Path	Dependent variable				
SRLs	<---	SMU	.56	Significant	9.67	.31
Motivation	<---	SMU	.09	No significant	1.53	.57
SRLs	<---	Motivation	.70	Significant	13.29	.57

Note: SMU=Social Media Usage; SRLs=Self-regulated learning strategies

As shown in Table 4.63, SEM analysis with Smart PLS shows that t-statistics values for the individual path SRLs- SMU (β= .56, t= 9.67, p<.05) and SRLs-motivation (β= .70, t= 13.29, p<.05) are greater than 1.96 and it is statistically significant. However, Motivation - SMU(β= .09, t= 1.53, p＞.05) yield not statistically significant results at the level of p>.05.

Based Table 4.60 also indicated, R^2 for Arabic learner's SMU is equal to .31, it is interpreted as, with the help of Arabic learners' SRLs and motivation, learners' SMU would be maximized to 31%. In other word, only 31% of SMU for Arabic learning is due to Arabic learners' SRLs practice and motivation level. Moreover, 57% of Arabic learners' motivation is due to learners' SRLs practices.

To decide the significant indirect effect for SRLs- motivation via social media usage, Bootstrapping applied in the following.

Table 4.64

Bootstrapping the total indirect effect for SRLs- motivation via social media usage

Total indirect effect			Estimate (β)	Result	T-statistics
Independent variable	Path	Dependent variable			
SRLs	<---	Motivation	.05	No Significant	1.46

Note: SRLs=Self-regulated learning strategies

However, by referring to Table 4.64, it indicated there is no significant indirect effect of the relationship between SRLs practice and motivation via Arabic learners' SMU (β= .05, t= 1.46, p>.05). In other words, Arabic learners' SMU has no statistically significant mediating effect on the relationship between SRLs practice and motivation among Arabic learners. Therefore, the H5b is not supported.

4.4.7 H5c: The Mediating Effect of Arabic learners' SRLs on the Relationship among SMU and Motivation

This research question committed to address the effect of SRLs as a mediating variable in the relationship between SMU and motivation in a model. Thus, Structural Equation Modeling (SEM) analysis was used to test the Mediation model with data

collected from the target six universities in Malaysia. The total mediation effect are presented in the following Table 4.67.

In the beginning, total effect of motivation to SMU are presented in the following section. T-statistics, standardized regression weight, (β) and R^2 of path coefficients of Arabic learners' SRLs on SMU as shown in Table 4.65.

Table 4.65

T-statistics, Standardized regression weight (β) and R^2 of Path Coefficients of motivation and SMU

Regression			Estimate (β)	T-statistics (Bootstrapping value)	R^2
Dependent variable	Path	Independent variable			
SMU		M	.48	7.45	.23

Note: M=Motivation; SRLs=Self-regulated learning strategies

Based on Table 4.65, it shows that the effect of SMUto motivation were significant (β= .48, t= 7.45) at the .05 level (p<.05). In other words, there are significant positive effect of participants' SMU on motivation which can be indicated that whenever participants' SMU increased, their motivation will be increase. By referring to Table 4.62, R^2 for responders' motivation is equal to .23, it is interpreted as, with the help of SRLs, learners' motivation would be maximized to 23%. In other word, only 23% of learners' motivation is due to social media usage. Figure 4.8 illustrated the total effect model of Arabic learners' SMU on motivation.
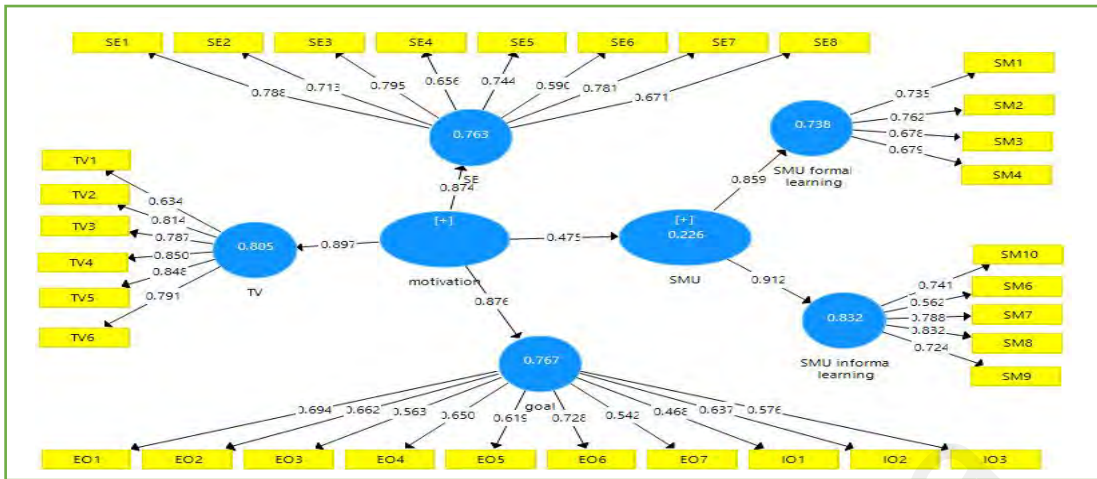
Figure 4.9. The Total Effect Model of Arabic learners' SRLs and motivation

4.4.7.1 Direct Effect and Mediating Effect of leaners' SRLs on the relationship between SMU and Motivation for Arabic learning

Once the significance of the total effect between SMU and motivation is established, the mediating variable of this study which SMU enters into the model and obtained an output as shown in Figure 4.9. In addition, t-statistics, standardized regression weight (β) and R^2 of the relationship between learners' motivation, SMU and SRLs for Arabic learning are as illustrated in Table 4.66.
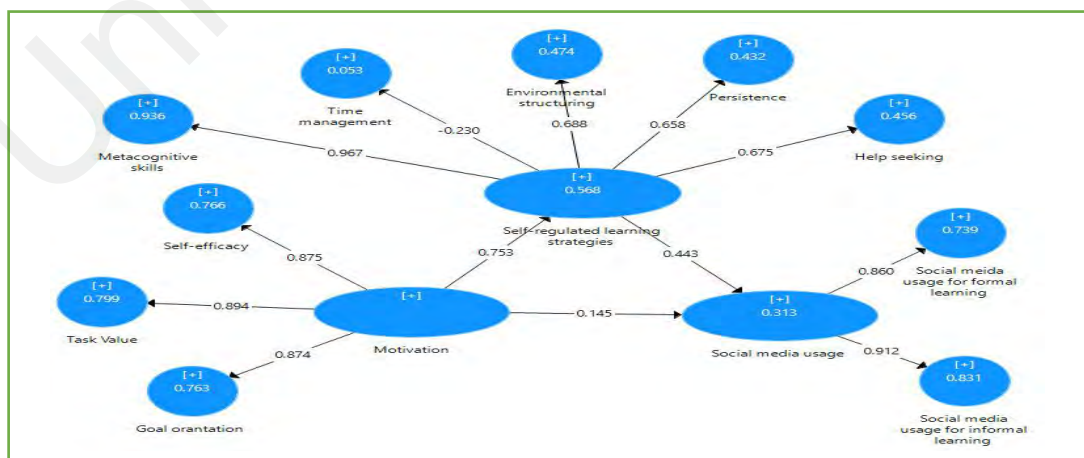
Figure 4.10. Mediation Model for SRLs on the Relationship between Motivation and SMU

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Table 4.66

T-statistics, Standardized regression weight (β) and R^2 of the relationship between SRLs, motivation and SMU

Regression			Estimate (β)	Result	T-statistics	R^2
Independent variable	Path	Dependent variable				
SRLs	<---	Motivation	.75	Significant	19.29	.57
SMU	<---	SRLs	.44	Significant	5.13	.31
SMU	<---	Motivation	.15	No Significant	1.51	.31

Note: SMU=Social Media Usage; SRLs=Self-regulated learning strategies

As shown in Table 4.66, SEM analysis with Smart PLS shows that t-statistics values for the individual path Motivation-SRLs (β= .75, t= 19.27, p<.05), SRLs-SMU(β= .43, t= 5.13, p<.05) are greater than 1.96 and it is statistically significant. However, Motivation - SMU(β= .15, t= 1.51, p＞.05) are less than 1.96 and it is not statistically significant.

Based Table 4.66 also indicated, R^2 for Arabic learner's SRLs is equal to .57, it is interpreted as, with the help of Arabic learners' SMU and motivation, learners' SRLs would be maximized to 57%. In other word, 57% of SRLs for Arabic learning is due to Arabic learners' SMU and motivation level. Moreover, 31% of Arabic learners' SMU is due to learners' motivation.

To decide the significant indirect effect for SRLs-motivation via social media usage, Bootstrapping applied in the following.

Table 4.67

Bootstrapping the total indirect effect for SMU- motivation via SRLs

Total indirect effect			Estimate (β)	Result	T-statistics
Independent variable	Path	Dependent variable			
SMU	<---	M	.33	Significant	4.54

Note: SMU=Social Media Usage; M=Motivation

In the view of Table 4.67, it indicated there is significant indirect effect of the relationship between SMU and motivation via Arabic learners' SRLs (β= .33, t= 4.54, p<.05). In other words, Arabic learners' SRLs practice has statistically significant mediating effect on the relationship between SMU and motivation in Arabic learning. Hence, as a result, the H5c is supported. As summarized result of all the research Hypothesis in Table 4.68.

Table 4.68

Results of research Hypothesis

	Hypothesis of the study	Test result
H1a	SRLs are significant difference between gender	Rejected
H1b	SMU are significant difference between gender	Rejected
H1c	Motivation are significant difference between gender	Rejected
H2a	SRLs are significant difference among different year of study	supported
H2b	SMU are significant difference among different year of study	Rejected
H2c	Motivation are significant difference among different year of study	Rejected
H3a	SRLs are significant correlated to motivation among Arabic learners in Malaysian Public Universities.	Supported
H3b	SMU are significant correlated to motivation among Arabic learners in Malaysian Public Universities.	Supported
H3c	Motivation are significant correlated to SMU among Arabic learners in Malaysian Public Universities.	Supported

Table 4.68 (*Continued*)

	Hypothesis of the study	Test result
H4a	Self-regulated learning strategies (SRLs) are significant influnce in academic achievement (GPA) among Arabic learners in Malaysian Public Universities.	Rejected
H4b	Social media usage (SMU) are significant influnce in academic achievement (GPA) among Arabic learners in Malaysian Public Universities.	Rejected
H4c	Motivation is significant influnce in academic achievement (GPA) among Arabic learners in Malaysian Public Universities.	Rejected
H5a	Motivation is significant mediator on the relationship between Self-regulated learning strategies (SRLs) and Social media usage (SMU) in Malaysian Public Universities.	Rejected
H5b	Social media usage (SMU) is significant mediator on the relationship between Self-regulated learning strategies (SRLs) and motivation in Malaysian Public Universities.	Rejected
H5c	Self-regulated learning strategies (SRLs) is significant mediator on the relationship between motivation and Social media usage (SMU) in Malaysian Public Universities.	Supported

4.5 Summary

This chapter presents the findings of the data collected from 317 Malay Arabic learners in Malaysian universities both descriptive and inferential statistics were used to analyze the data collected in order to answer the twelve research questions proposed for this study. The findings for each of the research questions are summarized in Table 4.69.

