GENDER-BASED DIFFERENCES IN LANGUAGE LEARNING STRATEGIES AMONG UNDERGRADUATES IN A MALAYSIAN PUBLIC UNIVERSITY

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ABSTRACT

Unemployment among the Malaysian public universities' graduates due to their inability to communicate proficiently and accurately in English language with proper pronunciation has been a concern among various parties. One possible method to address such issue is to look at how these graduates learn and improve their command of English language. Language learning strategies (LLS) is one of the prominent variables that can affect their language learning process. With that in view, this study investigated the LLSs used by the first year undergraduates in a Malaysian public university. It also examined the relationship between language learning strategies based on gender. The survey utilised the Strategy Inventory for Language Learning (SILL) by Oxford (1990) on 535 male and 1173 female respondents. Data obtained were analysed using descriptive statistics, t-test, One-way ANOVA and chi-square test. Finding revealed that females employed more strategies if compared to males. The research result also showed that metacognitive strategies were highly employed by these undergraduates whereas affective strategies were least used among them. Further ANOVA test revealed there was a significant difference between the language learning strategies used by these undergraduates. The implications of these findings to educators, scholars and researchers were also discussed.

Keywords: language learning strategies, metacognitive strategies, affective strategies

Introduction

In Malaysia, English is viewed as a second language (ESL). Second language learning (L2) is a term that is used to explain the learning of all other languages in addition to one's mother tongue languages in various situations and for various purposes (Cook, 2001). Oxford (1990) also added that a second language has "social and communicative functions within the community where it is learned" (p. 6). Blau and Dayton (1992) revealed that Malaysia is considered as "ESL English-using societies" (as cited in Green and Oxford, 1995, p. 268). This view was also recognised by Nunan (1999), whereby the teaching and learning of English in Malaysia is commonly used by the population at large (as cited in Kamalizad & Samuel, 2015, p. 3).

Currently, learning a second or foreign language is a crucial educational matter in most of the schools throughout the world (Lavasani & Faryadres, 2011). This is also further emphasised by Tan Sri Muhyiddin Yassin, the Deputy Prime Minister and Education Minister, Malaysia, who announced on 2 September 2014 that there would be a new policy implemented soon, in which English language would be a compulsory subject to pass in all the public universities (Lee, 2014). Furthermore, according to Kho, Aqiera, and Leong (2015), the issue of unemployment among Malaysian graduates with excellent academic achievement has come to the attention of Malaysian higher institutions. They also stated that unemployment among Malaysian graduates is due to their inability to communicate proficiently and accurately in English with proper pronunciation. This view was also echoed by Kiram, Sulaiman, Swanto, and Din (2014), who stated that Malaysian students encountered difficulties in mastering the English language, which later affected their examination results. According to them, another scenario found across Malaysian public universities was that the number of female learners surpassed the number of male counterparts. Male learners generally used fewer LLS for a given learning context compared to female learners who were likely to be more strategic (Liyanage & Bartlett, 2012). The role of gender on LLS's preferences (Liyanage & Bartlett, 2012) and success in language acquisition and learning were also highlighted (Michońska-Stadnik, 2014). Nevertheless, the role of gender is still "underestimated and neglected in research for a long period of time" (Michońska-Stadnik, 2014, p. 122). Hence, this study examined language learning strategies based on the population of learners as a whole and their differences based on gender.

Literature Review

Language learning strategies is an important variable that can affect the performance of the learners (O'Malley & Chamot, 1990; Oxford, 1989, 2003). Other than that language learning strategies have been regarded as a crucial variable in influencing academic achievement (Hakan, Aydin & Bulent, 2015) or language proficiency (Fazeli, 2012; Kiram et al., 2014). Hakan et al. (2015) also stated that language learning strategies have shifted to focus on the learners and the learning process instead of focusing on the teacher and the teaching process. Such shifts have led to the importance of conducting more studies to identify how learners learn and the strategies employed by them to enhance and stretch their use of

language learning strategies beyond their comfortable zone in the process of language learning. This shows that further studies on language learning strategies in the area of second language learning are deemed crucial. Other than that, Hakan et al. also highlighted the importance of language learning strategies for understanding the language learning process and the development of skills in learning a second or foreign language.

