Factors Affecting the Employment of Arabic Language Learning Strategies Among Religious Secondary School Students

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ABSTRACT
Several studies on Language Learning Strategies (LLS) showed that various factors influence the selection and the employment of LLS. This paper describes a study that was designed i) to identify the variables that contribute significantly to LLS employment, and ii) to identify the level of contribution of the predictor variables on the employment of LLS. The selected variables were Arabic language grades, language learning motivation, total family income, father’s level of education, mother’s level of education and total hours of learning Arabic language outside the classroom per week. This study was conducted in thirteen religious secondary schools in Terengganu. A total of 460 Form Four students were selected randomly. Research data were collected using a self-reported questionnaire, which was adapted from the Strategy Inventory for Language Learning (7.0 version) (Oxford, 1990) and Language Learning Motivation (Ehrman & Oxford, 1991). The Stepwise Multiple Regression statistical test was used to answer the research questions and to test the related null hypothesis. Results showed that the four independent variables, which were language learning motivation, Arabic language grades, total hours of learning Arabic language outside the classroom per week, and father’s level of education were correlated and contributed significantly to employment of LLS among the Arabic language students.

Keywords: Arabic language, language learning motivation, language learning strategies

INTRODUCTION
Language learning strategies (LLS) are specific steps or actions taken by students to facilitate acquisition, storage, retrieval and use of information until learning becomes easier, faster, more enjoyable, more self-
directed, more effective and easier to be moved to a new situation. These strategies involve mental and communicative procedures to learn and use language in the improvement and mastery of target language mainframe (Oxford 1990; Nunan, 1999).

Most researchers of second language learning view LLS as a very important element that plays a major role in understanding the processes and ways of how second or foreign languages are being learnt (Stern, 1983; Ellis, 1994). LLS can make language students more efficient and effective in learning a language. In fact, most studies show that effective language students are found to be using various kinds of LLS more frequently than less effective students (Wharton, 2000; Griffiths, 2003; Holt, 2005; Gahungu, 2007). LLS can also be taught to less effective students (O’Malley & Chamot, 1990; Oxford, 1990).

In relation to language learning, cognitive and social cognitive learning models are two major theoretical frameworks that are highly recognised in setting the direction of LLS research. Cognitive psychology views the information acquisition process through four stages: selection, acquisition, construction and integration (Weinstein & Mayer, 1986). In the selection stage, students concentrate and focus on the specific information they need or are interested in. Then, the information is transferred to short-term memory. In the acquisition stage, students transfer the information to long-term memory for storage. In the construction stage, students connect or integrate the information stored in the short-term and long-term memory to organise and increase their understanding of a new concept or idea. Finally, in the integration stage, while learning new information, students actively seek important knowledge in the long-term memory and transfer it to the short-term memory. While passing through all the four levels above, students use a variety of appropriate language learning strategies. They will, among others, create mental linkages, apply images and sounds, analyse and reason, as well as guess using linguistic clues. All of these are done to speed up the acquisition, storage, memory and the use of information (Ehrman & Oxford, 1990).

Furthermore, language learning is not only about information processing regarding grammar, vocabulary and the phonetic system alone. Language is also seen as a part of culture, and culture is a part of the language. Both are interdependent and inseparable without affecting the significance of one another (Brown, 1994). Therefore, language learning also involves the individual’s participation in the socialisation process through the interpersonal and intrapersonal interactions. This situation has established a strong relationship between social interaction, social context and the language (Donato, 2000). Thus, social cognitive learning theory is concerned with the impact of social and cultural on human learning. It is undeniable that the social psychology and socio-cognitive scholars such as Vygotsky (1978) and Bandura (1991) also have contributed to the formation of the LLS theory. The social learning theory views individuals’
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cognitive systems as a result of their social interaction with people around them (Woolfolk, 1990). Therefore, interaction is most crucial for learning development and language acquisition either in formal or natural learning situations. The main concept in the theory is that interaction does not only facilitate learning, but it is also a contributing factor in the employment of language learning and acquisition strategies (Saville-Troike, 2006). A study done by Donato and McCormick (1994) on the LLS from socio-cultural perspective shows that the employment and development of LLS are results from students’ mediation and socialisation with the target language community in which language learning takes place. Language learning strategies continue to evolve and become active when there is interaction between students and their environment.

