

Esl Learners' Performance in Recalling Emotion Words

Prestasi Pelajar Esl dalam Mengingat Kata Emosi

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ABSTRACT

Studies have shown that individuals may be able to express themselves better in their first language than in their second language due to their greater emotional attachment to their first language. Although students in Malaysia are typically exposed to the English language as early as they reach 7 years of age, not all of them are able to express their feelings and emotions well in the language. This paper presents a study conducted via an online survey on how 114 Malay and English emotion words are rated by 30 English Language Studies undergraduates of Universiti Kebangsaan Malaysia who are native speakers of Malay. The questionnaire was also designed to investigate the participants' emotional strengths towards the two languages and how the age of acquisition would affect the recall of emotion words. Results show that majority of the participants who acquire the English language after the age of seven recalled English emotion words better than they recalled Malay emotion words. This suggests that emotion effects in the second language is present despite the age participants started to acquire the English language.

Keywords: *Emotion words, taboo words, recall, bilinguals, age of language acquisition*

ABSTRAK

Kajian lepas telah menunjukkan bahawa individu boleh meluahkan perasaan dengan lebih baik dalam bahasa pertama mereka berbanding bahasa kedua disebabkan hubungan emosi yang lebih kuat dalam bahasa pertama. Walaupun pelajar di Malaysia didedahkan kepada Bahasa Inggeris seawal umur 7 tahun, namun tidak semua daripada mereka mampu meluahkan perasaan dan emosi dengan baik dalam Bahasa Inggeris. Kertas ini mengetengahkan hasil kajian melalui soal selidik atas talian bagaimana 30 mahasiswa program Pengajian Bahasa Inggeris Universiti Kebangsaan Malaysia yang merupakan penutur asli Bahasa Melayu menilai 114 perkataan-perkataan emosi. Soal selidik dibangunkan untuk mengenal pasti kekuatan emosi dalam dua bahasa dan usia peserta ketika mereka didedahkan kepada Bahasa Inggeris buat pertama kalinya boleh menjejaskan ingatan mereka terhadap kata-kata emosi tersebut. Dapatan mendapati bahawa majoriti peserta yang didedahkan kepada Bahasa Inggeris selepas usia tujuh tahun lebih mengingati kata-kata emosi dengan lebih baik berbanding peserta yang didedahkan kepada Bahasa Inggeris antara usia satu dan tujuh tahun. Kajian ini mendapati bahawa kesan emosi wujud dalam bahasa dua tanpa mengira bila peserta didedahkan kepada Bahasa Inggeris.

Kata kunci: *Kata-kata emosi, kata terlarang, ingat, dwi bahasa, umur, pemerolehan bahasa*

1. Introduction

Memory plays a vital role in vocabulary learning. This is because new words are learned and are enhanced through the meaningful things that are encountered every day. Although Levin (1993) stated that learning vocabulary through memory is effective in students with low proficiency level, the fact is, everybody, regardless of their proficiency level, in any language, learn vocabulary using their memory. When we communicate with one another, we choose words that describe about our feelings and current emotional state. Events and experiences which contain emotions can be extracted through words, especially emotive words (e.g., laugh, joy, anger) as they possess deeper meaning than neutral words (e.g., window, number, tree). Emotion words refer to words that contain emotion, valence (i.e., how positive or negative a stimulus is), and arousal (i.e., how calming or exciting a stimulus is) (Kensinger & Corkin, 2003). Altarriba (2014) mentioned that emotional language consists of our everyday communication no matter what language we speak. Kulkofsky et al. (2010) stated that studies have also shown that words are better remembered if they evoke the learners' emotions. The significance of words is very much depended on learners' past experiences. Hence, learners are found to recall words that they can relate to their emotions better than those that do not appeal to their emotions.

Aycicegi and Harris (2009) suggested that the first language is much more emotional than the second language. A person may express his feelings better in the first language because there is a greater emotional association in the first language than in the second language. Dewaele and Pavlenko (2002) proposed that when a second language is acquired later after childhood, the emotional effect on the first and the second language will be distinct. Prior work reported by Anooshian and Hertel (1994) found that this emotional effect was absent in a second language. Words in a second language may thus lack the emotional associations of words acquired in childhood.

Hence, this study focuses on how ESL learners would rate both Malay and English emotion words and compare the emotionality strengths between the two languages. This study also looks into whether age of acquisition in the English language would affect the recall of the emotion words.