Language learning strategies are defined as "the steps taken by students to enhance their own learning" (Oxford, 1990, p. 1). These strategies are considered as the "tools for active, self-directed involvement" (Oxford, 1990, p. 1), which are crucial to develop communicative competence. It is stated that using appropriate language learning strategies will help to improve language proficiency and enhance self-confidence (Oxford, 1990). The word "strategy" originates from the ancient Greek term "strategia", which meant "generalship or the art of war" (Oxford, 1990, p. 7). She also stated that "tactics" is another related word to "strategy" that could be used as tools to attain the success of strategies (Oxford, 1990, p. 7). These two words were applied interchangeably because they indicate similar basic characteristics, like "planning, competition, conscious manipulation and movement toward a goal" (Oxford, 1990, p. 7). As such, Oxford (1990) defined strategy as the plan, step or conscious action to achieve an objective. This strategy concept was then transformed into "learning strategies", which are defined as the operations applied by the learners to assist them in "the acquisition, storage, retrieval and use of information" (Oxford, 1990, p. 8). More specifically, these learning strategies are specific actions employed by the learners to make the "learning easier, faster, more enjoyable, more self-directed, more effective and more transferrable to new situations" (Oxford, 1990, p. 8). Cohen (1998) also described learning strategies as the processes that learners employ consciously to enhance the storage, retention, recall and application of knowledge in the language learning process.

Oxford (1990) has classified strategies into direct strategies and indirect strategies as shown in Figure 1. Direct strategies consist of memory strategies, cognitive strategies and compensation strategies whereas indirect strategies comprise metacognitive strategies, affective strategies and social strategies.
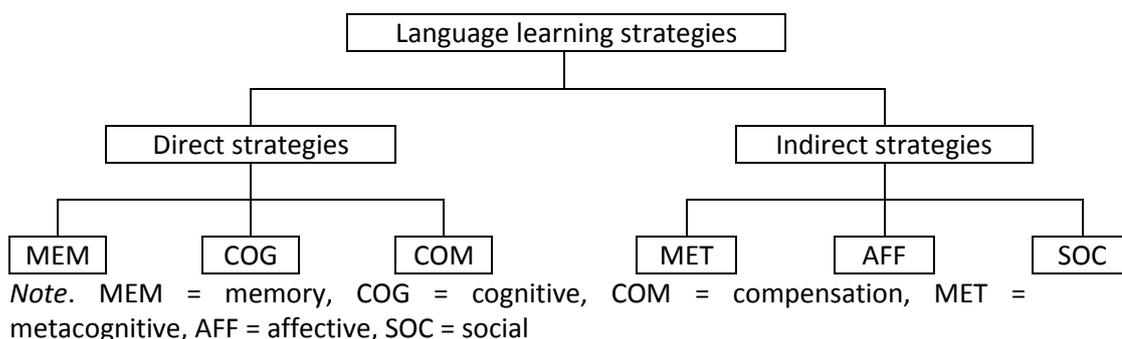

Note. MEM = memory, COG = cognitive, COM = compensation, MET = metacognitive, AFF = affective, SOC = social

Figure 1. Strategy system according to Oxford (1990, p. 16)

Direct strategies require mental processing of the language. Memory strategies are used to help learners store and retrieve new information. Some of

these memory strategies include grouping or using imagery. Cognitive strategies are to help learners to understand and produce new language using various means. These strategies include summarising or reasoning deductively. Compensation strategies are applied in order to help learners to use the language regardless of their big gaps in knowledge. These strategies include guessing or using synonyms. On the hand, indirect strategies are classified as the strategies used to support and manage language learning without being involved directly in the target language (Oxford, 1990). Metacognitive strategies enable the learners to "control their own emotion" and to "coordinate their learning" through "centering, arranging, planning and evaluating" (Oxford, 1990, p. 135). Affective strategies will assist to regulate "emotions, motivations and attitudes" (Oxford, 1990, p. 135) whereas social strategies encourage the interaction of learners with others.