In general, both cognitive and social cognitive theories show that several factors influence the selection and employment of learning strategies as well as language acquisition. Therefore, a study on factors that contribute to LLS employment is really important. Ellis (1994) opined that differences in students’ background contribute to LLS employment, and is one of the variables that should be studied. As shown in Fig. 1, individual differences are believed to have influenced the selection and the employment of learning strategies, and the strategies used also influence some individual difference variables. For example, LLS employment helps students achieve success and enjoyment in language learning. LLS employment can also enhance students’ performance and language proficiency, increase their motivation and reduce their language anxiety level. At the same time, these factors influence students’ LLS selection and employment processes.

Thus, many LLS studies on the factors contributing to the selection and the employment of LLS have been done. Those studies showed that various factors such as gender (Oxford et al., 1988), cultural background (O’Malley & Chamot, 1990), motivation (Ehrman & Oxford, 1989), learning period (Politzer, 1983) and type of language (McGroarty & Oxford, 1990) influence the selection and the employment of LLS. Those studies also provided significant information on the
process and diversity of language learning, information for the pedagogy advancement and issues for further research.

Several empirical studies have shown a positive relationship between language achievement and LLS employment. Most studies showed that students who have a high level of language proficiency tend to use more strategies on a regular basis than the underachieving students (Bruen, 2001; O’Malley & Chamot, 1990; Wharton, 2000). Findings of several studies have also supported that relationship even though not entirely (Khaldeih, 2000; Vann & Abraham, 1990). On the contrary, some other studies such as Chen (1990) and Philips (1991) showed that there was a negative relationship between language achievement and LLS employment. Okada, Oxford and Abo (1999) studied the relationship between motivation and employment of LLS among English native speakers who learned Japanese and Spanish. By using Strategy Inventory for Language Learning (SILL) and Affective Survey questionnaires, they found that Japanese language students were more highly motivated than Spanish language students, and they used LLS more often than the Spanish language students.

Regarding parents’ level of education, a study by Mohd Nazali (1999) on Malay language students in Malaysia showed that there was a significant relationship between parents’ level of education and the use of strategies in terms of LLS as a whole and in terms of the categories investigated. The study also reported that students with highly educated parents used more LLS on the whole compared to other groups. Faizahani’s (2002) study on English language students in Malaysia showed that students with mid-academic background parents employed more LLS than students whose parents were less educated.

The study by Mohd Nazali (1999) also showed that there was a significant relationship between total family income and overall LLS employment. Students from high-income families employed more strategies than students from middle and low-income families. However, Faizahani’s (2002) study reported that there was almost no correlation between the socioeconomic status factors and the LLS. There was weak correlation between middle-class socioeconomic status factors and the media usage strategies. Thus, Faizahani (2002) suggested that there was no significant relationship between the employment of LLS and the level of socioeconomic status. Ramirez (1986) conducted a study on 105 students who learned French in two schools in New York City. This study showed that the learning period influenced the LLS employment rate. Students with a longer learning period were found to be using more LLS than those in the other group who had a shorter learning period.

Most of the research on the influence of contributing factors on LLS employment have been conducted in Western countries, and such research involving the Malaysian context is still lacking. The studies were mostly done for English, Spanish, French and German, while the studies on the Arabic language, either within or outside Malaysia,
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even in Arab countries themselves, are limited. Thus, the lack of research in the context of Arabic language learning and the desire to explore the extent of a number of selected variables contributing to LLS employment were among the factors that prompted the present study. It is hoped that this study will be able to help improve the performance of Arabic language learners, which is claimed to be declining (Wan Abrisam, 2002; Saupi, 2003; Nasimah, 2006) by implementing the findings of this study. At the same time, the learning of the Arabic language in Malaysia can be made more effective, dynamic and exciting.

