

The Effect of Thematic Clustering on Enhancing Monolingual and Bilingual EFL Learners' Vocabulary Acquisition

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Abstract

The present study intended to compare the effect of thematic clustering on learning English vocabulary among monolingual and bilingual EFL learners. It examined if the use of meaningful context or thematic grouping facilitates vocabulary learning. It was also transmitted to spread knowledge on their effectiveness in helping more bilinguals or monolinguals. The study consisted of 166 intermediate female EFL learners from two branches of Tehran institutes in Bandar Abbas, 74 bilingual Arabic EFL learners and 92 monolingual EFL learners. Before starting the main study, a pilot test was carried out to assess the feasibility and usefulness of data collection methods and the procedures. Each group of bilingual and monolingual were divided into two groups in which one group studied thematic clustering and another group was regarded as control group. A one - way Analysis of Variance (ANOVA) statistical test was used to analyze the quantitative data collected. The results showed that thematic clustering of English vocabulary can play a significant role in enhancing both monolingual and bilingual EFL learners' vocabulary acquisition. Finally, bilinguals had better performance when they learned new words, based on thematic clustering, in comparison to monolinguals. The result of this study can help language educators and administrators to decide about the most effective vocabulary instruction programs to improve second language vocabulary learning.

Key words: vocabulary learning, thematic clustering, monolingual, bilingual, EFL

1. Introduction

The mastery of vocabulary is central and essential in the process of second / foreign language learning. It facilitates reading, speaking, writing and listening, and it can be considered as the factors leading to good progress in second language learning. The role of vocabulary is one of the first aspects of method design to receive attention in second language teaching programs (Al Jabri, 2005). Some children grow up in a social environment where more than one language is used and are able to acquire a second language in circumstances similar to those of first language acquisition [...] most of us are not exposed to a second language until much later and our ability to use a second language, even after years of study, rarely matches ability in our first language (Yule, 1985).

Due to the importance of vocabulary knowledge for the purpose of learning a language, probe into the influence of different vocabulary learning methods have been of noticeable value to L2 learning. Via learning new words, learners can enhance their skills including speaking, reading,

listening and writing and learners can progress production and comprehension in L2. In the field of applied linguistics, there are many different aspects of language that can be explored and studied. Vocabulary learning and teaching are among the most important issues that have been under systematic research in the field of applied linguistics recently.

Further, the vocabulary function is one of the first aspects of method design to obtain consideration in the process of language teaching programs (Richards & Rodgers, 2001). Nassaji (2004) discovered that ESL learners with wider vocabulary knowledge made more efficient usage of defined sorts of lexical inferencing strategies than their weaker peers. Depth of vocabulary knowledge created an important contribution to inferential achievement over and above the contribution created by the student's degree of strategy use.

As a consequence of increasing the income by the researchers in building vocabulary, different skills are introduced and used. Yet, there are still some issues which should be taken into account. The review of the current ESL textbooks shows that ESL/EFL learners' new vocabulary items typically presented in thematic fields.

Explicit instruction drastically enhances vocabulary knowledge. The students are given lists of words or pictures that are most related to a particular topic or situation. Thinking about the relationship between what the learners know and how s/he learns the new words has emphasized the importance of thematic clustering of English vocabulary. However, there is little empirical evidence that thematic clustering simplifies learning. According to Tinkham (1994), providing students with new words grouped in lexical clusters has not motivated experimental support or theoretical concerns. Rather, giving writers a specific methodology, whether its language or learning-center based, tends to determine their approach to the development of second language.

There are a number of studies have been conducted to check the importance of thematic and semantic clusters. Anyway, teachers teaching at intermediate level in English courses believe that the students still have problem with retaining the word they learned despite years of teaching. This study examines the effects of 'thematic' clustering over the learning of new words among bilingual and monolingual intermediate EFL learners.

1.2. Statement of Problem and purpose of the study

Learning vocabulary is a very important part of learning a language. The more words you know, the more you will be able to understand what you hear and read; and the better you will be able to say what you want to when speaking or writing. Assisting learners develop solid vocabularies is necessary to their prosperity for school and further study. The most important factor in a successful vocabulary-building program is motivation. It will be very difficult for learners to study words month after month without a strong feeling that it is worth doing, that a larger vocabulary will help them in school and on their job, and that it can lead to a more exciting and fulfilling life. It is important to find an effective method for vocabulary instruction while lexical knowledge is one of the essential factors in comprehending a text. It appears that ESL program designers and textbook authors assume that the presentation of semantically and syntactically related lexical items facilitates learning.