Table 4.69

Summary of Research Findings

NO.	Research questions	Research Findings
1	What extend Arabic learners' SRLs, SMU and motivation on Arabic learning in Malaysian universities?	The overall mean of Arabic learners using SRLs and SMU for Arabic learning is medium level and a high level of motivation.
2	Are there any significant difference between gender among self-regulated strategies, motivation and social media usage in Malaysia?	The usage of SRLs, motivation and SMU were **not significant** different between gender in Arabic learning.
3	Are there any significant difference between years of study among self-regulated strategies, motivation and social media usage in Malaysia?	The usage of SRL **were significant** different between level one, level two, level three and level four students. However, motivation and SMU were **not significant** different between different level Arabic learners in Arabic learning.
4	Does SRLs, motivation and social media usage significantly correlated to each other among Arabic learners in Malaysia?	There are **statistically significant positive correlation** between: Arabic learners' self-regulated learning strategies, SMU and motivation.
5	What extent SRLs, SMU and motivation influence academic achievement on Arabic learning in Malaysia universities?	There is **significant effect** of Arabic learners SRLs on GPA. However, there is no significant effect of motivation and social media usage on GPA.
6	Are there any mediating effect of Arabic learners' motivation on the relationship among self-regulated and SMU in universities?	Motivation is **not a significant mediator** of the relationship between Arabic learners' SRLs and social media usage.
7	Are there any mediating effect of Arabic learners' SMU on the relationship between self-regulated and motivation in universities?	SMU is **not a significant mediator** of the relationship between Arabic learners' SRLs and motivation.
8	Are there any mediating effect of Arabic learners' self-regulated learning strategies on the relationship among motivation and SMU in universities?	SRLs are **significant mediator** of the relationship between Arabic learners' motivation and social media usage.

The findings summarized above provide the basis for the discussions of findings in Chapter 5 that will include a brief review of the findings, a discussion of the findings, and the conclusions that can be made from the findings.

CHAPTER 5

DISCUSSIONS OF FINDINGS

5.1 Introduction

This chapter first presents a summary of this study. The discussion on the findings of

the study, supported by relevant literature and interpreted from the data analysis results

in Chapter Four, is presented. The discussions are based on the objectives of the study

outlined in Chapter One.

5.2 Summary of the Study

This study was framed under seven research questions. The core objective of this study

is to investigate the relationship between SRLs, motivation, SMU and their influence

in Arabic language learner's academic achievement in Malaysia. Thus, Arabic

language learners' SRLs, motivation and SMU were measured and the relationship

among these variables in Malaysia was identified. The major findings of this study are

summarised according to the research questions and are presented in Chapter Four

(refer to Table 4.68). Discussions on the results of the study based on each of the

research questions are presented in the next section.

5.3 Discussions

This study investigated the influence of SRLs, motivation and SMU in Arabic

language learner's academic achievement (GPA) and the relationships among these

variables in Malaysian universities. By referring to the seven research objectives as

described above, seven research questions were proposed. Results of the data analysis

reported in Chapter Four were presented based on each proposed research questions in Chapter One. Similarly, the following sections in this chapter will provide a discussion of the findings based on each of the research questions highlighted in Chapter One and supported by relevant literature in Chapter Two. The discussions are intended to provide answers to the research questions proposed and to achieve the research objectives of this study.

5.3.1   The level of SRLs, SMU and Motivation

The following sections will provide a discussion about the degree of SRLs, SMU and motivation on Arabic language learning among Arabic language learners in Malaysian public universities.

5.3.1.1   The Degree of SRLs

SRLs has gained a lot of attention in the foreign language teaching and learning field over the last few decades. As stated by Pintrich (1995), self-regulation is not a personality trait. Students can control their behaviours and improve their academic learning and performance. They learn self-regulation through experience and self-reflection (Zimmerman, 1998). According to Zimmerman & Martinez-Pons (1986), students' effectiveness in planning and controlling their use of personal, behavioural, and environmental strategies to learn is one of the most visible signs of their degree of self-regulation.