PURPOSE OF THE STUDY

This study aimed to achieve the following objectives:

1. To identify factors that contribute significantly to LLS employment by Arabic language students.

2. To identify the level of contribution of the predictor variables in LLS employment by Arabic language students.

To achieve the objectives, a total of six independent variables were tested, namely Arabic language grade, language learning motivation, total family income, father’s level of education, mother’s level of education and total hours of learning the Arabic language outside the classroom per week.

RESEARCH METHODOLOGY

This quantitative study, which employed the survey design, was conducted in 13 religious secondary schools in Terengganu. The population of the study consisted of 1,691 Form Four students. Using Krejcie and Morgan’s (1970) table for determining sample size, 460 students were randomly selected as the statistical sample.

A questionnaire was used as the instrument to collect data from the respondents. The questionnaire consisted of three sections. The first section was on demographic information such as Arabic language grade in the Peperiksaan Menengah Rendah (PMR) (Lower Secondary Assessment (LSA), parents’ level of education, total family income and total hours of learning the Arabic language outside the classroom per week. The second section was for collecting data on the use of Arabic language learning strategies of the respondents. The third section was on questions on Arabic language learning motivation (LLM).

The instrument used in this study was developed based on the constructs in SILL version 7.0 developed by Oxford (1990). SILL is an established instrument used to study LLS based on cognitive and social cognitive theory. This instrument has been translated to 23 languages and used in more than 120 dissertations and theses. Tens of thousands of language students have been involved in the LLS studies that made use of the instrument (Lan 2005). Until now, it is still considered an effective and robust instrument to identify various strategies used
by students. Other than the six constructs in SILL (memory, cognitive, compensation, metacognitive, social and affective), another construct called metaphysic construct was also added. This metaphysic construct was developed by Kamarul Shukri et al. (2009) based on the observation on general nature of learning Arabic language and the uniqueness of the attitude towards learning the language in Malaysia. The construct was established based on concept, theory and procedure of inventory development. The construct had also been verified by empirical studies (Kamarul Shukri et al. 2009; 2012). All these seven constructs were included in the second section of the instrument. Next, the questions in the third section of the instrument were developed based on the constructs and items in the motivation section of the Affective Survey questionnaire developed by Ehrman and Oxford (1991).

The face and content validities for the developed questionnaire were determined by four experts. Besides, a pilot study was conducted on 49 religious secondary school students to test the administrability of the instrument, to obtain the face validity and to determine the reliability index. Table 1 shows the values of Cronbach’s alpha reliability coefficients for each LLS construct with the index ranging from 0.650 to 0.869. The table also shows the values of the Cronbach’s alpha reliability coefficients for each LLM construct, ranging from 0.790 to 0.835. These reliability indices are high and acceptable (Sekaran, 2003; McMillan & Schumacher, 2006).

### RESULTS

The regression analysis involved six predictor variables, which were Arabic language grade, language learning motivation, total of family income, father’s level of education, mother’s level of
Education and total hours of learning Arabic language outside the classroom per week. Meanwhile, LLS employment was the criterion variable to all the six independent variables. Analysis of variance in regression explained whether the constructed model had produced a good prediction on its significance to the established predictors or not. The analysis tested the null hypothesis and the differences between the dependent and independent variables. Table 2 shows the $F = 95.904$ and its significance value $= 0.000$ ($p < 0.05$). Therefore, the first null hypothesis (Ho.1), which stated that there was no significant contribution by the six independent variables to LLS employment, was successfully rejected.