1.1 Background of Study

Language and memory are two cognitive aspects that complement each other. Without memory, language cannot be learned, and language enhances memory through various linguistic activities such as mnemonics and repetition. While emotion and words have been linked to cognition, past researchers have been careful in conducting studies on bilinguals as they have to take into consideration factors that are involved in second language acquisition such as age of acquisition, ethnicity, and formal-informal learning. However, Aycicegi et al. (2006) opposed such claims that individual's emotional experience is influenced by too many factors as these factors will help to determine the cause of the phenomena.

In a study by Aycicegi and Harris (2004), in which Anooshian and Hertel's (1994) methodology was adopted, it was found that taboo words presented a higher recall and recognition in both first and second languages. Gonzalez-Regiosa (1976, as cited by Aycicegi & Harris, 2004) proposed that taboo words in the first language produced more tension than the second language. For example, it is not complicated to talk about shameful topics in the second

language than in the first language (Bond & Lai, 1986). Code-switching that is present in bilinguals makes it more comfortable for them to talk about taboo topics in their second language as discussing these topics in their first language can create more anxiety. Bilinguals may be able to relate to their first language better compared to their second language as emotion words in the first language are associated with different situation and events than the second language. Aycicegi et al. (2006) stated that various traces in the memory would be formed from the emotion words to establish their semantic representation. Words that are less applied in the second language would result in fewer emotional connection than in the first language. The period where bilinguals acquire their second language could be one of the factors how the emotional intensity of the emotion words are affected in both languages (Harris et al., 2006).

1.2 Statement of Problem

The earliest exposure to the English language for students in Malaysia typically starts at the age of 7 when they are in primary school. There is also a possibility that some have acquired English before the age of seven. Despite this relatively early age of English acquisition, there are still students who have low proficiency in the English language and possess weak vocabulary knowledge. The lack of vocabulary knowledge typically results in students using the same, fixed, and limited number of words to describe their feelings, emotions and opinions. This study is fundamental as it will help teachers to identify students who possess weak vocabulary especially in English and provide suitable teaching materials to the student to excel in the language.

The study by Anooshian and Hertel (1994) was however, conducted in the context of English-Spanish and Spanish-English bilinguals; hence the current study investigates whether or not there are differences in recalling emotion words between Malay-English bilinguals who acquire English at the same time they acquire their first language and those who acquire English much later than they acquire their first language.

Past studies have also shown that learners have difficulty in recalling words if they do not have emotional attachments to those words (Annoshian & Hertel, 1994). Since it is believed that emotional systems develop at the same time as a person's early language develops (Bloom & Beckwith, 1989), English as a Second Language (henceforth, ESL) learners who learn English much later than they acquire their first language tend to have difficulty in recalling emotion words in the English language (Annoshian & Hertel, 1994) compared to those who acquire the English language almost at the same time they acquire their first language.

1.3 Research Objective

The aim of this study is to investigate the recalling of English emotion words among ESL learners. Specifically, this study hopes to achieve the following research objectives:

- i. To describe how ESL learners who acquire English at different stages of their lives would rate the emotions words (from non-emotional to emotional)
- ii. To categorise the words that they are able to recall based on the emotive scale;
- iii. To explain the relationship between their ability to recall the emotion words with the time they acquire the English language

1.4 Research Questions

- i. How would ESL learners rate their emotions towards the selected emotion words?
- ii. What are the words that they are able to recall?

- iii. How are the words they are able to recall related to the time they acquire the English language?

1.5 Significance of study

This study is significant as it shows how emotion plays an important role in language as well as in identifying whether age of acquisition affects the emotionality between the Malay and English language. While past researchers focused on Spanish, Finnish and Catalan language, this study provides a new perspective on bilinguals in Malaysia. This study aims to give an insight to teachers on how emotion in languages would affect students' performances in school.

2. Literature Review

This section begins with an overview of the framework proposed by Aycicegi et al. (2006) which is emotional contexts of learning theory. This theory consists of three simple approaches, which are emotionality in the first language, age of acquisition, and language proficiency. However, two approaches, namely, emotionality in the first language and language proficiency are discussed as the present study focuses in these two aspects.

2.1 Emotional Context of Learning Theory

This framework is influenced by three categories which are brain maturation, autobiographical memory, and context-depending learning, which depends on the emotionality of bilingual.