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┌─────────────────────────────────────┐
│  The Degree of Self-regulated learning strategies  │
│         used by Arabic learners                     │
└─────────────────────────────────────┘
```

| Help seeking | Persistence | Metacognitive skill | Environment al structuring | Time management |
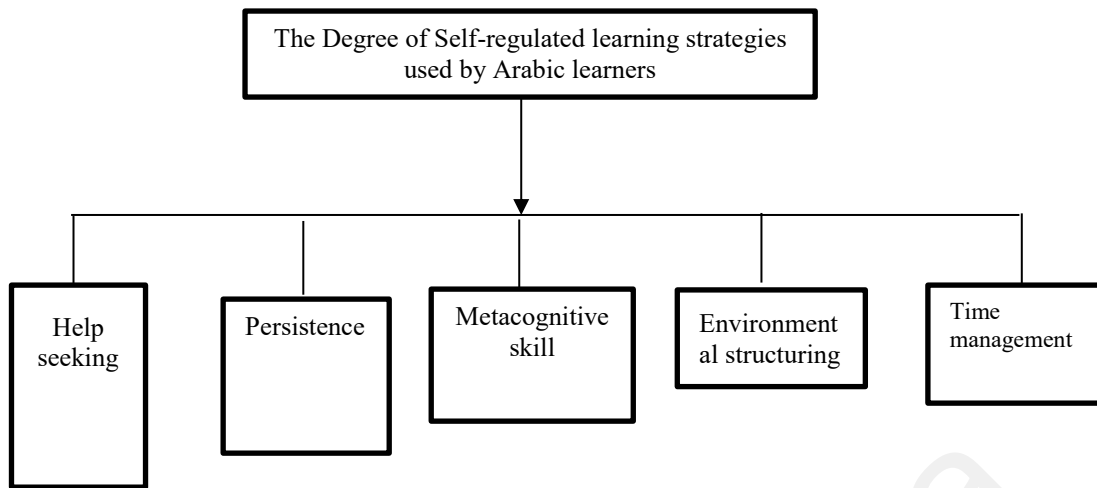
Figure 5.1. The Degree of Self-regulated learning strategies used by Arabic learners

Through analysis in this study, the Arabic language learners showed a medium degree SRLs usage. In other words, the Arabic language learners in Malaysian university have a moderate level of SRLs usage. Similarly, other researchers (Puteh and Ibrahim, 2010; Hashemyolia el at., 2015) & Seker, 2016) found that the respondents to have a medium degree of SRLs usage. However, the findings were inconsistent with Yazid (2017), which reported the Arabic language learners had a high SRLs usage.

As mentioned before, Self-Regulated Learners are distinguished by their awareness of strategic relations between regulatory processes or responses, learning outcomes, their use of these strategies to achieve their academic goals, systematic use of metacognitive, motivational, and behavioural strategies (Zimmerman, 1989). Thus, the following dimensions were used to analyse SRLs usage more specifically. This finding is also an excellent indicator of that these students still have room for improvement in terms of SRLs usage in these three dimensions, namely persistence strategy, environmental structuring strategy, and time management strategy, as displayed in Figure 5.1.

Help-seeking was the most frequent strategy used by Arabic language learners, which could be interpreted as highly used in Arabic language learning. In other words, almost all Arabic language learners used help-seeking strategy for their Arabic language learning strategy. The learners are quite good in efforts to solicit help from a peer, teacher, and adults; library, internet, etc. When they believed that they are not sure about some material in Arabic language learning, they checked them with other people. In addition, the result of the current study also indicates that 15 respondents do not use help-seeking strategy in Arabic language learning and 46 respondents are not sure whether they had applied help-seeking strategy. The reason behind this could be that some of the students consider help-seeking as a negative word because it exhibits his/her weakness to others. Another reason could be that the respondents do not know help-seeking strategy as well. On the other hand, the respondents may have misunderstood the statement and marked the wrong answer. Some self-regulatory researchers (Karabenick and Knapp, 1991; Newman, 1994, 2008; Zimmerman, 2008), suggest that students who seek help when necessary are more likely to use other strategies as well. Under these conditions, metacognitive skills are personally directed forms of learning which can be divided into task analysis, strategy selection and self-monitoring, which have high usage among Arabic language learners. This finding was similar to those by Mahmoodi el at. (2014) and Öz (2016), which found that metacognitive skills were highly applied by learners. Moreover, there are 4 items of metacognitive skills with a high agreement, which are "I think of alternative ways to solve a problem and choose the best one for Arabic language learning" (related to strategy selection), "I think about what I really need to learn before I begin a task in Arabic language learning" (related to task analysis) and "I ask myself questions about what I am to study before I begin to learn for Arabic language learning. I find myself

pausing regularly to check my comprehension of Arabic language learning" (related to self-monitoring). This finding supports other earlier findings (Karabenick and Knapp, 1991; Newman, 1994, 2008; Zimmerman, 2008) that students who seek help when necessary are more likely to use metacognitive skills.

Environmental structuring strategy used by learners in Arabic language learning showed a medium level of mean. It also indicates the environmental structuring strategy is not widely used by respondents. Moreover, Item 4 has the highest degree of agreement, which means the respondents know what the instructor expects them to learn in Arabic language learning and they were influenced by the instructor. However, Item 2 has the lowest degree of agreement. It indicates that the respondents with a medium agreement with setting a regular place set aside for learning the Arabic language. More specifically, 164 respondents agree or strongly agree with environmental structuring strategy use, and 78 learners do not use environmental structuring strategy use. Besides, 75 respondents are not sure whether they applied environmental structuring during their Arabic language learning. The reason for this is likely due to some of the respondents not knowing that environmental structuring could influence their learning. The environmental structuring strategy is not something Arabic language learners in Malaysia are familiar with. This result does not agree with findings of previous studies (Karabenick and Knapp, 1991; Newman, 1994, 2008; Zimmerman, 2008) that suggest students who seek help when necessary are more likely to use other strategies.

Furthermore, persistence strategy used by learners in Arabic language learning showed a medium level of mean. This indicates that the respondents agreed to use persistence strategy during Arabic language learning. Persistence is one of the popular strategies applied by Arabic language learners. Most respondents agree and strongly

agree with persistence strategy use. Item 1 has a high degree of agreement. It indicates the respondents highly agree that they make a special effort to keep concentrating when their mind begins to wander during a learning session for Arabic language learning. However, they have a medium degree of agreement in Item 3, "When I am feeling bored studying for Arabic language learning, I force myself to pay attention." In other words, the respondents have a medium agreement in forcing themselves to pay attention while learning. However, there are still 70 respondents do not apply persistence strategy and 62 respondents do not know they had applied persistence strategy in their Arabic language learning or not. They may even do not know much about persistence strategy. This result reinforces the findings of earlier studies (Karabenick and Knapp, 1991; Newman, 1994, 2008; Zimmerman, 2008) that students who seek help when necessary are more likely to use persistence strategy.

Finally, time management strategy showed a low level of usage among Arabic language learners in Malaysia. Only 153 of responders agree or strongly agree with use time management strategy during Arabic language learning. In comparison to other strategies used by learners, time management strategy has the lowest degree of usage by the Arabic language learners. In other words, the learners lack time management skill. Besides, the learners agree that they find it hard to stick to a study schedule for learning Arabic language and they often find that they do not spend very much time on learning the Arabic language due to other activities. This result is consistent with the findings by Mahmoodi et al. (2014). They are not good at planning their time to improve their learning. This result also does not agree with the findings of earlier studies (Karabenick and Knapp, 1991; Newman, 1994, 2008; Zimmerman, 2008) that students who seek help when necessary are more likely to use other strategies. Arabic

language learners seek help when necessary in their study, but they could not manage their study time well.

5.3.1.2   The Level of Motivation

Motivation is a type of internal drive for action that encourages a learner to pursue Arabic language learning. Moreover, in this study, motivation could be the one driving force that sustains the self-regulated learning process over the long and challenging years it takes to learn the Arabic language. According to Schunk and Zimmerman (2012), "Although SRL interventions produced successful outcomes in classroom settings, they often failed to sustain students' use of these processes in less-structured environments." Therefore, this limitation has led researchers to focus on students' sources of motivation to self-regulate. The past studies by Dörnyei, (2001); Daniela (2015); Mahmoodi and Ghaslani (2014); Öz (2015, 2016) have discovered that motivation will assist the self-regulated learning process and facilitate successful language learners. However, there are also studies such as Cetin (2015) which reported that there is no correlation between academic achievement, academic motivation and academic self-regulation learning.
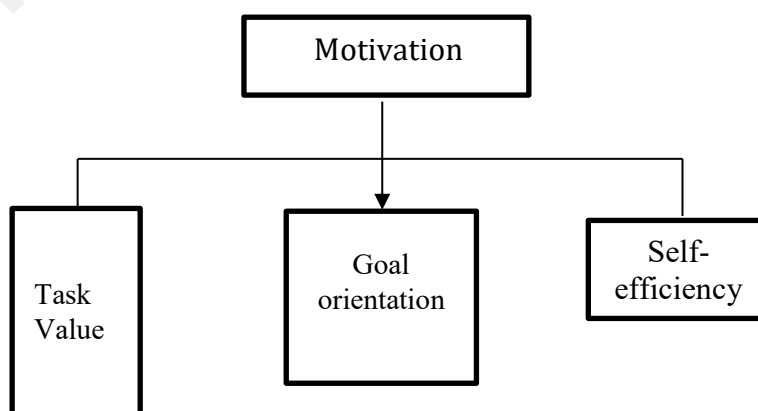

Figure 5.2. The level of Motivation

The analysis of the current study reported the level of Arabic language learners' motivation for Arabic language learning extent was 4.08, which could be interpreted as a high level of motivation. In other words, the Arabic language learners in Malaysian universities have a high motivation for Arabic language learning. The finding differs from Xuan et al. (2015) which reported the Arabic language learners in China posses a medium level of motivation. Moreover, Task Value scored the highest level among the Arabic language learners, followed by Goal orientation as the second highest level and Self-efficiency as the third. The study's respondents scored high in all three dimensions of motivation, with Task Value being the highest scored dimensions. As shown in Figure 5.2, 261 respondents showed high Task value in Arabic language learning, i.e. learners' perception that the task will be useful to meet some future goal. This means that the responders are interested in the Arabic language, they know why they learn it and what they want to achieve during Arabic language learning. The learners also know how important Arabic language is for them, their interest in it and also the value of the language itself. As mentioned before, the Arabic language is studied as a foreign language in Malaysia. The ultimate aim of learning the language is to understand the holy Quran and Hadith or for job opportunities (Zubairi & Sarudin, 2009).

Goal orientations are the goals for Arabic learners whether they focus are on mastery and learning of Arabic language, grades or extrinsic reasons for doing the task, or relative ability concerning social comparisons with other students. Arabic language learners with a high level of Goal orientation have these beliefs. 215 respondents showed high Goal orientation in Arabic learning, which means they know why they learn the Arabic language, what they want to achieve at present and in the future during Arabic learning. Furthermore, the learners highly agree that they want to do well in

Arabic language learning because it is important to show their ability to their family, friends, employer, or others. In other words, the respondents believe that good Arabic language acquisition can prove one's worth to other specific individuals or groups. The respondents also highly agree with the most important thing for them right now is improving their overall grade point average, so their main concern in Arabic language learning is getting a good grade.

Finally, the Arabic language learners demonstrated a high level of self-efficiency as well. The result in Chapter Four indicates that 208 out of 317 respondents have a high self-efficacy in Arabic language learning, suggesting that they have a high level of self-judgement about how well they will be able to perform in Arabic language learning. In other words, they believe that they can do well in their learning. The Arabic language learners understand that the Arabic language will be useful for some future goal. They also understand how much they interested in it and when they know what they want to achieve from Arabic learning, then they set their own Arabic learning goals. They even know how well they can be achieved in their Arabic language learning. Öz (2016) concluded that metacognitive training can motivate students to improve their metacognitive knowledge and strategy use in learning a second language.

5.3.1.3 Social Media Usage

Currently, social media, such as Facebook, Youtube, Wiki, Twitter, Blog and so on has widely applied for language learning purposes in universities (Kaplan & Haenlein, 2010). The learning environment of the university itself is a social system of individuals' interacting within a shared academic context (Lin & Anol,