The purpose of the present study is to examine the effects of thematic clustering on learning English vocabulary among monolingual and bilingual EFL learners. The two labels are intended to differentiate between two different methods of organizing lexical items including semantic clustering and thematic clustering. Semantic clustering is based on grouping words that share various semantic and syntactic characteristics; thematic clustering is based on the psychological associations between clustered words and a shared thematic concept.

1.3. Significant of the study

According to Tinkham (1994), research about the effects of clustering on L2 vocabulary learning is limited and indirect, although two methods of clustering are currently identifiable and employed in L2 vocabulary instruction; these are semantic and thematic clustering. This study examines clustering of two types, as it is an important factor in learning vocabulary in a second/foreign language. It also aims to shed light on the effectiveness of these two kinds of clustering among monolingual and bilingual EFL learners. The results of the study might be of great value to writers and planners of ESL/EFL textbooks, in their plans to introduce vocabulary in the course of their lessons. When EFL learners start to read a text, what comes to their minds is how to learn the meaning of new vocabulary. A usual method in Iran is memorizing words with their meaning by repeating them several times but after a few days, learners forget the meaning. Lack of teaching effective vocabulary methods in EFL classes may be the cause of this problem.

Accordingly, it is intransitive for teachers to make learners familiar with methods they can use when necessary, to train them how to transcend the problem of learning new words efficiently. Moreover, English teachers might find this study helpful as they seek to improve or modify the teaching methods they use in order to gain the best results in the learning process.

1.4 Research Questions

To accomplish the primary object of the study which is to discover whether thematic clustering of English vocabulary acquisition has any impact on the improvement of learning vocabulary among intermediate bilingual and monolingual EFL learners, the main research questions raised here are as follows:

Q1: Does thematic clustering of English vocabulary enhance monolingual EFL learners' vocabulary acquisition?

Q2: Does thematic clustering of English vocabulary enhance bilingual EFL learners' vocabulary acquisition?

Q3: Does thematic clustering method of vocabulary learning play different roles among monolingual and bilingual EFL learners?

1.4 Research Hypotheses

Regarding the above hypotheses, the following research hypotheses were raised:

H01: Thematic clustering of English vocabulary cannot play any significant role in enhancing monolingual EFL learners' vocabulary acquisition.

H02: Thematic clustering of English vocabulary cannot play any significant role in enhancing bilingual EFL learners' vocabulary acquisition.

H03: Thematic clustering method of vocabulary learning plays the same role among monolingual and bilingual EFL learners?

2. Review of Literature

2.1 Thematic Clustering

AlJabri (2005) expressed that "lexical semanticists, when investigating the way speakers organize words in their mental lexicons, propose that speakers subconsciously organize words in – frames- or – schemas - with reference to the speaker's background knowledge rather than in semantic fields" (p.48).

A set of words drawn from such a schema could contain *frog, pond, hop, swim, green, and slippery*; words of various sections of speech that are all relatively associated with the same thematic concept (in this set, *frog*). These kinds of words indicate the schemata that English speakers share for a word (Celce-Murica&Olshtain, 2000). On the basis of associative strength, clustering of this

kind are cognitively rather than linguistically derived, and therefore would seem fit most easily into learning- centered second language acquisition programs, which are most interested in learning process than with linguistic analysis.

Based on psychological union, thematic clustering is between a set of related words and a shared thematic concept. For example, documentary, studio, role, cast, plot, and location are said to be thematically related, and also all words drawn from a film review schema. Both the Interference Theory and the Distinctiveness Hypothesis fail to predict the impact of thematic clustering. Despite the fact that, researchers are interested in similar words in a number of studies in relation to interference, there are some conflicting issues. For example, a cluster of words like *frog, green, swim, and slipper* has not been their interest when they probe for evidence for interference. On the other hand, clusters of words like *car, raceway, team, champion, and drive*, which are not similar, have not attracted the researchers favoring the Distinctiveness Hypothesis.

Regarding the study done in this area, Al-Jabri (2005), examined the various method of presenting vocabulary to the subjects and found that thematic clustering of words proved to be the most effective while the semantic clustering was the least effective way of presentation especially in lower proficiency levels while in higher proficiency levels, the difference is not significant.