Among the factors that could affect language learning strategies, gender is considered an important factor (Gu, 2002). This was also agreed by Zoghi, Kazemi, and Kalani (2013), in which gender is a crucial affective factor that plays a specific role in second language acquisition. Mcelhninny (2003) labelled gender as "the social, cultural and psychological constructs" that are referring to the males and females (as cited in Kayaoğlu, 2012, p. 14). In this research, gender refers to the male and female undergraduates. The term "gender" instead of "sex" is used in this research because gender roles change based on the norms and expectations of the society whereas sex relies on the "physiological, biological and anatomic features that cannot change" (as cited in Kayaoğlu, 2012, p. 14). Gender was originally used as a term in linguistics and then in other social science areas (Kayaoğlu, 2012). The term gender denotes "masculine and feminine categories constructed in society" (Sadiqi, as cited in Kayaoğlu, 2012, p. 14). However, Chang (2004) stated that since men and women do not only differ biologically, they are also brought up in various ways with different social expectations (Aliakbari & Hayatzadeh, 2008). Consequently, Chang (2004) added that "their behavioral differences were reflected in academic aptitudes" (as cited in Aliakbari & Hayatzadeh, 2008, p. 77). Another researcher, Rua (2006) confirmed that the interaction of neurological, cognitive, affective, social and educational factors had contributed to girls' achievement in foreign language learning based on her review on various tests and studies (as cited in Aliakbari & Hayatzadeh, 2008, p. 77).

Zoghi, Kazemi, and Kalani (2013) revealed that according to gender role theory, "prevalent gender stereotypes are culturally shared expectations for gender appropriate behaviors" (p. 1124). Eagly (1987) and Eagly and Karau (2002) also stated that females and males would learn "the appropriate behaviors and attitudes from the family and overall culture they grow up with and hence, non-physical gender differences are a product of socialisation" (as cited in Zoghi et al., 2013, p. 1124). As for the biological point of view, basically females and males have different cognitive ability and learning style (Zoghi et al., 2013). Such differences are caused by the basic physiological differences and higher-level cortical functions differences (Keefe, as cited in Zoghi et al., 2013). Regardless of whether gender differences are basically culturally or biologically determined, educational research has showed that students' academic interests, needs and achievements are affected by gender differences (Zoghi et al., 2013). The theorists of Second Language Acquisition (SLA)

(Boyle, 1987; Burstall, 1975; Ehrlich, 2001) agreed that female learners show possible superiority in their second language learning process (as cited in Zoghi et al., 2013, p. 1124).

Larsen-Freeman (2000) asserted that females excel males at the early stage of first language acquisition (as cited in Yan, 2009, p. 109). Other than that, the study on linguistics recently and with the "breakthrough of neurolinguistics experiment" further revealed the significance of gender difference in language acquisition (Liang, as cited in Yan, 2009, p. 109). Other than that, "effective integration of spatial skills and linguistic cognition" indicated that females had more advantage at the early stage of language acquisition (as cited in Yan, 2009, p. 109). In other words, theoretically, females are more adept to learn a language or a second language (as cited in Yan, 2009, p. 109). These researchers have also indicated that research in language learning has acknowledged the role of society and context besides the sex physiological of learners. With this definition and role of gender, it is feasible to compare studies on the use of language learning strategies across different sociocultural contexts.

Studies on the use of language learning strategies based on gender had resulted in mixed conclusions (Ehrman & Oxford, 1990; El-Dib, 2004; Zarei & Beiza, 2013). Similarly, Gu (2002) indicated that the empirical studies on the influence of gender and academic major on language learning strategies often had produced inconsistent results. In addition, gender and language proficiency factors are among the two factors that have not received enough attention as the effect of these two factors will affect the use of language learning strategies (Salahshour, Sharifi, & Salahshour, 2013). Fewer studies were conducted on male and female in terms of their language learning (Yan, 2009). The focus of research on the role of gender on the employment of learning strategies was still lacking (Ellis, as cited in Kayaoğlu, 2012, p. 14). Based on those views, there is a still a need to examine further the effect on gender of the use of language learning strategies.