2008; Bernikova & Redkin, 2017) whether it is formal learning or informal learning. Many past studies have been shown that motivation is one of the essential factor influences SRL and motivational processes play an important role in initiating, guiding, and sustaining students effort to self- regulate their learning (Schunk & Zimmerman, 2012; Dörnyei, 2001; Daniela, 2015; Mahmoodi & Ghaslani, 2014; Öz 2015; Öz, 2016). However, what leads to self-enhancing cycles of SRL and motivation rather than conflicting, self-defeating cycles? Social media usage (SMU) in the current study exist as a lubricant to promote the relation of motivation and self-regulated learning in positive cycles. SMU and practices of self-regulated learning act as a kind of "natural alliance" in the current study (Matzat & Vrieling, 2016).
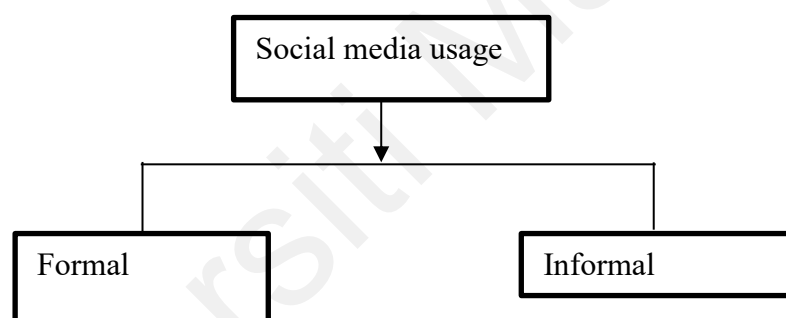
Figure 5.3. The degree of SMU in Arabic learning

The result of the current study shows that Arabic language learners' SMU for Arabic language learning is of medium level. More specifically, Arabic language learners' level of applied social media in formal Arabic language learning was high, and it is higher than the usage of social media in informal Arabic language learning. In other words, even when they are frequent users of social media, the university Arabic language learners tend not to use these tools to regulate their learning process. The result is inconsistent with Dabbagh and Kitsantas (2012), which stated that social media have the potential to support the promotion of informal learning. In view of

social media for formal Arabic, even when they are frequent users of social media, learning, only 206 over 317 respondents used social media tools in their formal Arabic language learning, using Facebook or other social networks tools to discuss Arabic assignments, search materials from the website to complete Arabic learning, and so on. This indicates that a large number of Arabic language learners in Malaysia frequently use social media in their study. However, some do not use social media for formal Arabic language learning. The reason might be the learners are coming from a different state, and many states still use traditional teaching and learning methods, such as focus in grammar (نحو وصرف), teaching sentence by sentence and sit in a circle or any reference refer to books only. These may cause the learners to become weak in SMU and they may not know that they can use social media to process their learning. In addition, 159 respondents use social media tools in informal Arabic learning, such as listening Quran, Nasheed, Islamic lectures, watching Arabic movies, communicate with Arabic friends using Youtube or any other social media tools. More than 50% of the respondents disagree with using social media in informal learning or they even do not know about how social media can support informal Arabic language learning, as Figure 5.3 displays.

5.3.2 The Difference in Gender and Year of Study in SRLs, Motivation and SMU

The past studies (Panadero et al., 2017; Bidjerano, 2005; Teh et al., 2009; Ismail et al., 2017; Akram and Ghani, 2013; Elsayed, 2016) have been reported the learners may have different levels of SRLs, motivation and SMU due to gender and year of study differences.
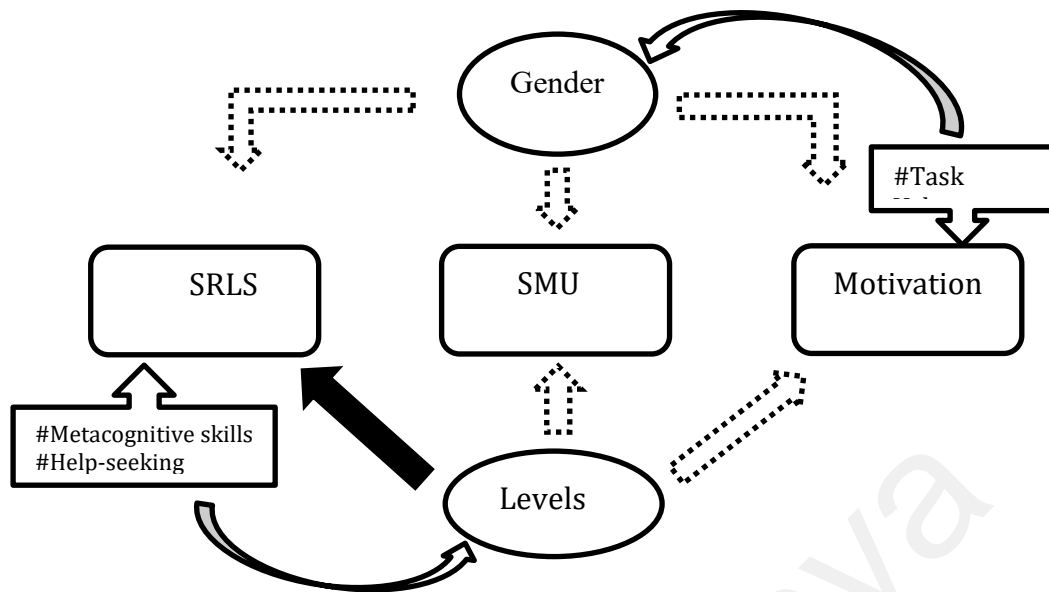
Figure 5.4. Gender and level of difference in SRLs, motivation and SMU

5.3.2.1   Gender Difference among SRLs, Motivation and SMU

The result of this study shows that there is no significant difference between male and female in SRLs usage in Arabic language learning. Similarly, the male and female Arabic language learners have the same degree of Metacognitive skills, Environmental structuring, Time management, Persistence and Help-seeking strategies use as well. In addition, there is no such difference in the motivation level between male and female Arabic language learners. The result of the study also shows that male and female Arabic learners have the same high level of self-efficiency and goal orientation. However, they are a significant difference in task value. The Internet has been a male-dominated technology, although the gender gap in Internet use has narrowed over the past several years (Price, 2006). Given the study's findings, female Arabic language learners scored significantly higher than male Arabic language learners in Task value. Lastly, the current study also found that male and female Arabic language learners have the same degree of SMU in Arabic learning. Similarly, male

and female Arabic language learners have an almost same level of agreement of SMU in both formal and informal learning. The reason might be that Arabic language learners still have not used social media tools as learning tools and that the range of social media usage in Arabic language learning is low.

The findings are significantly different with from what is reported in past studies (Panadero et al., 2017; Bidjerano, 2005; Teh et al., 2009; Lan's, 2005, Ismail et al., 2017) which claim male and female are significantly different in terms of language learning strategies, motivation, and social media usage. Other on the other hand, the finding is similar to what was found by Chou (2002), al-Otaibi (2004), Yukselturk, and Bulut (2009), Akram and Ghani (2013) and Ikhlef and Khalifa (2012).

5.3.2.2 Year of Study Difference among SRLs, Motivation and SMU

SRLs are significantly different among Arabic language learners from different study years or levels. In other words, the respondents in different study years or levels have different SRLs. The result is consistent with Xuan et al. (2014) but is inconsistent with Ismail et al. (2017), Elsayed (2016) and Ikhlef and Khalifa (2012). More specifically, the Level 1 Arabic language learners have a higher usage of SRLs than other levels and Level 3 have a lower the frequency of usage in SRLs. In addition to the dimensions of SRLs, Level 4 Arabic language learners are significantly different in their usage of Metacognitive skills and Persistence strategies. Similar to SRLs, Level 1 respondents have a higher usage in Metacognitive skills than other levels learners and Level 3 respondents are the lowest. Level 4 respondents have a higher degree of agreement in Persistence strategy and Level 3 respondents are the

lowest as well. Moreover, Level 4 respondents have no significant differences in usage in Environmental structuring, Help-seeking and Time management strategies.

Moreover, the Arabic language learners in Level 1, 2, 3, and 4 have the same level of motivation in Arabic language learning. There is also no significant difference in each of dimensions of motivation i.e. Self-efficiency, Task Value and Goal orientation. Therefore, the level of Self-efficiency, Task Value and Goal orientation among Level 4 respondents are not different from the Level 1, 2, and 3 Arabic language learners.

In addition to Arabic language learners' social media usage, the finding shows that the respondents have some degree of difference in terms of SMU among the different levels. More specifically, the two dimensions of SMU show no significant difference between Level 1, 2, 3, and 4 students. In other words, the Arabic language learners' SMU for Arabic learning does not increase or reduce by year of study.

5.3.3   Correlation among SRLs, Motivation and SMU

As mentioned before, the conceptual framework for this study was based on the social cognitive theory which states that people learn by observing others, with the environment, behaviour, and cognition/personal all act as the majority factors in influencing development in a reciprocal triadic relationship. In the current study, SRLs are typically grounded in social cognitive theory (Person, Behavior and Environment), motivation is represented by personal factors and SMU is represented environmental factors.
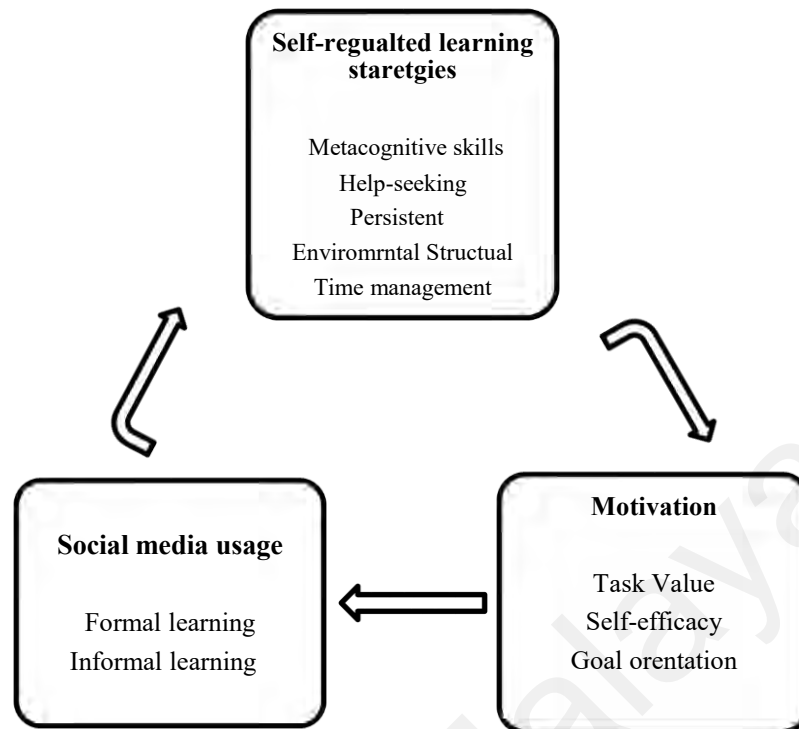
Figure 5.5. The relationship between SRLs, SMU and motivation

5.3.3.1   Correlation between SRLs and Motivation

Based on the literature review, Pintrich (2000), Zimmerman (2008), Ommundsen, Haugen and Lund (2005) and Wang and Holcombe (2010) reported self-regulated learning is controlled by an interconnected framework of factors that determine its development and sustainability, and motivation is a critical factor in this framework. SRLs and motivation influence this development in a reciprocal triadic relationship.

According to these studies, there is a statistically significant positive correlation between Arabic language learners' SRLs and motivation. The correlation coefficient indicates that the correlation strength between SRLs and motivation is moderate. Therefore, this finding was agree with many past studies (Abdulvahab, 2012;

Schunk and Ertmer, 2010; Pintrich, 2010; Zimmerman, 2010; Zimmerman and Schunk, 2004; Mahmoodi et al., 2014; Winne and Hadwin, 2008; Kitsantas et al. 2009; Clark; 2012; Carolina et al., 2014; Abdolvahab, 2012). On the other hand, the finding disagrees with Cetin (2015) which discovered there is no correlation between SRLs and academic motivation.

5.3.3.2   Correlation Between SRLs and SMU

Social media-enriched learning is designed to enhance student self-regulation and motivation, facilitates academic performance, and increases positive attitudes towards learning (Azevedo and Hadwin, 2005; Chang, 2007; Kramarski and Gutman, 2006; López-Morteo and López, 2007; Perry and Winne, 2006; Winne, 2006; Winne et al., 2006). Empirical studies have demonstrated that social media provide lots of benefits for students learning. However, under a variety of social media learning, the effects of social media integration strongly depend on the way students use them (Junco 2012; Junco et al., 2013; Ahn 2011; Mazer et al., 2009). Students need skill in controlling learning through multiple information and technology. Thus, students with limited SRL skills would not learn much from the media environment.

The current study found that there is a significant correlation between Arabic language learners' SRLs and SMU is positively and significantly correlated. The correlation coefficient indicates that the correlation strength between SRLs and SMU is weak. In other words, the SRLs would increase whenever the learners' SMU increases. As suggested by Matzat and Vrieling (2016), social media exist as a "natural alliance" with self-regulated learning in the educational process. The current study is supported by Matzat and Vrieling (2016). Therefore, social media exist as a "natural alliance" with self-regulated learning in Arabic language learning among university

learners. Likewise, this finding also aligns with Dabbagh and Kitsantas (2012) and McLoughlin and Lee (2010). However, the finding disagrees with Michikyan et al. (2015), Karpinski (2010) and Tariq et al. (2012), which reported that there is a negative relationship between students' social media usage, SRLs and academic achievement, due to lack of self-control and time management ability.

5.3.3.3 Correlation Between Motivation and SMU

As mentioned before, social networks allow their enthusiastic users, all familiar with the fast-growing world of technology and internet, to freely and quickly share with their family, friends and colleagues significant moments of their lives, in addition to their ideas, opinions and beliefs. Due to its interactive and multidimensional characteristics, SMU can improve motivation. According to the framework of this study, SMU and motivation are in a reciprocal triadic relationship.

Given the current study's findings, there is a statistically significant positive correlation between Arabic language learners' motivation and social media usage. The correlation coefficient indicates that the correlation strength between SMU and motivation is weak. Still, SMU is one of the factors that can increase learners' Arabic language learning motivation. The finding is similar to Zhe, ZhouXiu and XiaoXin (2015), Alhaj and Banafi (2015), and Celik et al. (2014). However, the finding disagrees with Karpinski (2010) and Tariq et al. (2012) which reported a negative relationship between students' SMU and academic motivation due to lack of self-control and time management ability. Therefore, the researcher inferred that one of the reasons for a weak correlation between Arabic language learners' motivation and SMU is a lack of time management ability.

5.3.4 SRLs, SMU and Motivation Influence GPA