According to AlShaikhi(2011), most of the results directed by the interference theory and the distinctiveness hypothesis did not suggest that all types of clustering inhibit learning L2 words. Grouping words in thematic sets has been shown to facilitate learning vocabulary. This result is consistent with schema theory, which indicates that learning information is easier when it is related to back ground knowledge.

2.2 Bilinguals vs. monolinguals

Monolingualism is the situation of speaking only one language, in comparison with multilingualism. In the other hand, bilingualism is defined as a situation where a person or groups of people acquire the knowledge and use of more than one language. Anyway, bilingualism is a complex psychological and socio- cultural linguistic behavior and has multi- dimensional aspects (Hakuta, Butler, & Witt, 2000).

In a study done with children in their early school years recommended that there are emotional and behavioral benefits to being bilingual (Han, Wen- Jui, Hung, Chien- chung, 2010, as cited in Al Shaikhi, 2011). In the same study, the results demonstrated that monolingual children, in particular non- English monolingual children, display more poor behavioral and emotional outcomes in their school years.

Monolingual and bilingual children's learning word environments differ in many ways. Besides, the clear distinction in the number of items to acquire and the extent of revealing to each language, bilingual children are also faced with the extra task of finding from which language each word comes. Bilingual children can obtain data if a converser knows both languages or not, or if a speaker was present in the same place when a word was first introduced or not to help them consider the meaning of a word (Denscombe, 2003). When it requires to learning object names, performance of the articles themselves become a significant source of information. From about 2 years of age, children generalize new nouns in very systematic ways depending on their perceptual properties. Given a solid thing with multiple parts and constructed shape, children generalize the name broadly to all things that match the exemplar object in shape (Jones et al., 1991).

Cross-linguistic similarity between the two languages that are known to bilinguals may be an important factor in shaping the bilingual advantage for word learning. Although the bilingual advantage on non- linguistic tasks does not rely on the specific combination of languages that are spoken by bilinguals" (Kaushanskaya and Marian, 2009).

Keshavarz and Astaneh (2004), conducted a research in which they studied the effect of bilingualism on third language vocabulary learning of three groups of bilingual and monolingual female students including Turkish- Persian bilinguals, American- Persian Bilinguals and Persian monolinguals in two regions of the country. They concluded that the subjects' bilingualism has a positive effect on third language vocabulary learning.

Clyne (2009), also pointed out that bilinguals tend to be more effective and persistent learners of the target language than monolinguals. They added that bilinguals are able to benefit from their metalinguistic awareness.

In the field of bilingual advantages in learning the novel word, Kaushanskaya & Marian (2009) administered another study, in which they concluded that bilingualism makes the procedure of acquisition of novel words easier in adults with different language histories. Word- learning performance was examined in monolingual English speakers, early English- Spanish bilinguals, and early English- Mandarin bilinguals. Novel words were phonologically unfamiliar to all participants, and they were collected in relation with their English translations. During the test procedures, both bilingual groups exceeded in performance with the monolingual group. Research findings signified that, bilingualism facilitates word- learning performance in adults, and the researchers suggested a general bilingual advantage for novel word learning.

3. Methodology

3.1 Participants

One hundred sixty six female intermediate EFL learners enrolled in two branches of Tehran English institute in, Bandar Abbas, Iran. All the participants had received two years of formal English instructions.

At the beginning, I talked to the teachers and gave them the whole idea and the instructions and it was supposed that the teachers themselves do the procedures during my research because they were more familiar with the students and had better control at the class. For getting assurance as the homogeneity of the participants, they were taken Nelson Placement Test (NPT). Then, each group of bilingual and monolingual were assigned to two groups including thematic clustering group as experimental group (N= 20), and control group (N=20), who received the institute instructions.

3.2 Instrumentation

A. Self – Rating Proficiency Scale questionnaire: This questionnaire was used to see the bilinguals' proficiency at writing, speaking, reading, and listening.

B. General English Proficiency Test: The Nelson proficiency test includes 50 multiple- choice items, which was used in order to select the sample among the learners. This test was used to make a homogenous sample in term of the language proficiency level.

C. Pre- test: The test includes both gap- filling and matching items selected from the book (Intermediate Vocabulary by B. j. Thomas) as for the (pre- test).

D. Post- test: This test included both gap- filling and matching items from the same book was held to obtain the considerable differences between the performance of the groups (one control and one experimental groups) after the intercourse(post- test).