Studies on the effect of gender on language learning strategies have also shown inconsistent results. While some studies have revealed that female learners employed more language learning strategies compared to their male counterparts (Kiram et al., 2014; Yunus, Sulaiman, & Embi, 2013), others have indicated the obverse (Abbasian, Khajavi, & Mardani, 2012; Aliakbari & Hayatzadeh, 2008; Wharton, 2000). Previous studies have revealed that there were significant differences on the use of strategies based on gender (Hakan et al., 2015; Kiram et al., 2014; Liyanage & Bartlett, 2012; Tezcan & Deneme, 2015). For example, the study by Tezcan and Deneme (2015) on young Turkish learners revealed that a significant difference was found in the overall language learning strategies used by the learners. This study also found that females employed more language learning strategies compared to males. Another study by Hakan et al. (2015) among the undergraduates revealed that there was a significant difference in only the compensation strategies, which were used mostly by male undergraduates compared to female undergraduates. However, a study by Kiram et al. (2014) on 56 pre-university students discovered that females employed more strategies compared to males for all language learning strategies, except for the compensation strategies, in which these strategies were more dominant among the males.

Nevertheless, further tests revealed that there were only significant differences in the use of cognitive and social strategies based on gender. Liyanage and Bartlett's study (2012) among high school learners revealed that females had higher use of metacognitive and cognitive strategies compared to male learners regardless of their ethnicity. Results also showed that there were significant differences in the use of overall strategies used. However, no significant difference was found on the use of individual language learning strategies based on gender.

Other than significant difference found in the use of language learning strategies based on gender, literature has also revealed contradictory findings that showed the use of language learning strategies did not differ statistically based on gender (Kashefian-Naeeini & Maarof, 2010; Kayaoğlu, 2012; Nguyen & Godwyll, 2010). For example, Nguyen and Godwyll's study (2010) revealed that there was no significant difference on the use of language learning strategies based on gender even though females had higher tendency to employ more language learning strategies. Likewise, another study by Kashefian-Naeeini and Maarof (2010) also found that there was no significant statistical difference in all the learning strategies based on gender even though females were found to employ more of memory, metacognitive and affective strategies among the undergraduates in Universiti Kebangsaan Malaysia, Malaysia. In addition, Kayaoğlu (2012) also provided the support that there was no significant difference on the use of overall language learning strategies among male and female science students in a Turkish university. Nevertheless, Kayaoğlu (2012) revealed that there was a significant difference with respect to the effect of gender of the use of individual language learning strategies. Since literature has revealed that the effect of gender has produced mixed findings, it is therefore still crucial to investigate how this factor could affect language learning strategies in various contexts. This concern has led to the investigation of the language learning strategies among the first year undergraduates in respect to the effect of gender in Universiti Malaysia Sarawak, a public university in Malaysia.

Research Objectives

This study aimed to identify the language learning strategies of first year undergraduates in a public university, University Malaysia Sarawak, Malaysia. It also aimed to investigate further whether there was a difference in the use of language learning strategies based on gender. However, this paper would only report the preferred language learning strategies of these respondents and whether there was a difference in the choice of language learning strategies based on gender. The following questions were addressed in this paper:
1. What are the language learning strategies employed by first year undergraduates in a Malaysian public university?
2. Is there any difference in terms of language learning strategies based on gender?

Method

This study was part of a larger study on language learning strategies employed by Malaysian undergraduates. In order to identify the English language learning strategies of these first year undergraduates, the Strategy Inventory for Language Learning (SILL) version 7 by Oxford (1990) was utilised. The overall reliability of SILL in this study was high, with coefficients of Cronbach's alpha of 0.926. Such finding further supported the results of past studies, which indicated that SILL had shown a high reliability in many studies (Oxford, 1996; Savas & Erol, 2015). Fahim and Noormohammadi (2014) also supported that the SILL was the best-known strategy scale and was widely employed due its high reliability and validity. Furthermore, the internal consistency of SILL, within the range of .89 to .98, is reported in different studies (Oxford & Burry-Stock, 1995).