Since language acquisition requires a substantial and continuous investment of time, due to the dynamic nature of language itself, maintaining high levels of motivation and persistence is crucial. Language learners require adequate practise inside and outside the classroom through active participation in curricular and extracurricular activities. However, not all students possess the knowledge management and the self-regulatory skills to effectively use social media to achieve the learning goals they want (Dabbagh and Kitsantas, 2012). In the current study, the researcher studied Arabic learners' SRLs use, SMU and motivation level to discover the influences of the three variables in academic achievement.
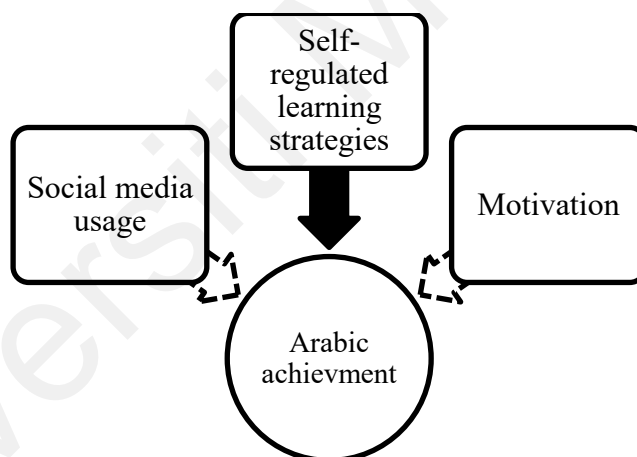
Figure 5.6. the influence of SRLs, SMU and motivation on Academic achievement

5.3.4.1 SRLs Influence Academic Achievement (GPA)

As mentioned before, Second Language acquisition theorists have discussed self-regulation as a broader construct than language learning strategies (Cohen and Macaro, 2007; Dörnyei, 2005; Oxford, 2011; Oxford and Schramm, 2007). Several past studies (Andrade and Bunker, 2009; Oxford, 2003, 2011; Ehrman, 1996;

Ma and Oxford, 2014; Ehrman, 1996; Andrade and Evans, 2013; Wang et al., 2009; Rasekh and Ranjbary, 2003) have shown the influences of SRLs on language learners academic achievement, stating that with effective regular use, these strategies facilitate language learning and can lead to deeper learning and higher performance in language skills such as speaking, reading, writing and vocabulary.

The current study found t-statistics values for self- regulated learning strategies significant affect academic achievement. In other words, Arabic language learners' academic achievement is influence by their SRLs usage. The individual path SRL-GPA is found to have a positive effect and thus can mean that when the Arabic language learners increase SRLs usage to a higher degree, their academic achievement might be higher. In this case, the finding is consistent with a large number of past studies (Andrade and Bunker, 2009; Oxford, 2003, 2011; Ehrman, 1996; Ma and Oxford, 2014; Ehrman, 1996; Andrade and Evans, 2013; Wang et al., 2009; Rasekh and Ranjbary, 2003; Cohen and Macaro, 2007; Dörnyei, 2005; Oxford, 2011; Oxford and Schramm, 2007; Varasteh et al., 2016; Ghasemi and Dowlatabad, 2018; Abdolvahab, 2012; Ning and Downing, 2012). However, it is inconsistent with a few studies (Cho and Heron, 2015; Mahmoodi et al., 2014; Cetin, 2015) which found that learning strategies do not influence students' academic achievement.

More specifically, there is a significant effect between the dimensions of SRLs of Metacognitive skills to GPA and Help-seeking to GPA. This finding is identical to the result of Research Question One, where the Arabic language learners show a high-frequency degree of usage in Metacognitive skills and Help-seeking in learning. Furthermore, the finding also indicates there is no significant effect between Environmental structuring and GPA, time management and GPA, Persistence dimension to GPA. The relationship between Time management and GPA and

between Persistence and GPA are more likely to have a tiny negative effect. In other words, the more frequent the respondents utilise time management and Persistence strategies, the lower their academic achievement (GPA) becomes. In comparison, the more frequently they utilities Metacognitive skills and Help-seeking, the higher their academic achievement (GPA). Thus, SRLs has a significant influence on Arabic language learners' achievement, especially, with Metacognitive skills and Help-seeking strategies. As displayed in Figure 5.7.
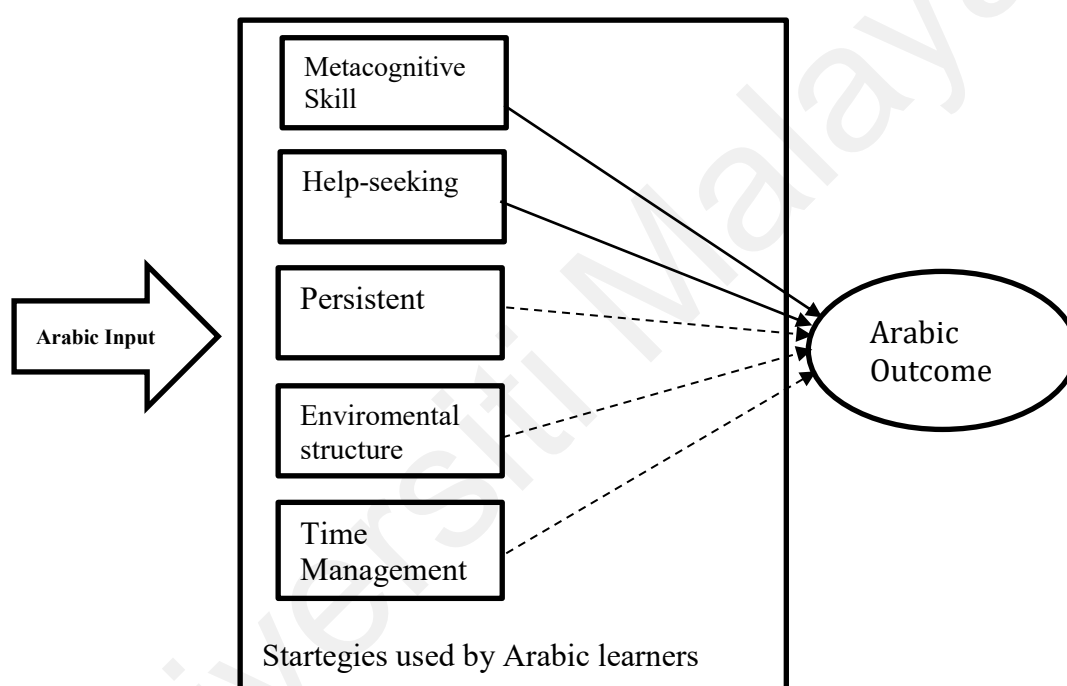
Figure 5.7. The influence of SRLs in Arabic Achievement

5.3.4.2   Motivation Influence Academic Achievement

Currently, many studies (Clement and Vallerand,2000; Dörnyei, 2001a; Masgoret and Gardner, 2003; Dörnyei, 2005; 2010; Dörnyei & Ushioda, 2011; Sotoodehnema & Taghipour, 2010; Shirbagi & Azizi, 2010; Seddighi & Zarafshan, 2006) have examined the role of language learning motivation in foreign language learning and recognized that motivation enhances foreign language acquisition.

This study found t-statistics values for motivation are not significant to affect academic achievement and instead has a modest effect. In other words, Arabic language learners' academic achievement is not influenced by their motivation level. Moreover, regarding the Arabic learners' dimensions motivation on their academic achievement, the result indicates that there is a significant positive effect between dimension motivation self-efficiency and academic achievement. However, there is no significant effect between the Task value dimension and the Goal orientation dimension on their academic achievement. The finding is inconsistent with Clement and Vallerand (2000), Dörnyei (2001a), Masgoret and Gardner (2003), Dörnyei (2005), Dörnyei (2010); Dörnyei and Ushioda (2011), Sotoodehnema and Taghipour (2010), Shirbagi and Azizi (2010), Seddighi and Zarafshan (2006), Raoofi, Tan and Chan (2012), Ning and Downing (2012), Abdolvahab (2012), Varasteh et al. (2016) and Ikhlef and Khalifa (2012). These studies state that motivation enhances foreign language acquisition. The finding is consistent with Cetin (2015) which suggest that there is no correlation between GPA and academic motivation. Indeed, the qualitative data collected also indicate the reasons why they are learning and from what motivation sources are available in the context of learning the Arabic language. The findings of the present study suggest that university Arabic language learners are highly motivated in Arabic language learning. However, the learner's Arabic language performance was shown to be significantly affected by the level of motivation, specifically, learners' self-efficacy towards Arabic language learning. TV and GO were not shown to influence learners' performance. It is interesting to note that TV and GO ae at a high level among Arabic language learners. According to the findings of the current study, the reason for this situation might be due to the medium level of SRLs and SMU among Arabic language learners. Motivation is the key to the language

learning door, and language strategies are learning tools that assist in achieving the target language outcomes. Therefore, there is a need to improve Arabic language learners' SRLs and SMU. Besides, Cetin (2015) reported that students' GPA being too close to each other has been evaluated as the reason for the lack of significant prediction of GPA by academic motivation.

It is also worth mentioning that the highest level that depicts why they are learning Arabic was first to show their learning ability in the Arabic language to their family, friends, employers, or others. Secondly, to obtain a good grade, thirdly to enable them to appreciate Islamic arts, Nasheed, and literature in Arabic, and finally to understand the Quran, Hadith and Islamic knowledge more deeply. In addition, self-efficacy was the only effective source of motivation related to the academic achievement of Arabic language learners' academic achievement. As showed in Figure 5.8.

Therefore, it can be concluded that some other factors such as educational system, materials, and teachers might affect the learners' academic achievement besides Motivation.
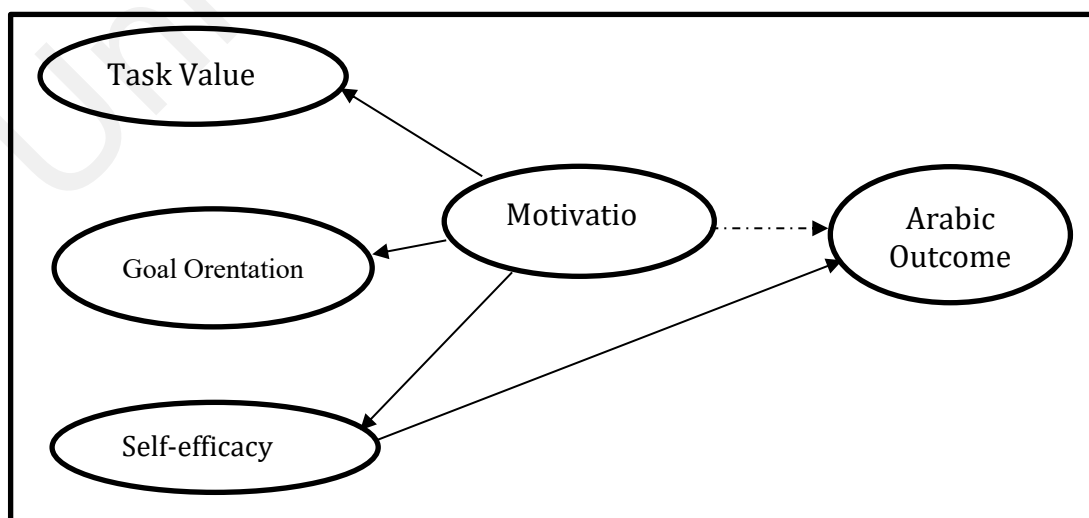

Figure 5.8. The influence of Motivation in Arabic Achievement

5.3.4.3 SMU Influence Academic Achievement (GPA)

Social media is generally considered to be the most popular way to communicate and learn foreign languages, where students can easily accept the integration of social media in educational practice (Van't Klooster and Janssen 2012). As demonstrated by several researchers, social media can generate meaningful output and stimulate students' interest in language learning. In addition, social media's practicality, such as expression, interaction, and community building are all important factors in the language learning experience (Chartrand 2012; Chen 2013; Thorne 2010). However, the current study did not find that SMU influences learners' academic achievement. In view of findings in the current study, there is no significant effect among Arabic language learners' SMU on academic achievement.

Moreover, the Arabic language learners' SMU was found to have no significant effect on both formal and informal Arabic learning among Arabic language learners. This is completely different with what was reported by other researchers (Van't Klooster and Janssen 2012; Chartrand 2012; Chen 2013; Thorne 2010; Harrison and Thomas, 2009; Akbari et al., 2012; Lomicka and Lord, 2009; Motteram and Sharma, 2009). This finding, however, agrees with Michikyan et al. (2015), Tariq et al. (2012), Khan (2009), Karpinski and Duberstein (2009) and Camilia et al. (2013). The reason might be that the students have a medium level of social media usage in Arabic language learning as displayed in Chapter Four. The increase in using social media tools in Arabic language learning is needed for Arabic language learners.

Consequently, it can be concluded that other factors such as educational system, materials, and teachers might affect the learners' academic achievement other than Motivation and Social media usage.

5.3.5 Mediating Effect of Motivation on the Relationship Between SRLs and SMU

As described in the previous section of this chapter, there is a significant effect between respondents' SRLs on social media usage. Arabic language learners' SRLs has a significant effect on social media usage. However, motivation has no significant effect on SMU among the respondents. More importantly, motivation has no mediating effect on the relationship between SRLs and SMU based on the result of bootstrapping.

In view of the past study, there is growing evidence that supports the notion that students' SRLs processes, motivational beliefs, and SMU are reciprocally interactive, where Matzat and Vrieling (2016) treat SMU and practices of self-regulated learning as a kind of "natural alliance." These can be indicated SRLs processes, motivational beliefs, and SMU are in self-enhancing cycles, each of them can be a factor to enhance the other (Schunk and Zimmerman, 2012; Schunk & Zimmerman, 1997; Bandura,1986). However, the current study found motivation would not influence the relationship between SRLs and social media usage, as displayed in Figure 5.9. Thus, the researcher claims the reason might be Arabic language learners rarely use of social media in informal Arabic learning.

Figure 5.9. Mediating effect of motivation on the relationship between SRLs and SMU

5.3.6 Mediating Effect of SMU on the Relationship Between SRLs and Motivation

According to the findings of this study, whenever respondents' self-regulated learning increases, their motivation would increase as well. In other words, Arabic language learners' SRLs has a significant effect on their motivation in Arabic language learning. In addition, respondents' self-regulated learning has a statistically significant effect on their motivation. In other words, whenever respondents' self-regulated learning increases, so will their motivation. However, SMU has no mediating effect on the relationship between SRLs and motivation. In other words, whatever level the respondents' SMU is, it would not influence the relation between SRLs and motivation in their Arabic language learning, as displayed in Figure 5.10.

According to Matzat, and Vrieling (2016), social media to existing as a "natural alliance" with self-regulated learning in the educational affair. Moreover, Zhe et al. (2015), Alhaj and Banafi (2015) and Celik et al. (2014) summarised that students with a high level of motivation, which is characterised by mastery goal orientation, are

willing use social media in learning because they are confident that it will be lead to more adaptive cycles of learning. On the other hand, motivation is a critical factor to stimulate the development of self-regulated learning (Ommundsen et al., 2005; Wang and Holcombe, 2010). In conclusion, all three SRLs, SMU, and motivation are in a reciprocally interactive circle. The findings of this study show that SMU has no moderating effect on the relationship between SRLs and motivation, thus contradicts the research hypothesis that assumes SMU will enhance the relationship between SRLs and motivation. However, the finding of this study is identical to the studies by Kirschner and Karpinski (2010) and Tariq et al. (2012), which asserted SMU can diminish SRLs and motivational beliefs rather than enhance them.