3.3 Procedure

As for the first step, we should examine the bilingualism of the Arabic- Persian Bilingual students by the self- rating Proficiency Scale questionnaire to ensure about the students' bilingualism. According to this test, 74 Arabic- Persian bilingual students were selected.

Then, Nelson proficiency test was administered to both monolingual and bilinguals, on the bases of the test result 60 bilingual and 60 monolingual EFL learners that their homogeneity was

verified, were selected. Each group divided into two groups, one as control group and one experimental groups as thematic lustering group. The pre-test provided for the six groups under the study, contained 32 items, based on (Intermediate Vocabulary by B. j. Thomas, 2002), the pretest was presented to find out which vocabulary items the learners did not know.

After the pretest, each group attended English classes three times a week. Every session the students of thematic experimental group worked on 10sets of the thematically related words through the passages. In the control groups, the students were followed the institute instructions.

In each session, one passage was given to the students in experimental groups. In thematic experimental group, the selected related words based on the thematic filed were taught through thematic clustering techniques. Each session the participants were presented 10 vocabularies for 10 sessions. In thematic clustering groups, the teacher announced the topic of the unit by drawing the concept map on the board and asks the students to think of words that might be related to the topic. Concept mapping in this case was a circular map with a topic inside and some spoke like arrows showing the connection between the thematic words which were lexically related to the particular topic or theme.

In this survey, at the end of treatment session in thematic clustering group, and control groups which received institute instructions, the participants took posttest which contained 32 instructional vocabulary items in one and a half hour.

4. Results and Discussion

By considering all the above-mentioned issues and fulfilling the purpose of this study, the following research questions were raised:

Q1: Does thematic clustering of English vocabulary enhance monolingual EFL learners' vocabulary acquisition?

In order to answer this research question, data were analyzed and the following tables were elicited.

First, in order to see whether we are able to use t-test as a parametric test, first we should check whether the data have been normally distributed or not. If the level of significance is more than 0.05, it indicates the normality of data distribution. Therefore, we can use parametric test for further data analysis.

Table 1. One-Sample Kolmogorov-Smirnov Test for thematic and control monolingual group

		Thematic monolingual	Control monolingual
N		20	20
Normal Parameters(a,b)	Mean	11.07	10.56
	Std. Deviation	2.344	2.607
Most Extreme Differences	Absolute	.178	.163
	Positive	.178	.163
	Negative	-.122	-.147
Kolmogorov-Smirnov Z		.689	.652
Asymp. Sig. (2-tailed)		.729	.789

As it is evident from Table 1, the result of normality test shows that p values of two groups (.689 and .652) are more than significance level (0.05). Therefore, we can accept the assumption of normality and we can use ANOVA for comparing the results of pretest and posttest in this study.

However, before answering this research question, we wanted to see whether there is any significant difference between subjects in control and thematic monolingual group before any intervention program takes place in the experimental group classrooms. Table 2 and 3 indicate the results of data analysis. As it is clear from table 3, no significant difference was found between the control and experimental group ($F = .084$; $P = .773$) before the instructors started to use thematic clustering method of teaching vocabulary. By considering the results of these two tables, if there is any significant difference between these two groups in posttest, we can relate it to the effect of thematic clustering method of teaching vocabulary.

Table 2. Descriptive Statistics for pretest in thematic and control monolingual group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Thematic monolingual group	20	19.00	3.095	.692	17.55	20.45	14	24
Control monolingual	20	19.30	3.435	.768	17.69	20.91	12	25
Total	40	19.15	3.231	.511	18.12	20.18	12	25

Table 3. Results of ANOVA for mean pretest scores of thematic and control monolingual group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.900	1	.900	.084	.773
Within Groups	406.200	38	10.689		
Total	407.100	39			

Now, in order to answer the first research question, ANOVA was used for data analysis in the posttest of both thematic and control monolingual group. As it is evident from Table 5, ANOVA revealed a significant difference between the control and thematic monolingual group with regard to the effect of teaching vocabulary, based on thematic clustering on increasing the level of Iranian EFL learners' vocabulary, where the obtained F value was 36.366 and P value was .000. Further, mean scores of the samples in control and thematic group were found to be 25.55 and 19.85 respectively, which are statistically different. In other words, the students in experimental group had better mean in comparison to their counterparts in control group. Therefore, we can conclude that teaching vocabulary based on thematic clustering can increase the level of Iranian EFL learners' vocabulary in experimental group. With respect to this point, the hypothesis (Thematic clustering of

English vocabulary cannot play any significant role in enhancing monolingual EFL learners' vocabulary acquisition) is rejected.