The results of the Stepwise Multiple Regression analysis, which identified the relative contribution of the six independent variables on LLS employment, are summarised in Table 3. The results of the analysis showed that four independent variables contributed significantly ($p <0.05$) to the total variance in LLS employment, namely language learning motivation, Arabic language grade, total hours of learning Arabic language outside the classroom per week, and father’s level of education. The four independent variables contributed 47% to the variance in the LLS employment. Therefore, the null hypothesis, which stated that there was no significant contribution by the independent variables to LLS employment, was successfully rejected.

The main and highest predictor for LLS employment was language learning motivation ($\beta = 0.418$, $t = 10.883$, and $p = 0.000$) that contributed as much as 32.9%. This indicates that for every one

**Table 2**
Analysis of Variance for Stepwise Multiple Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>64.443</td>
<td>4</td>
<td>16.111</td>
<td>95.904</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>72.740</td>
<td>433</td>
<td>0.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>137.183</td>
<td>437</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3**
Stepwise Multiple Regression Analysis for the Independent Variables Influencing LLS Employment

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta (β)</th>
<th>t</th>
<th>Sig.</th>
<th>$R^2$</th>
<th>Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>0.420</td>
<td>0.039</td>
<td>0.418</td>
<td>10.883</td>
<td>0.000</td>
<td>0.329</td>
<td>32.90</td>
</tr>
<tr>
<td>Arabic Language Grade</td>
<td>0.123</td>
<td>0.015</td>
<td>0.309</td>
<td>8.077</td>
<td>0.000</td>
<td>0.429</td>
<td>10.00</td>
</tr>
<tr>
<td>Total Learning Hours</td>
<td>0.194</td>
<td>0.039</td>
<td>0.180</td>
<td>4.972</td>
<td>0.000</td>
<td>0.459</td>
<td>3.00</td>
</tr>
<tr>
<td>Father’s Level of Education</td>
<td>0.055</td>
<td>0.018</td>
<td>0.106</td>
<td>3.018</td>
<td>0.003</td>
<td>0.470</td>
<td>1.10</td>
</tr>
<tr>
<td>Constant</td>
<td>0.001</td>
<td>0.142</td>
<td>0.016</td>
<td>0.006</td>
<td>0.996</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$R = 0.685$; $R^2$ Square = 0.470; Adjusted $R^2$ Square = 0.465; Constant = 0.001; Standard Error = 0.142
unit increase in the score level of language learning motivation, there is a predictable increase of 0.418 unit in LLS employment rate. This result clearly showed that the improvement in the level of motivation in language learning among the Form-Four students in religious secondary schools was the major factor that contributed 32.9% to the employment of LLS in learning Arabic language.

The second most important predictor was the Arabic language grade (β = 0.309, t=8.077 and p = 0.000) and its contribution to LLS employment was as much as 10%. This means that when the score of the Arabic language grade increases by one unit, LLS employment will also increase by 0.309 unit. The result clearly showed that when the achievement of the Arabic language grade increased, the level of LLS employment among students also increased. The third predictor that contributed as much as 3% of the LLS employment was the total hours of learning the Arabic language outside the classroom per week (β = 0.180, t = 4.972 and p = 0.000). The result indicated that when the total hours of learning the Arabic language outside the classroom per week increased by one unit, the LLS employment rate also increased by 0.18 unit. In other words, if the students were able to increase their total hours of learning the Arabic language outside the classroom per week, then their level of LLS employment would also increase. Father’s level of education (β=0.106, t = 3.018 and p = 0.003) was the fourth and final predictor that contributed 1.1% to LLS employment. Therefore, changes in father’s level of education only contributed 1.1% of variation in students’ level of LLS employment. This indicates that when father’s level of education increased by one unit, LLS employment would also increase by 0.106 unit. In other words, father’s level of education also has a role in the changes in the level of LLS employment among Arabic language students.