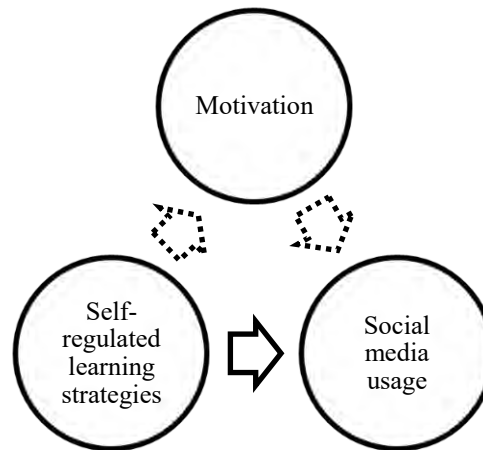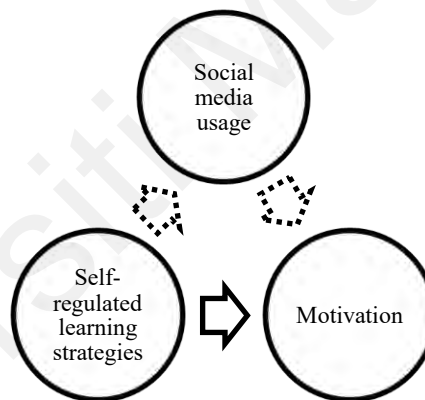

Figure 5.10. Mediating effect of SMU on the relationship between SRLs and motivation

5.3.7 Mediating Effect of SRLs on the Relation Between SMU and Motivation

Based on the analysis shown earlier, respondents' motivation has no significant effect on SMU which can be indicated that whatever the respondents' level of motivation is, it would not influence their social media usage. However, the finding of the current study also indicates whenever respondents' self-regulated learning

increases, their SMU would also increase. In other words, SRLs is one of the factors that influence respondents' social media usage. SRLs has a significant mediating effect on the relationship between SMU and motivation, which suggest that when the respondents' SRLs increase, the relation between SMU and motivation in learners' Arabic language learning would increase as well. Moreover, the findings of this study are consistent with Schunk and Zimmerman (2012) and Schunk & Zimmerman (1997) which were argued the three triadic factors SRLs, SMU and motivation would enhance each other in a reciprocally interactive circle. See Figure 5.11.
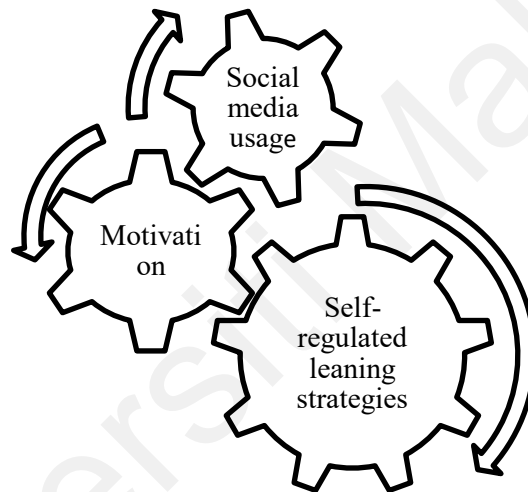
Figure 5.11. SRLS to lead self-enhancing cycles of SMU and motivation to facilitate Arabic language learning

5.3.8   Overall map of findings
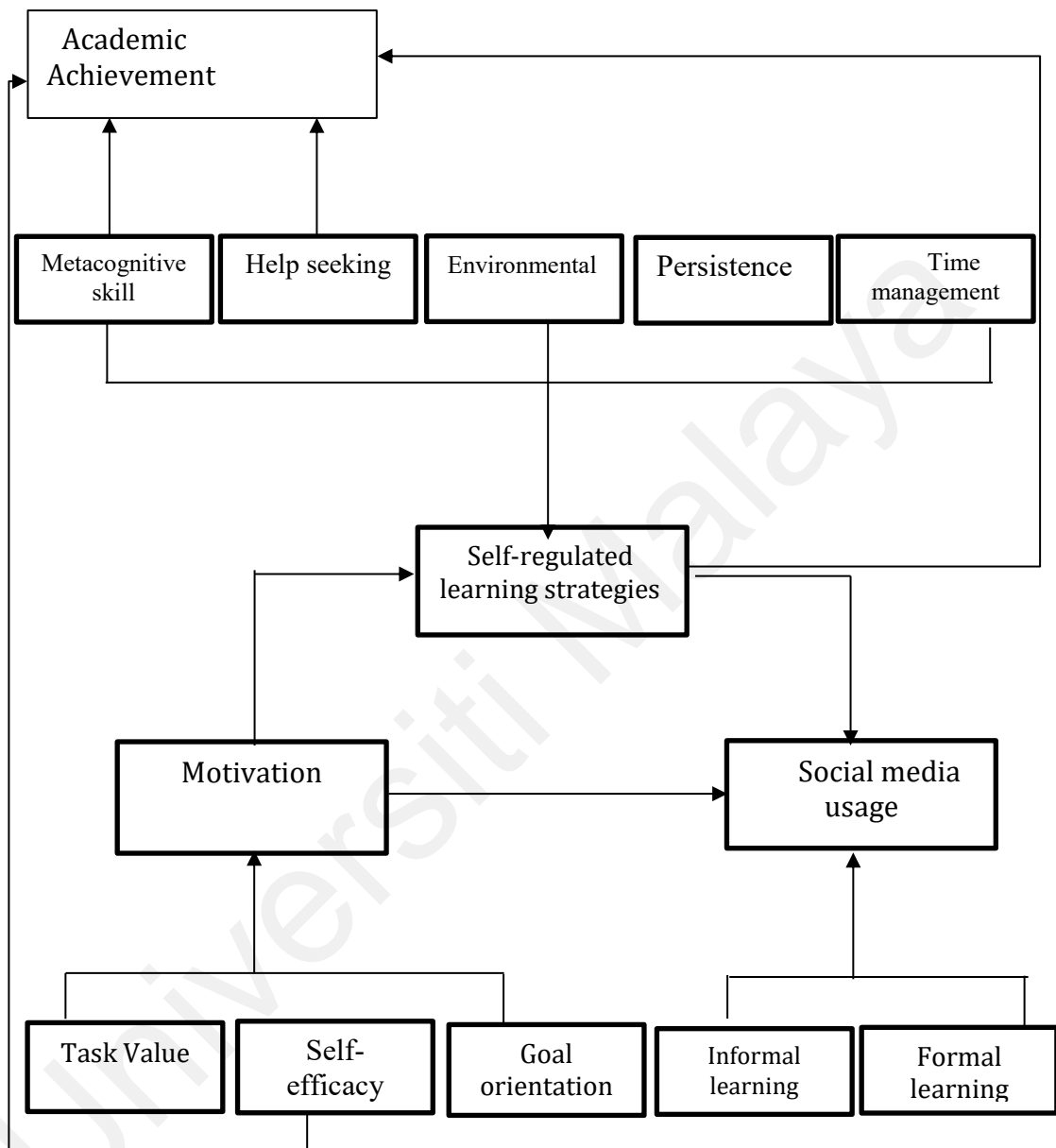
Figure 5.12. Model outline based on findings of the current study

An impressive array of contributors to individual Social Cognitive Theory has been identified in language learning, among them are self-regulation (e.g., Butler and Winne, 1995; Pintrich and DeGroot, 1991; Pintrich, Marx, and Boyle, 1993; Schunk and Zimmerman, 1994; Zimmerman, 1989), social media usage (Van't Klooster and Janssen 2012; Chartrand 2012; Chen 2013; Thorne 2010; Harrison and Thomas, 2009; Akbari et al., 2012; Lomicka and Lord, 2009; Motteram and Sharma, 2009; Michikyan et al., 2015; Tariq et al., 2012; Khan U, 2009; Karpinski and Duberstein, 2009; Camilia et al., 2013), Motivation (Clement and Vallerand, 2000; Dörnyei, 2001a; Masgoret and Gardner, 2003; Dörnyei, 2005; 2010; Dörnyei & Ushioda, 2011; Sotoodehnema & Taghipour, 2010; Shirbagi & Azizi, 2010; Seddighi & Zarafshan, 2006), self-efficacy (e.g., Bandura, 1977; Eccles et al., 1983), goal orientations and task choice (e.g., Ames, 1992; Nicholls, 1984; Pintrich and Garcia, 1991; Urdan and Maehr, 1992), and others.

This study examined these constructs in greater depth and there are several general points to note. First, each factor, although distinguishable and discussed separately, interacts with the others in complex ways to influence academic performance.

As displayed in Figure 5.10, the model outline is summed up based on the findings of the current study. Indeed, SRLs, SMU and Motivation are very much close-connected in Arabic language learning context. In other words, when learners become self-regulated learners, they would experience positive motivation and use social media in a proper way towards learning. On the other hand, learners with less self-regulation ability would misuse of social media, which could lead to degraded learners' motivation. The finding is consistent with the Social Cognitive Theory which proposes that people learn by observing others, with the environment, behaviour, and

cognition/personal, all of which are majority factors that influence development in a reciprocal triadic relationship.

In addition, the theoretical study supports the argument that SRLs improves language learning, as well as self-efficacy, as well as a strong predictor of many educational, physical, and mental health outcomes (Bandura, 1997). In an overview of Figure 5.10, the finding of the current study is identical to Bandura (1997) as the result indicated SRLs and self-efficacy will significantly enhance Arabic language learners' performance. On the other hand, Motivation in general and Social media usage were not found to be predictors of Arabic language learners' performance. The findings were not consistent with the theoretical framework of the study which assumed that motivation and social media usage are major predictors of learners' academic achievement. More specifically, task value, goal orientation, social media informal learning and formal learning as dimensions of motivation, and social media usage would not predict learners' academic achievement as well.

As reported by Schunk and Zimmerman (2012), self-regulated learning interventions have caused successful outcomes in classroom settings. Yet they often fail to sustain students' use of these processes in less-structured environments. This gap has guided researchers to focus on motivation factors as well. The role of motivation in language learning is as a driving force to sustain the SRL process over the long learning years. In addition, there is growing evidence suggesting that students' SRLs processes and motivational beliefs are reciprocally interactive (Daniela, 2015; Dörnyei, 2001; Mahmoodi and Ghaslani, 2014). However, what leads to self-enhancing cycles of SRLs and motivation rather than conflicting cycles? Schunk and Zimmerman (2012) stressed that one of the possible answers is a "chicken-and-egg"

dilemma because improving self-sources of motivation involves the use of social resources, such as parental or lecture modelling and praise. Social Cognitive Theory (Zimmerman, 2000) and Vygotskian theorists (McCaslin and Hickey, 2001) view social sources as interdependent and mutually beneficial with self-sourced of motivation. The current study treated SMU as a social source that leads to self-enhancing cycles of self-regulated learning and motivation. In this regard, SRLs, SMU and Motivation are indispensable elements in the students learning process, and as assumed before, SRLs is a mediator between SMU and Motivation. By the same token, SMU is a mediator between SRLs and Motivation, and Motivation is a mediator between SRLs and SMU. As a result, the findings of the study confirmed that SRLs is a mediator that will influence SMU and Motivation. In other words, as the respondents' SRLs increase, the relation between SMU and Motivation would increase as well, or SRLs is a predictor of the relationship between SMU and Motivation. However, the findings rejected Motivation as a mediator between SRLs and SMU, or SMU is a mediator between SRLs and Motivation. Therefore, this empirical study demonstrates the importance of SRLs in Arabic language learning.

5.4   Suggestion

In answering the research questions, the Arabic language learners were found to have a medium degree of usage in SRLs and SMU in their Arabic language learning. Moreover, the independent variables (SRLs, motivation and social media usage) in this study did not improve students' academic performance (GPA). As a result, there is an oral ability gap among Arabic language learners in Malaysia. On this issue, Haron et al. (2010) suggested being aware of certain learning strategies can enhance speaking skills and alleviate other problems that prevent the learners from becoming good Arabic speakers, rather than relying on the learning environment only.

The reasons for a medium degree of SRLs and SMU among the Arabic language learners in Arabic language learning might be:

The learners may have not acquired the ability of self-regulated learning (Dabbagh and Kitsantas, 2012). In other words, not all students possess the knowledge management and the self-regulatory skills to effectively use social media to achieve the learning goals that they want. They do not know that they can use language-learning strategies to make their learning process easier. As mentioned in Chapter Two, self-regulated learners are learners who personally initiate and direct their efforts to acquire knowledge and skill rather than relying on teachers, parents, or other agents of instruction (Elstad and Turmo, 2010; Clarebout et al., 2010; Labuhn et al., 2010; Butler & Winne, 1995; Meltzer, 2007; Puustinen & Pulkkinen, 2001; Winne, 1995; Zimmerman, 1989, 2001).

Based on the results, one other reason for the medium degree of SRLs and SMU could be due to Arabic language learners having a low degree of usage of time management strategy. The time management problems among university students is a

recurring one. Past studies (Fitzgibbon and Prior, 2003; Lynch and Dembo, 2004; Goldfinch and Hughes, 2007; Van Den Hurk, 2006) confirm that time management is a contributing factor to students' achievement and withdrawal from a course in a variety of learning context. Macan, et al. (1990) studied 165 college students' time management and revealed the most predictive factor was perceived control of time, which refers to the feeling that one is in control concerning how time at work is spent. For example, the learners do not know "What did I do today, where did my time go to?"

In addition, the environmental structuring strategy usage by Arabic language learners could be considered as another reason for the medium degree of SRLs usage in Arabic language learning. Environmental strategies use can be indicated by the Arabic learners trying to change and adapt to the learning place, which includes physical environment, schedule, activities, and materials to encourage positive social interactions between learners in that study area. However, it is more likely that many students do not even know the environmental structural could be one of the language learning strategies.

Besides, too much reliance on "spoon-feeding" teaching and learning style could be considered as another reason causing Arabic language learners to have a medium degree of SRLs usage in Arabic language learning. Khan (2018) and Noorizah Mohd. Noor (2006) mentioned that the Malaysian education system has long been criticised for producing spoon-fed passive learners. This teaching and learning style have caused failures in studies at the higher education level due to lack of effective study skills, reading, writing time and stress management skills (Noorizah Mohd. Noor, 2006).

Moreover, the rare usage of social media on informal learning could consider as one of the reasons for the medium usage of SMU in learning. In other words, the university Arabic language learners, even when they are frequent users of social media, tend not to use these tools to help with their learning process. Social media could be an intriguing way to assist in language learning. However, it also can lead to poor performance. As mentioned in earlier studies, the effects of social media integration strongly depend on the way students use them and that some outcomes can be influenced by the interference of the teacher (Junco 2012; 2012b; Junco, Heiberger, and Loken (2011). Karpinski and Duberstein (2009) pointed out that social media users devoted less time to their studies in comparison to non-users and subsequently had a lower GPA. Nalwa & Anand (2003) found that addicted users prefer using the Internet over their personal and professional responsibilities which ultimately leads to poor academic performance. Poor self-control ability might be one of the reasons. As Karpinski (2010) and Tariq et al. (2012) reported that there is a negative relationship between students' social media usage, SRLs and academic achievement due to lack of self-control and time management ability.

Finally, study anxiety could be other reason for a medium degree of SRLs, motivation and SMU in Arabic language learning. In view of past studies, study anxiety can undermine students' use of metacognitive control processes and can inhibit setting long-term goals (Zimmerman, 1989).

In short, these factors may lead to Malaysian Arabic language learners having a medium degree of SRLs, motivation and SMU in Arabic language learning. To enhance learners' self-regulated learning, motivation and social media usage, self-regulated learning is the main point that enhances the three variables. Social Cognitive Theory has been pointed out self-regulated learning is developed on personal,

behavioural, and environmental factors, while motivation is developed on personal factor and social media is developed on environmental factor. Three variables are in a reciprocal triadic relationship (Zimmerman, 2000). Thus, self-regulated learning is the key point to enhancing Arabic language learners' self-regulated learning, motivation and SMU.