Table 4. Descriptive Statistics for posttest in thematic and control monolingual group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Thematic monolingual group	20	25.55	2.837	.634	24.22	26.88	20	32
Control monolingual	20	19.85	3.133	.701	18.38	21.32	14	26
Total	40	22.70	4.127	.653	21.38	24.02	14	32

Table 5. Results of ANOVA for posttest in thematic and control monolingual group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	324.900	1	324.900	36.366	.000
Within Groups	339.500	38	8.934		
Total	664.400	39			

Q2: Does thematic clustering of English vocabulary enhance bilingual EFL learners' vocabulary acquisition?

In order to answer this research question, data were analyzed and the following tables were elicited.

First, in order to see whether we are able to use t-test as a parametric test, first we should check whether the data have been normally distributed or not among bilingual students. If the level of significance is more than 0.05, it indicates the normality of data distribution. Therefore, we can use parametric test for further data analysis.

Table 6. One-Sample Kolmogorov-Smirnov Test for thematic and control bilingual group

		Thematic bilingual	Control bilingual
N		20	20
Normal Parameters(a,b)	Mean	10.02	10.52
	Std. Deviation	2.23	2.68
Most Extreme Differences	Absolute	.175	.143
	Positive	.171	.153
	Negative	-.118	-.149
Kolmogorov-Smirnov Z		.664	.633
Asymp. Sig. (2-tailed)		.690	.787

As it is evident from Table 6, the result of normality test shows that p values of three groups (.690 and .787) are more than significance level (0.05). Therefore, we can accept the assumption of normality and we can use ANOVA for comparing the results of pretest and posttest among bilinguals in this study.

However, before answering this research question, we wanted to see whether there is any significant difference between subjects in control and thematic bilingual group before any intervention program takes place in the experimental group classrooms. Table 7 and 8 indicate the results of data analysis. As it is clear from table 8, no significant difference was found between the control and experimental group ($F = .119$; $P = .733$) before the instructors started to use thematic clustering method of teaching vocabulary among bilinguals. By considering the results of these two tables, if there is any significant difference between these two groups in posttest, we can relate it to the effect of thematic clustering method of teaching vocabulary.

Table 7. Descriptive Statistics for pretest in thematic and control bilingual group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Thematic bilingual group	20	19.45	3.395	.759	17.86	21.04	13	24
Control bilingual group	20	19.10	3.024	.676	17.68	20.52	14	24
Total	40	19.28	3.178	.503	18.26	20.29	13	24

Table 8. Results of ANOVA for mean pretest scores of thematic and control bilingual group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.225	1	1.225	.119	.733
Within Groups	392.750	38	10.336		
Total	393.975	39			

Now, in order to answer the second research question, ANOVA was used for data analysis in the posttest of both thematic and control bilingual group. As it is clear from Table 8, ANOVA revealed a significant difference between the control and thematic bilingual group with regard to the effect of teaching vocabulary, based on thematic clustering on increasing the level of Iranian bilingual EFL learners' vocabulary, where the obtained F value was 134.401 and P value was .000. Further, mean scores of the samples in control and thematic bilingual group were found to be 20.25 and 28.90 respectively, which are statistically different. In other words, the students in experimental group had better mean in comparison to their counterparts in control group. Therefore, we can

conclude that teaching vocabulary based on thematic clustering can increase the level of Iranian bilingual EFL learners' vocabulary. With respect to this point, the hypothesis (Thematic clustering of English vocabulary cannot play any significant role in enhancing bilingual EFL learners' vocabulary acquisition) is rejected.

Table 9. Descriptive Statistics for posttest in thematic and control bilingual group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Thematic bilingual group	20	28.90	1.861	.416	28.03	29.77	25	31
Control bilingual group	20	20.25	2.770	.619	18.95	21.55	16	25
Total	40	24.58	4.961	.784	22.99	26.16	16	31

Table 10. Results of ANOVA for posttest in thematic and control bilingual group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	748.225	1	748.225	134.401	.000
Within Groups	211.550	38	5.567		
Total	959.775	39			

Q3: Is there any significant difference in thematic clustering method of vocabulary learning among monolingual and bilingual?