Therefore, the result of the data analysis showed that for the study population (sample size = 460), the four predictor variables, namely language learning motivation, the Arabic language grade, total hours of learning Arabic language outside the classroom per week and father’s level of education were indeed the predictors for LLS employment. The value of $R^2 = 0.47$ showed that the overall contribution of the four predictor variables on LLS employment was 47%. The percentage values were 32.9% from language learning motivation, 10% from Arabic language grade, 3% from the total hours of learning Arabic language outside the classroom per week, and 1.1% from father’s level of education (see Table 3). The excess of 53% can be explained by other variables that were not taken into account in this model. The finding showed that there might be other factors that affected or influenced the employment of LLS, which were not discussed in this study (Hair et al., 1998; Pallant, 2001; Tabachnick & Fidell, 2001). The results also dismissed researchers’ assumptions that suggested total family income and mother’s level of education were the predictors for LLS employment.
among Arabic language students. The Adjusted R$^2$ value provided the estimation of how far this model fits with other sets of data from the same population. Its value is in the range of 0.0 to 1.0. To assess the extent to which the regression model fits or suits the data, Muijs (2004) proposed the Adjusted R$^2$ values <0.1 as poor (not good), 0.11 - 0.3 as low, 0.31 - 0.5 as moderate, and > 0.5 as strong (good). Given the Adjusted R$^2$ value for this study was 0.465, thus this developed model was considered as moderate. However, given the Adjusted R$^2$ value was close to 0.5, the proposed model was considered suitable to predict the level of LLS employment among Arabic language students in religious secondary schools. In general, the overall significant contribution of the four independent variables to LLS employment could be formed through a regression equation. The equation is the prediction of the dependent variables when the independent variable values have been determined. The regression equation for this study is as follows:

$$Y = 0.001 + 0.420 X_1 + 0.123 X_2 + 0.194 X_3 + 0.055 X_4 + 0.142$$

where:

- $Y$ = LLS employment
- $X_1$ = Language learning motivation
- $X_2$ = Arabic language grade
- $X_3$ = Total hours of learning Arabic language outside the classroom per week
- $X_4$ = Father’s level of education

Constant = 0.001
Standard Error = 0.142

With reference to the above regression equation, the null hypothesis was successfully rejected. The Stepwise Multiple Regression analysis found that the four independent variables were correlated, affecting and contributing to the level of employment of the Language Learning Strategies (LLS) among Form Four students in religious secondary schools in Terengganu. The independent variables were language learning motivation, Arabic language grade, total hours of learning Arabic language outside the classroom per week and father’s education level.

**DISCUSSION**

Multiple Regression analysis showed that the Arabic language learning motivation, Arabic language score grade, total hours of learning Arabic language outside the classroom per week and father’s level of education had contributed significantly to the total variance in LLS employment. The four independent variables had contributed as much as 47% to the LLS employment of the population.

The status of language learning motivation as the main predictor, which had provided the greatest contribution (32.9%) to the LLS employment level, is in line with the study of Ho (1998) and Schmidt and Watanabe (2001). The Multiple Regression test result by Ho (1998) in an LLS research on 372 students of the National University of Technology in Taiwan showed that the language learning motivation was a major contributor to the LLS employment level. Schmidt and
Watanabe’s (2001) study on 2089 students of five foreign languages in University of Hawaii also found that the language learning motivation was the strongest predictor of LLS employment. Thus, the results of these studies have proved the significant influence of the language learning motivation on second/foreign language learning generally and the employment of LLS specifically. Furthermore, language achievement was the second biggest contributor (10%) to the population’s employment of the LLS. This finding is in line with the results of Multiple Regression tests performed by Lan (2005) in his research on 1,191 students who learned English in six primary schools in Taiwan. His research showed that language achievement was the second variable, after the attitude of love to learn language factor, which had contributed the most to the population’s employment of LLS. These findings support several other studies (Bremner, 1999; Ellis, 1994; Green & Oxford, 1995), which have postulated language achievement as a contributing factor to LLS employment. Total hours of learning the Arabic language outside the classroom per week were also listed as a predictor variable with a contribution as much as 7% of population’s employment of the LLS. Students’ period of life outside the classroom is much longer than the learning period in the classroom. Therefore, they have much more opportunities to learn the language outside the classroom. The longer a student used his time for learning activities, the more learning strategies could be practised. Therefore, it is not surprising that the total hours of learning the Arabic language outside the classroom have become a contributing factor and predictor to the employment of LLS as found in this study. Father’s level of education was the last predictor variable that contributed 1.1% to the population’s employment of LLS. The small contribution of this variable was also shown by the finding in Lan’s (2005) study. In this present study, father’s influence on the employment of LLS was greater than that of the mother’s, which may be caused by the father’s participation in the children’s learning, provision of facilities, encouragement and father as a role model based on his education’s level was rather frequent and outstanding.