Self-regulated learning is never an absolute state of functioning but rather varies in degree, depending on the social and physical context. The early past studies (Thoresen and Mahoney, 1974; Pintrich, 1995) has proven that self-regulation is not an enduring measure of mental intelligence after a certain point in life, nor is it a personal characteristic that is genetically based or formed early in life.

To improve learners self-regulated learning abilities and produce self-regulated learners, educators suggest people learn self-regulation through experience and self-reflection (Zimmerman, 1998). A student's personal capacity to self-regulate is assumed to depend on learning and development. Older and more experienced students are believed to be better able to self-regulate during learning (Bandura, 1986). Experienced students were found to score significantly higher than the inexperienced ones in all the value components which comprised of intrinsic motivation, extrinsic motivation and task value, showing that the earlier group had more positive value towards oral Arabic language learning than the newer students (Magnan and Back, 2007; Morris, 2005).

As highlighted by Pintrich (1995), there are five general principles for facilitating self-regulated learning, which can be applied to both students and faculty.

Students need to have a greater awareness of their behaviour; motivation, and cognition. For students to become self-regulated learners, they must become aware of

their behaviour, motivation, and cognition by reflecting on these aspects of their learning. As Zimmerman and Paulsen pointed out, students need feedback about their learning to become aware of their strengths and weaknesses, before they can attempt to change their learning, such as through assessment by a questionnaire such as "Motivated Strategies for Learning Questionnaire" (Pintrich et al., 1993). The Learning and Study Strategies Inventory (Weinstein, Schulte, and Palmer, 1987) also can provide students with feedback about their motivational beliefs and learning strategies.

Students need to have positive motivational beliefs. Self-regulated learning can be a very difficult and time-consuming process. It certainly takes more time and cognitive effort than simply reading and memorizing the course material. Students are not likely to engage in self-regulated learning if they are focused on just completing their work to "get it done" or to get the highest grade. This type of performance orientation is not conducive to self-regulated learning. As Pintrich and Garcia (1991) propose, once students have a mastery orientation and focus on learning and understanding the material, it is much more facilitative for their self-regulated learning. This does not mean that students should not care about their grades, it just means that grades should not be their sole schoolwork goal. Hagen and Weinstein (1995) suggest various strategies that the faculties might use in their courses to lessen the emphasis on grades and grading curves and increase students' mastery goal orientations. Besides a mastery goal orientation, another positive motivational belief that facilitates self-regulated learning is positive self-efficacy for learning. Faculties rightfully insist that it is not their role to improve students' global self-esteem and make them feel good about themselves in general. However, faculties can and should strive to make the students believe they can master the content knowledge and the reasoning strategies that are

used in their discipline. It is clear from an abundance of research on self-efficacy (Bandura, 1986; Schunk, 1994) that students will have difficulty learning the course material if they do not have appropriate self-efficacy beliefs. The keyword is "appropriate." Self-efficacy beliefs should be neither overly negative nor overly optimistic. Students should have fairly accurate, and positive, beliefs that they can learn and master course material. Faculties can be models of self-regulated learning (Zimmerrnan and Paulsen, 1995). Students need time and opportunity to develop their self-regulatory strategies. The opportunities and time can come from the student's own efforts to practice self-regulation as well as through tasks and situations that the faculty organises in their classrooms. Moreover, in the classroom setting, faculty members can guide students through the tasks, deliver corrective feedback that helps students see where they have gone wrong, and provide hints about how they can get back on the proper path. Such guided instruction can be very helpful as students try to become self-regulated learners. Classroom tasks can be and should be opportunities for student self-regulation. As pointed out by Pintrich (1995), models of self-regulated learning may be most relevant to college students and classrooms because there is inherently more freedom for college students than there is for most K-12 students. Nevertheless, the tasks that college students confront should be structured in ways that provide them with opportunities for self-regulation. According to Zimmerman (1994), students must have some choice and control over their learning if self-regulated learning is to occur. Hagen and Weinstein (1995) found that the essence of choice and control is important in fostering a mastery orientation in students. The provision of choice and control does not mean that faculty gives up their decision-making power in terms of the course content or even in terms of the structure of exams, papers, labs, or course assignments. Instead, some strategies allow students some decision making and some control over

their work while maintaining the integrity of the curriculum content. Exam or paper assignments with a choice of essay questions or topics within a prescribed list allow students some control without resulting in randomly selected topics. Models of self-regulated learning provide a very useful description of what good learners do in college courses. There is still much to be learned about what self-regulated learners do, about how students learn to become self-regulated learners, and about how faculty can help students develop into self-regulated learners, but the research presented here provides a good beginning. It is intended to spark more research and development of an important area of college teaching and learning.

From a social-ecological perspective, students' interactions with teachers are the most important experiences that affect self-regulated learning (Zimmerman, 1989). Students may be more inclined to self-regulate if teachers promote student-centred learning, provide them with appropriate feedback during the teaching and learning processes, and teach them learning strategies (Butler and Winne, 1995). In addition, teachers can help language learners become self-regulated learners who can approach complex tasks with useful strategies to help them plan how to carry out the learning task, how to monitor the task while being engaged in it, and how to evaluate their performance on the task to improve it next time (Chamot, 2009). The aim of fostering the skills necessary for 'life-long learning' in young people has focused some attention on teachers' abilities to encourage SRL in the classroom (Dignath & Büttner, 2008). Moreover, Junco et al. (2013), Ahn (2011) and Mazer et al. (2009) suggested that differences in the teacher's guidance and stimulation of learning through the use of social media can make a fundamental difference in students' learning outcomes. Many teachers, however, may not be able to do so as they are not aware of the factors related to self-regulated learning (Zimmerman, 2002). Thus, the use of social media is vital in

training self-regulated L2 teachers. This training and awareness-raising will directly result in improved practices of language teaching (Öz, 2015; 2016)

Besides, parents and peers are also assumed to be proximal forces of development for self-regulated learning, motivation and social media usage. Studies indicate that parents can influence the academic and psychosocial development in children and adolescents (Abar et al., 2009; Maccoby and Martin, 1983; Purdie et al., 2004; Steinberg et al., 1994). High parental involvement, as perceived by the adolescent, is an important influence on adolescents' self-regulatory behaviours (Purdie et al., 2004). Besides, peer groups have the potential to exert significant influence over the motivation for learning and school as well (Altermatt and Pomerantz, 2003; Berndt and Keefe, 1995; Jones et al., 2008).

On the other hand, the way to enhance learners' self-regulated learning and SMU in Arabic language learning is by improving their time management strategy use. Time management ability can be improved in some ways. First, the learner has to set goals for their learning, such as completing a review of the first semester's assignment, completing a review of the first half of the second-semester assignment, complete the review problems or practice test that your professor distributed in class. Second, build time management according to importance and urgency. There are many time management tools can be applied according to personal preference, such as time management app in smartphones including Create a To-Do List, The Weekly Planner, Google Calendar, Time Tracking, Remember Tips, Sticky Notes, TASK oriented or TIME orientated, and so on.

In addition, the universities could apply online learning systems to train students to enhance their skills in adopting social media tools to support their

educational communications and collaborations (Roblyer et al., 2010). To encourage Arabic language learners to use social media for learning, the focus should be on performance (such as perceived usefulness, flexibility and credibility), facility (ICT infrastructure), functionality (collaboration, sharing, interaction) and effort (perceived ease to use) (Pourgholaminejad, 2015). Moreover, institutional pressure and expected benefits should also be considered as factors that could influence learners to use social media for their learning.

In conclusion, facilitating self-regulated learning factors should be used on an individual basis to reduce the effect of inhibiting factors in improving self-regulation among students (Jouhari et al., 2015). Thus, what the Arabic language learners need to do is find the strategies that fit their learning process. As mentioned by Oxford (1990), the foreign language learners develop their learning strategies according to personality, biography and situational factors.

5.5   Implications of the Study

Both implications for theory and implications for the practice of the study are discussed and presented in the section below. Particularly, on the relationship among the three main variables of this study, namely, SRLs, SMU and motivation among Arabic language learners and the influence of three variables on academic achievement (GPA).

5.5.1   Theoretical Implications

This study further specifies the discussion regarding SRLs, SMU and motivation among Arabic learners. Numerous literature reviews have discussed the linkages between SRLs, SMU and motivation, but none have looked at the linkages as

outlined by the framework developed for this study. In addition, this study applied the triadic analysis of Social Cognitive Theory functioning by Bandura (1986) as its theoretical framework to understand the relationship between SRLs, SMU and motivation among Arabic language learners in Malaysia. This study was able to provide some useful information on the level of Malaysian undergraduate Arabic language learners' SRLs usage, SMU and motivation in Arabic learning. Based on the triadic analysis of Social Cognitive Theory functioning, SRLs (Personal, Behavioral, and Environmental), SMU (Environmental) and motivation (Personal) are in a reciprocal triadic relationship. The findings of the current study are consistent with the Social Cognitive Theory (Bandura, 1986). Hence, this study provides fresh empirical evidence to support the Social Cognitive Theory which presents a statistically significant positive correlation between SRLs, social media usage, motivation in the Arabic language learning context in Malaysia. In other words, the Social Cognitive Theory is suitable for explaining and understanding among Malaysian undergraduate learners in the context of Arabic language learning in Malaysia. On the other hand, the results of this study indicate that Arabic learners' SRLs, SMU and motivation would not influence their academic achievement. This finding is inconsistent with the Social Cognitive Theory which claims the personal, behavioural and environmental factors will influence learners' achievement. Hence, the current finding is useful for future researchers who are seeking directions to further examine SRLs, social media usage, motivation in any other languages. Furthermore, for the mediation effect of SRLs, social media usage, and motivation, the findings show that Arabic learners' SRLs is the only mediator that influence the relationship between SMU and motivation. In other words, Arabic learners' motivation can facilitate learners' SMU via their SRLs.