Now, in order to answer the seventh research question, ANOVA was used for data analysis in the posttest of thematic monolingual and bilingual group. As it is observed from table 11 and 12, ANOVA revealed a significant difference between monolingual and bilingual group as far as the effect of teaching vocabulary, based on thematic clustering on increasing the level of Iranian bilingual EFL learners' vocabulary is concerned, because the obtained F value was 19.495 and P value was .000. In addition, by looking at mean table, mean scores of the samples in bilingual and monolingual group were found to be 28.90 and 25.55 respectively, which are statistically different.

Table 11. Descriptive Statistics for posttest in thematic monolingual and bilingual group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Monolingual group	20	25.55	2.837	.634	24.22	26.88	20	32

Bilingual group	20	28.90	1.861	.416	28.03	29.77	25	31
Total	40	27.23	2.913	.461	26.29	28.16	20	32

Table 12. Results of ANOVA for posttest in thematic monolingual and bilingual group

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	112.225	1	112.225	19.495	.000
Within Groups	218.750	38	5.757		
Total	330.975	39			

Regarding the above tables, we can conclude that bilinguals had better performance when they were new words, based on thematic clustering, in comparison to monolinguals. With respect to these numbers, the seventh hypothesis (There is no significant difference in thematic clustering method of vocabulary learning among monolingual and bilingual.) is rejected. Therefore, we can come to this conclusion that teaching vocabulary based on thematic clustering can increase the level of Iranian bilingual EFL learners' vocabulary better than the monolingual EFL learners.

5. Conclusion

In general, the overall purpose of the study was to examine whether thematic clustering could play any role for leaning vocabulary among bilinguals and monolingual or not. The results showed that thematic clustering of vocabulary instruction can be effective for both monolinguals and bilinguals

Regarding the role of bilingually in vocabulary learning, it is often assumed that young bilinguals are lexically delayed in comparison to monolinguals. However, the result of the present study was in opposite to this claim. Further, it can confirm the study done by Bornstein and Putnick (2012). It was about a comprehensive comparison of comprehension and production vocabulary in 31 firstborn bilingual and 30 matched monolingual children. Several raters completed Dutch and French adaptations of the MacArthur Communicative Development Inventories for children aged 13 and 20 months. At 13 months, bilinguals understood more words than did monolinguals; at 20 months, monolinguals knew more Dutch words than did bilinguals (combining comprehension and production). There were no group differences for word production or for Dutch word comprehension. Both groups understood and produced the same number of lexicalized meanings; ratios of word comprehension to word production did not differ; inter individual variation was similar.

In general, the studies concerned about the thematic clustering are relatively small in number and they showed contradicting results. While there are larger numbers concerning thematic clustering methods of presentation. Thus, there is a need for further research on the topic in order to show the results from different perspectives. Tinkham (1997), for instance, was based on artificial words which do not represent natural settings of real language. In Al-Jabri (2005), the study showed contradicting results between the different levels of learners, which revealed that as level of proficiency increased the need for making the difference in categorization of words decreased.

In view of that, levels of proficiency can have an important role in determining which method is effective as well as learners' age levels such as children and adults. Therefore, this variable can be taken into account in future studies about this topic.

In general, these findings have a profound implication for instructional design, particularly because this research study targeted English language learners who have not mastered the English language fully, therefore, instructing them in the use of vocabulary strategies based on thematic clustering, as a new method of teaching vocabulary, is an effective practice. An important contribution from this research study is that English language learners can raise their awareness of vocabulary strategies although they may have already internalized using some vocabulary strategies in their mind before.

5.1 Pedagogical Implication

According to the result of the present study, we can conclude that thematic clustering of English vocabulary has deep connotations for the future of vocabulary teaching and learning. This can help language educators and administrators to decide about the most effective vocabulary instruction programs to improve second language vocabulary learning. Most of learners learn vocabulary through traditional ways of vocabulary learning and could not know how another forms of methods encourage vocabulary learning, instructors require to spend some times drilling students to use thematic clustering in the most advantages way.

Finally, the bilingual profit on the learning new words can be investigated to a more effective restoration of stored information from memory in bilinguals than in monolinguals. It could be possible that the advantage of bilingualism is due to the bilinguals' enlarged memory storage capacity relative to monolinguals. Papagno and Vallar(1995), suggested the mechanism of the advantages of bilingualism and they recommended that the bilingual advantage for learning words is because of bilinguals' higher working memory capacity.

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