This instrument was worded in two languages, which were the English language and the national language of Malaysia, i.e. *Bahasa Melayu*. The instrument had to be adapted to include both languages in order to cater to respondents with low levels of English language proficiency. The questionnaire consisted of 50 questions. These questions were used to identify the six language learning strategies as categorised by Oxford (1990), namely memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies The items in this instrument were measured using a five-point Likert scale ranging from "always or almost always true of me" to "never or almost never true of me". The data were then analysed using Statistical Package for the Social Sciences version 18 (SPSS 18).

Participants

The study was conducted on 1,708 first year undergraduates of a public university in Malaysia. These students were briefed about the nature and purpose of this study before they were asked to sign the participation consent form. Of the 1,708 undergraduates, 535 respondents were male whereas the remaining, 1,173 respondents were female.

Results

Quantitative findings from the questionnaire survey in Table 1 showed that first year undergraduates most preferred metacognitive strategies (*M* = 3.42, *SD* = .71) in learning the English language. This was followed by the use of social (*M* = 3.26, *SD* = .72), cognitive (*M* = 3.21, *SD* = .59), compensation (*M* = 3.16, *SD* = .63), memory (*M* = 3.03, *SD* = .59) and affective (*M* = 2.97, *SD* = .64) strategies. All the mean scores of language learning strategies ranged from 2.97 to 3.42 indicated that the respondents "sometimes" used these strategies as classified by Oxford (1990).

Table 1
Overall language learning strategies used by first year undergraduates

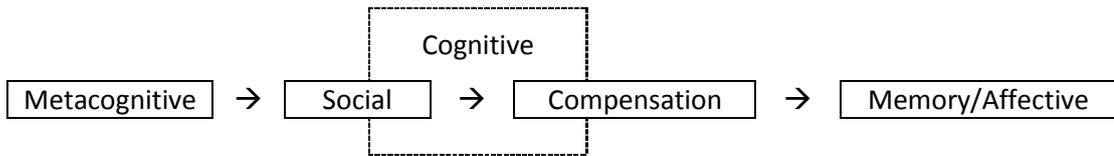| Language Learning Strategies		*M*	*SD*	Rank
Direct	Memory	3.03	.59	5
	Cognitive	3.21	.59	3
	Compensation	3.16	.63	4
Indirect	Metacognitive	3.42	.71	1
	Affective	2.97	.64	6
	Social	3.26	.72	2

Apart from that, memory, cognitive and compensation strategies were categorised as direct strategies whereas metacognitive, affective and social strategies were grouped as indirect strategies (Oxford, 1990). This study revealed that the first-year undergraduates significantly employed more indirect strategies (*M* = 3.22, *SD* = .71) compared to the use of direct strategies (*M* = 3.14, *SD* = .61) (*t*(10008) = 6.221, *p* < .05). This finding corroborates with the study by Tan and Kaur (2015) on English learners at another Malaysian public university, namely Universiti Sains Malaysia.

In order to obtain more in-depth information about preferences of language learning strategies among the respondents, further statistical analysis was conducted. One-way Analysis of Variance (ANOVA) was used to determine whether there was significant difference among all the mean scores of six language learning strategies, as shown in Table 2.

Table 2
One-way analysis of variance (ANOVA) for overall language learning strategies

	Variation	*SS*	*df*	*MS*	*F*	*p*
Learning strategies	between	229.213	5	45.843	108.707*	.000
	within	4319.127	10242	.422		

The finding revealed that there was a significant difference on the use of language learning strategies among the first-year undergraduates in learning English (*F*(5,10242) = 108.707, *p* < .05) (Table 2). At α = .05, Tukey's HSD tests showed that mean score of metacognitive strategies has significant differences from all the other language learning strategies. Mean score of social strategies was also significantly different compared to other language learning strategies except cognitive strategies. While the use of cognitive strategies showed that there were no significant differences with social and compensation strategies, there were significant differences for memory, metacognitive and affective learning strategies. Compensation strategies have significant differences with all the other learning strategies except cognitive strategies. Both memory and affective strategies did not show any significant difference among them but shown significant differences with other learning strategies. The statistical findings of Tukey's HSD test about the language learning strategies employed by respondents are shown in Figure 2.