The result of the Multiple Regression analysis of this study had rejected the assumptions of mother’s level of education and total family income as the predictors for the employment of LLS among the population. This finding is in line with the study of Lan (2005), which showed that mother’s level of education was not a contributor to the employment of LLS. He stated that the strong correlation between the level of education of the mother and father might be the reason that caused the mother’s educational level to have become insignificant in ANOVA and the Multiple Regression analysis. In other words, the mother’s level of education was equally high/low with the father’s. Total family income was not listed as the significant contributor to the employment of LLS, but it is expected to have had an indirect role in the employment of LLS. Learning needs
and facilities provided by the families based on what they can afford are related to the students’ motivation level. Numerous and various learning facilities could increase students’ motivation in learning language. Therefore, this motivation will increase the employment of LLS among those students (MacIntyre, 1994; Nyikos & Oxford, 1993; Okada et al., 1999). Hence, the total income itself does not contribute directly to the increase of LLS employment. In fact, total income contributes through motivation, learning activities and so on.

CONCLUSION

This study proposed important information on the factors that influence the employment of LLS by Arabic language students from religious secondary schools. Although this study focused on a specific group of respondents, the findings provide valuable input to the field of Arabic language learning in particular and LLS in general. This study demonstrated theoretical implications by showing that the LLS field is centred on the cognitive and social cognitive theories. According to cognitive theory, the application of LLS could be seen to start from inner aspects involving biological and maturity elements to external aspects. On the other hand, the social cognitive theory sees the application of LLS ranging from external to internal aspects through internalisation. This aspect has been demonstrated when this study showed that the level of language achievement (representing elements of cognitive theory) and motivation, total learning hours and father’s level of education (representing element of social cognitive theory) were among the factors that contributed significantly to the employment of LLS.

From the aspect of pedagogical implications, responsible parties for language education need to increase the level of these factors. The status of motivation as the major contributor to the employment of LLS in this study showed that it is a factor that should be taken seriously. Hence, programmes and environments that could enhance language learning motivation should be planned properly. Total hours of learning language outside the classroom should also be increased. This can be done by planning schedules and designing language tasks that need to be completed by the students outside the formal learning period. Students should be given exposure to research findings, which revealed that the language learning process would be more effective when the formal learning period of one hour is followed by three hours of language learning outside the classroom (Nunan, 1999). The schools or teachers need to be wise in manipulating the elements available to those factors. For example, learning strategies that are often used by effective students should be taught to other students as well. Awareness workshops on the importance of the relationship between language achievement and the employment of language learning strategies should also be held regularly. Parents should be made aware of their responsibilities in their children’s language learning. They should provide learning facilities, teach
their children, provide reinforcement and solve the children’s learning problems. Their contribution to these activities will give students the opportunities to learn language and to practise the language learning strategies in a more frequent and effective manner.

Given the difference in students’ background is one of the factors affecting the selection and the employment of LLS, language teaching should not ignore these elements. Good understanding of the influences of these factors on the employment of LLS will be able to make the training programmes of the employment strategy more efficient and suitable to students’ needs and circumstances. Through this method, students will be given the opportunities to use a variety of strategies on a regular basis and they will move towards success in language learning in a simple yet fun manner.

REFERENCES