Accordingly, the language learning process across Second Language Acquisition (SLA) theories and SCT can be summarised in four main stages, i.e. "Input-attention-retention-output." The first stage, effective input, captures the learners' attention. The resource input can be captured from valuation activities with teachers, advanced peers, social environment, social media tools, books or other resources that come into contact with the learner. The attentional process (motivation) as the second stage, indicates the words that the observer attended to and perceived accurately; the 'significant features of the modelled words' (Bandura, 1977). Indeed, motivation is a central factor that "drives" or "forces" the attention of the learner. For example, driving the learner's interest in the target language increases their detection sensitivity in both endogenous attention and exogenous attention tasks, enhances stimulus coding, and influences the filtering of task-irrelevant stimuli (Pessoa, 2014). Both the first and second stage of language learning is retained in short-term memory. The transfer to long-term memory is also a retention process (learning strategies), i.e. the third stage. Here, the retention process can be defined as storing words into long-term memory. To reinforce the process of storing words into long-term memory, the learners can apply learning strategies (Nemati, 2009), such as self-regulated learning strategies (metacognitive skills, help-seeking, time management, environmental, structural, persistence) and social media (formal and informal learning) to create a language learning environment. The last stage, the production process/output process results from the learner transferring the stored words into memory from observing or modelling the words into identifiable actions (i.e. oral speaking or writing). The finding unfolds new understanding regarding the Arabic language as second language pedagogy in Malaysia, as displayed in Figure 5.13.
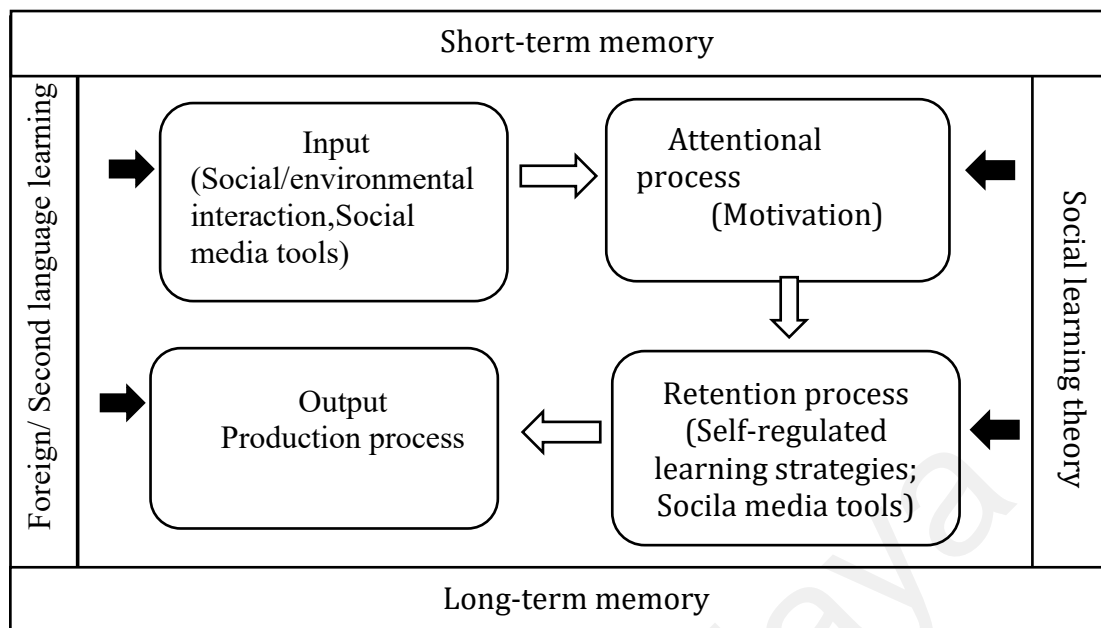
Figure 5.13. Language learning process cross Second Language Acquisition (SLA) theories and social cognitive theory (SCT)

5.5.2 Practical Implications

This study provides some implications for the Ministry of Education (MOE) Malaysia, practitioners including Arabic language department policymakers in universities, researchers, teachers, students, and parents. Based on the finding of this study, the Ministry and higher education institutes may identify new teaching and learning strategies for both course instructors and students. Moreover, the findings indicate that a medium degree of mean in Arabic learners' SRLs, SMU and high level of mean in motivation in Arabic language learning. This may affect Arabic language department policymakers in university, teachers, students and parents, in their effort to improve learners' SRLs, SMU in Arabic learning, and consequently increase the strategies usage in Arabic language learning. Therefore, this study was able to provide empirical evidence for the language department policymakers or university administrators to comprehend and create fitting strategies and policies to both maintain

and increase the level of learners' Arabic language performance. In addition, it essential to foster the self-regulated learning of our students and enable them to "learn to learn." The Ministry of Education (MOE) Malaysia may refer to the findings of the current study to add or modify the strategies and motivational variables in terms of Arabic language learning. For example, based on the findings, Arabic language learners are very weak in time management strategies use. The language pedagogy department of the Ministry of Education (MOE) can this information to provide universities with guidance on how to improve the Arabic language learning, for example by creating specific plans for developing learners' time management strategies such as by organising workshops and introducing time management tools and apps. In addition, this study also addresses a set of SRLs that university students may implement using social media. According to Kitsantas and Dabbagh, (2010) and Dabbagh and Kitsantas (2012), there are three levels of social media support self-regulated learning: personal information management, social interaction and collaboration, and information aggregation and management, as shown in Figure 5.14.

| Personal information management | → | Social interaction and collaboration | → | Information aggregation and management |
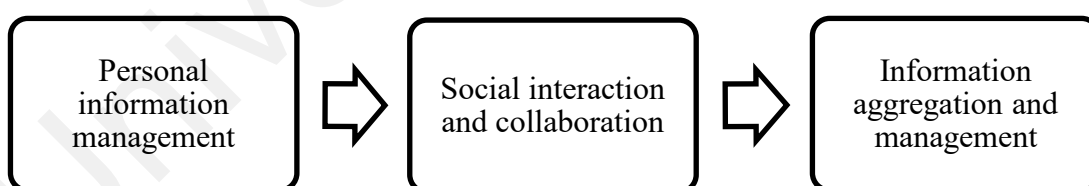
Figure 5.14. three levels of social media support self-regulated learning

Based on current research findings, the researcher has built a framework for using social media to support self-regulated learning in Arabic learning, shown in Table 5.1.

Table 5.1

A framework for using social media to support self-regulated learning in Arabic learning

	(Level1) Personal information management	(Level 2) Social interaction and collaboration	(Level 3) Information aggregation and management
WhatsApp, Facebook	Instructor invites students to use social network tools such as groups in WhatsApp, Facebook and give assignment and task in the group in the Arabic language.	Instructors encourage students to discuss in Arabic in those groups and they may ask any questions that they have, anybody in the group may share open main opinions in Arabic.	Instructor demonstrates how to aggregate information and notice, how to check status and post status in Arabic.
MOOCs	Instructors or parents introduce MOOCs to students. Students can register as user and login to use the massive online course for free.	Instructors show students how to enrol in an Arabic language course, and encourage students leave message in the discussion area if they have any misunderstanding about the course and discuss with others in the same online course.	Instructors demonstrate how to manage the online courses, such as review or continue the course learning, and how to obtain the course completion certificate if necessary.
Blog	Instructor encourages students to use social media such as blog to set learning goals and plan for course assignments and tasks in Arabic language that engage them in SRLS *Goal setting and planning and Environmental structuring.*	Instructor encourages students to enable the blog comment feature to allow for instructor and peers feedback enabling basic interaction and sharing in Arabic language in order to foster students to use social media in informal Arabic learning and finally achieved assist formal learning performances' goals.	Instructor demonstrates how to configure a blog to pull in additional content and how to add the blog to RSS aggregation services in Arabic.

Table 5.13 (*Continued*)

	(Level1) Personal information management	(Level 2) Social interaction and collaboration	(Level 3) Information aggregation and management
YouTube	Instructor encourages students to use YouTube to subscribe to some beneficial channels or programmes in the Arabic language, such as القرآن الشيعة والحياة شيدالن، سلسلة اللغة العربية من قناة الجزيرة، و محاضرات To foster informal Arabic learning using social media and *Seeking information strategy*.	Instructor encourages students to enable the do comment under the video in Arabic language to engage students help-seeking strategy.	Instructor demonstrates how to aggregate media from several media and against some false channels to foster students' *Self-evaluating strategy*.
Google Calendar	Instructor encourages students to use Google Calendar for personal planning *and record it in Arabic language, it would be foster students' Keeping records and monitoring strategy*.	Instructor encourages students to enable the calendar sharing features to allow feedback and collaboration to complete course tasks in Arabic language.	Instructor demonstrates how to archive personal and group calendars to promote student self-evaluation regarding time planning and management.

5.6   Recommendations for Future Study

Based on the limitations of the current study, a few recommendations can be offered for future study considerations. The population of the current study are undergraduate students from six main Malaysian universities i.e. University of Malaya (UM), University Kebangsaan Malaysia (UKM), International Islamic University Malaysia (IIUM), Universiti Sultan Zainal Abidin (UniSZA), Universiti Putra Malaysia (UPM) and Universiti Sains Islam Malaysia (USIM), involving students learning the Arabic language. The researcher randomly selected 317 Arabic learners as the sample and was limited geographically and demographically. Thus, this sample distribution needs to be re-evaluated and replicated in further studies on SRLs, motivation and social media usage. The researcher suggests expanding the target sample to generalise the results for the population.

Moreover, only self-administered questionnaires were used to collect the data, without observations and interviews done with respondents. The approach used during the study could result in different findings, such as feedback received from the respondents is dependent on the sincerity and honesty of the respondents in answering the questionnaire. Furthermore, researcher adapted the instrument from various sources through literature review and this is the first time an attempt is made to examine the relationship among the dependent and independent variables defined in the current study in the context of Arabic language learners in Malaysia. Therefore, instrumentation bias is one of the limitations of the study. Thus, it is recommended that future research should include other forms of data collection. Methods such as observations and interviews explore self-regulation as a process rather than capturing questionnaire responses at a single point in time (Butler, 2002). On the other hand, the researcher concurs that "actual observations or behavioural indicators of strategy use

provide better construct validity than does a self-report questionnaire such as the MSLQ" (Duncan and McKeachie, 2005).

Besides, the findings of this study are limited to the characteristics of the samples: undergraduate Arabic learners from Malaysia and they all Muslim. Hence, further research in SRLs, motivation and SMU are recommended to be conducted in other locations or other groups to provide clearer pictures of those variables.

At last, the finding of research question indicated Arabic learners' motivation and SMU had no significant influence on academic achievement, thus, other external factors and internal factors include aspects related to the learning context should be considered to study in the future.

5.7   Summary

Nowadays, SRLs, SMU and motivation are indispensable topics in the second language acquisition field. Three of them are indispensable as three corners on a triangle. Language learners effectively use SRLs in learning. Then, motivation is the lubricant to promote long-term learning. Besides, social media is the social source to ensure the learners' language learning gears turning in self-enhance circle or self-decline. These are the process of how SRLs, motivation and SMU are three variables in the triadic reciprocal circle. This study confirmed that there is a statistically significant positive correlation between SRLs, motivation and social media usage. In addition, the current study has found the Arabic learners' SRLs and SMU at the medium level. However, they have a high level of motivation in Arabic learning. In other words, the Arabic learners in Malaysia with high interest in learning, but the learners with poor perception in strategies using. Furthermore, the findings of this study presented SRLs, motivation and SMU are not influence Arabic learners'

academic performance. Moreover, there is no moderating effect of Arabic learners' motivation on the relationship between self-regulated and SMU in Malaysia. Likewise, SRLs didn't have a moderating effect on the relationship between Arabic learners' motivation and social media usage. In the same way, SMU has no moderating effect on the relationship between self-regulated strategies and motivation as well.

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