Note. "→" means "higher mean score"

Figure 2. Significant order of language learning strategies

Based on Figure 2, metacognitive strategies were mostly preferred by the respondents in learning English compared to other language learning strategies. It was followed by social/cognitive, cognitive/compensation, and lastly memory/affective strategies. Mean scores of social and cognitive or cognitive and compensation did not have any significant differences. Likewise, there was also no significant difference between the employment of memory and affective strategies.

Table 3
Language learning strategies used by first year undergraduates based on gender

Learning strategies		Male (*n* = 535)		Female (*n* = 1173)		*t*	*df*	*p*
		M	*SD*	*M*	*SD*			
Direct	Memory	2.95	.61	3.07	.58	-3.809*	1706	.000
	Cognitive	3.16	.62	3.23	.58	-2.312*	975	.021
	Compensation	3.18	.64	3.16	.63	.512	1706	.603
Indirect	Metacognitive	3.33	.75	3.46	.69	-3.464*	960	.001
	Affective	2.87	.65	3.01	.62	-4.397*	1706	.000
	Social	3.22	.73	3.28	.71	-1.700	1706	.089
Total		3.12	.51	3.20	.46	-3.444*	1706	.001

Table 3 showed that male significantly used less strategies (*M* = 3.12, *SD* = .51) compared to female undergraduates (*M* = 3.20, *SD* = .46) in learning English language (*t*(1706) = -3.444, *p* < .05). Both males and females were "medium users" for all language learning strategies as their scores were between 2.5 and 3.4 based on the classification by Oxford (1990), except for metacognitive strategies which was "highly used" by females. Independent samples *t*-tests also revealed that male respondents significantly employed less direct strategies (*M* = 3.10, *SD* = .51) compared to female respondents (*M* = 3.15, *SD* = .48) (*t*(1706) = -2.265, *p* < .05). Likewise, males significantly used less indirect strategies (*M* = 3.14, *SD* = .60) compared to females (*M* = 3.25, *SD* = .56) (*t*(1706) = -3.830, *p* < .05). In addition, no significant difference was found between direct and indirect strategies used by males (*t*(3130) = -1.795, *p* > .05). However, female respondents significantly employed more indirect than direct strategies in learning English (*t*(6882) = 6.368, *p* < .05).

While learning English language, male undergraduates most preferred metacognitive strategies (*M* = 3.33, *SD* = .75). This was followed by social (*M* = 3.22, *SD* = .73), compensation (*M* = 3.18, *SD* = .64), cognitive (*M* = 3.16, *SD* = .62), memory

(*M* = 2.95, *SD* = .61) and affective strategies (*M* = 2.87, *SD* = .65). Female undergraduates also employed metacognitive (*M* = 3.46, *SD* = .69) and social strategies (*M* = 3.28, *SD* = .71) the most similar male undergraduates. This was followed by cognitive (*M* = 3.23, *SD* = .58), compensation (*M* = 3.16, *SD* = .63), memory (*M* = 3.07, *SD* = .58) and affective strategies (*M* = 3.01, *SD* = .62). Affective followed by memory strategies were the least preferred for both male and female first year undergraduates. Female undergraduates significantly preferred to use memory, cognitive, metacognitive and affective strategies compared to male undergraduates in learning English language. However, there were no significant differences for compensation and social strategies employed by those male and female undergraduates.

Discussion

Based on the quantitative findings, metacognitive strategies were the most employed strategies by the first year undergraduates in learning English as a second language. This finding is consistent with findings of other empirical studies (Aliakbari & Hayatzadeh, 2008; Platsidou & Sipitanou, 2015; Tan & Kaur, 2015). It appears that even though these studies were carried out on different levels of learners, like university students (Aliakbari & Hayatzadeh, 2008; Tan & Kaur, 2015), primary or secondary school students (Platsidou & Sipitanou, 2015), the results still showed that these learners employed mainly metacognitive strategies. In other words, the learners have recognised the importance of metacognitive strategies in their language learning strategies despite their education levels ranging from primary to tertiary education. Such preference for the use of metacognitive strategies might relate to the Malaysian education system, which is examination oriented. Due to the learners' aims to excel in the examinations, learners are indirectly prompted to plan, organise and monitor their English language learning process. Such necessity to use metacognitive strategies to enhance their English language proficiency is even more demanding at tertiary level as most universities courses are delivered and assessed in the English language. Such situation has motivated these university learners to intensify their effort to improve their command of the English language. As reported in most studies, these undergraduates will plan, monitor and evaluate their own language learning process for better academic performance. Daghistani's (2015) concept of metacognitive thinking skills as "mental actions" employed by an individual to "organise, monitor, guide and control" his or her thinking (p. 103) was similar to the definition of metacognitive strategies by Oxford (1990). Daghistani (2015) also revealed that the use of metacognitive thinking was a "strong indicator of possessing abilities, skills that develop with age" (p. 108). The results on metacognitive strategies being the most preferred language learning strategies revealed that these undergraduates were aware of the importance to monitor, plan and control their own learning as these strategies provide the necessary support for them to be more independent and successful in the language learning process, especially in higher institutions contexts. Metacognitive strategies are viewed as the more powerful strategies in assisting the learners to be more self-regulated in the learning process. Other than that, according to Hashim and Sahil (1994), university

students are more prompted to monitor and evaluate their own language learning in order to obtain good grades. Such use of metacognitive strategies can be related to their motivation to learn the English language in order to have better academic achievement. Such view is also in accordance with Thang, Ting, and Jaafar's views (2011), in which Malaysian students had higher tendency for instrumental motivation (as cited in Domakani, Roohani, & Akbari, 2012, p. 134). However, there were studies showing that other language learning strategies were highly preferred by learners. For example, the study by Subramaniam and Palanisamy (2014) revealed that compensation strategies were mostly used by learners in private secondary schools in Malaysia. These students had to resort to compensation strategies due their grammar and vocabulary deficiencies. This clearly showed that learners' choice of language learning strategies could also be affected by their command of the English language.

This study has shown that male and female undergraduates had higher preferences for metacognitive strategies and social strategies, similar to the finding by Kiram et al. (2014). This could be due to the fact that both studies were located in the same context and learners are indirectly assumed to show similar influence in learning English by their society despite of their sex biological aspect.

In this study, female undergraduates were also found to employ more strategies compared to male undergraduates. Female undergraduates also significantly employed more of direct and indirect strategies compared to male undergraduates. Both findings confirmed the fact that females were more superior in the use of language learning strategies if compared to males as reported by most other researchers (Liyanage & Bartlett, 2012; Platsidou & Sipitanou 2015). This could be related to the nature and personality of females, in that they are more motivated to explore different language learning ways to improve their language learning process compared to males. This was further supported by Platsidou and Sipitanou (2015), whereby females were found to outperform boys in self-reported scores of different "abilities, skills and personal characteristics" (p. 91). Chambers' (2003) and Tannen's (1991) contention, in which females exhibited greater enthusiasm and determination in learning for achieving social equality through education and overcoming centuries of male oppression could properly explained why females used more strategies than males (as cited in Liyanage & Bartlett, 2012, p. 247). López Rúa (2006) also agreed that girls' achievement in foreign language learning is enhanced by the interaction of neurological, cognitive, affective, social and educational factors. He added that girls' individual differences that comprised their interests and abilities and the social conditions could also encourage them to use strategies more frequently. On the other hand, this study contradicts the results of studies where males employed more language learning strategies (Aliakbari & Hayatzadeh, 2008; Subramaniam & Palanisamy, 2014; Zarei & Beiza, 2013). For example, Zarei and Beiza (2013) reported that males scored significantly higher than females in all language learning strategies, except for social strategies, in which both gender equally employed these strategies. Differences in findings could be due to other factors that could be interrelated with gender like context and the language proficiency of the learners since there were English majors.

Besides that, the present study also showed that there was a statistically significant difference (t(1706) = -3.444, p < .05) in terms of all the other language learning strategies except for compensation and social strategies employed by the undergraduates based on gender. Such findings concurred with the results of other researchers (Ehrman & Oxford, 1989; El-Dib, 2004; Hashemi, 2011; Khodae Balestane, Hashemnezhad, & Javidi, 2013). However, in other studies, it also revealed that gender did not have any effect on the use of language learning strategies (Abbasian et al., 2012; Aliakbari & Hayatzadeh, 2008; Subramaniam & Palanisamy, 2014). For example, Aliakbari and Hayatzadeh's study (2008) revealed that there was no significant difference on the use of all the language learning strategies because their respondents were from the same major of studies. On the other hand, Subramaniam and Palanisamy's (2014) research indicated such finding could be possibly be related to the small and unbalanced respondents' sample sizes. In other words, whether gender could significantly affect the use of language learning strategies might possibly be determined by other factors, besides gender.

Conclusion

In conclusion, language learning strategies appear to be an important variable that could determine the success of language learners as pointed out by different researchers and scholars (Kashefian-Naeeini & Maarof, 2010). Since this study showed that the most preferred strategies by first year undergraduates in a Malaysian public university were metacognitive strategies, reinforcing the use of metacognitive strategies will lead the learners to a more independent and self-directed language learning process as they will try to explore, plan, manage and evaluate their own learning. However, since this study did not identify the specific metacognitive strategies preferred by learners, future research should investigate this aspect. When the learners possess the ability to diversify and manage their language learning strategies appropriately in learning English language, indirectly they are able to increase their language proficiency.

Other than that, learners should also be exposed to various types of language learning strategies in order for them to stretch their use of language learning strategies based on different language learning contexts and tasks. Applying language learning strategies in an appropriate and a flexible way will ensure a more successful language learning process. This was also agreed by Fazeli (2012), who mentioned that teaching appropriate language learning strategies to these learners empowers them to manage their own learning process. If learners are able to take control of their language learning process using appropriate strategies based on various contexts and tasks given, besides the preferred metacognitive strategies, this indirectly leads the learners to have a better command of English language proficiency, which gives them an added advantage when looking for employment upon graduation.

Besides that, since this study revealed that female surpassed male learners in using more language learning strategies and females significantly employed more indirect strategies and direct strategies, multiple research methods and data collection, like interviews, observation and so on could be employed to identify why

these phenomena occur. Other than that, since past studies also revealed that males or females applied strategies differently, it is suggested that future studies should investigate the specific language learning strategies employed by male and female learners using various language activities and contexts because as of up to date, most studies have only reported on the differences of the overall language learning strategies used based on gender. More studies are also recommended to be carried out in various contexts and cultures as gender might interact with other factors in the use of language learning strategies.

Other than that, this study also found that there was a significant difference in the use of language learning strategies based on gender for all the language learning strategies, except for compensation and social strategies. However, further tests indicated significant differences were found in the use of memory, cognitive, metacognitive, and affective strategies. However, compensation and social strategies did not show any significant difference based on gender. Besides that, since females were found to significantly employ more indirect and direct strategies than males, future planning in curricula and activities implemented in class might consider how these indirect and direct strategies could be implemented effectively based on gender. Nevertheless, the results on the influence of gender should be taken with precaution as other factors especially the sociocultural contexts of learners, including their upbringing and exposures to various language learning environments and resources could also contribute to these significant differences. Hence, it cannot be denied that factors other than gender could also create differences in the use of language learning strategies since language learning process has shifted to focus on the learners rather than the teacher. Further measures or instruments used should also be proposed by the language researchers in order to determine the specific language learning strategies that could affect the language learning strategies through quantitative and qualitative research methods. The use of qualitative methods like think aloud protocol, observations, learning journal besides self-reported survey instruments, might be able to provide a rich data that could benefit the teaching and learning process even more.

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