2.1.1 Brain Maturation

Schoenemann (2009) stated that language and the brain are highly interconnected. The left hemisphere of the brain is the region where language acquisition and processing take place (Schonemann, 2009). Throughout our lives, there are at least two forms of brain development that will take place (Greenough & Black, 1992). The first one is experience-expectant, where early experiences are crucial as they help in the development of brain through the exposure to language, visual, and movement. The second form is experience-dependent where experience encourages brain development (Thompson, 2001). These developments are important especially in acquiring language where events and experience assist in the development of the brain.

2.1.2 Autobiographical Memory

The second category is autobiographical memory. Nelson and Fivush (2004) stated that autobiographical memory is a memory of a situation that has happened to someone in the past. Brewer (1996) stated that autobiographical memory refers to memories for events – detailed experience and past experience. Memory is often associated with emotional events than events that lack emotion (Khairudin et al., 2012). Bilinguals would feel more emotional as they encounter more events and experience in their first language than in their second language. In a study by Otoy (1987) in which she tested bilinguals (whose first language was Spanish) with cue cards of English and Spanish, it was found that Spanish words triggered earlier memories than English.

2.1.3 Context-Depending Learning

In this framework, Harris et al. (2006) stated that emotion in language can be felt and acquired through distinct emotional context. Emotion is an important factor when individual is learning another language as emotion can spark emotional experiences through language, custom and status (Noels et al., 1996, as cited by Ross & Rivers, 2018). When a person has a higher exposure to the second language, it will boost his/her long-term memory association (Aycicegi et al., 2006). This is because emotions play a crucial part in the learning of a second language (Mohammadipour et al., 2018).

2.1.4 Emotionality in the First Language

Pavlenko (2003) stated that psycholinguistic and psychoanalytic cases proposed that there would be a distinction in the emotional intensity between the first language and the second language, particularly when the second language is acquired after puberty. The second language is possibly not as emotional as the first language because when a person acquires a language at a young age, the first language would be a more competent and emotional language to them. Incidentally the emotional words in the second language would not be practiced as much as the first language, and thus, this results in the second language being a less emotional language than the first language (Ferre et al., 2010). Anooshian and Hertel (1994, as cited by Aycicegi & Harris, 2004) mentioned that a woman who grew up in a Spanish-speaking environment and later acquired English after 8 years of

Anooshian and Hertel (1994) noted that age of acquisition appears more important than proficiency in emotional expression, citing the example of a woman who grew up in a Spanish-speaking home and learned English after 8 years old prayed in Spanish because it felt more appropriate than praying in English. Bilinguals claimed that they do not have the same emotional intensity towards the words in their second language despite knowing the meaning of the words (Pavlenko, 2004 as cited by Ponari et al., 2015).

2.1.5 Age of Acquisition

Grosjean (1982, as cited by Aycicegi et al., 2006) stated that difference in the age of acquiring a language will affect in the learning context. Some second language learners acquire the language through formal setting in school but others may learn the language through informal setting (outside school); thus, they would lack emotional association in the second language. Age of acquisition and exposure to the language also plays an important role in language acquisition as acquiring language is influenced by our everyday life experience besides school. More exposure to the language leads to more experience in the language in different emotional contexts.

3. Methodology

3.1 Research Design

This study adapted Aycicegi and Harris (2004) stimulus list of emotion words. Fifty-seven Turkish emotion words were translated and modified slightly to fit the Malaysian context. Taboo words are also added as they are regarded as super-emotion words based on the relationship between the contexts and emotions (Aycicegi & Harris, 2004). The rating scale ranges from 1 to 7, with 1 being non-emotional and 7 being the most emotional. The participants of this study consisted of thirty native speakers of Malay who regarded English as their second language.

Each of the emotion category contained thirty-two words in Malay and English for each positive, negative and neutral category and eighteen words in taboo category.

3.2 Participants

The participants for this study were from Universiti Kebangsaan Malaysia, particularly those who are from the English Language Studies (ELS) undergraduate programme. The participants would be mostly native speakers of Malay who have studied English as a second language since they were in primary school. The participants are selected based on their MUET score which ranges from band 4 to band 6. Before proceeding to the tasks, participants were required to answer a questionnaire to identify the age they started to acquire English and their English fluency in the four skills namely reading, writing, listening and speaking.

3.3 Procedure

An online Google questionnaire was distributed to 30 participants. The questionnaire consisted three major parts: demographic questions, rating task, and recall task. Rating task consisted of four categories (positive, negative, neutral and taboo). Participants were required to rate one-hundred and fourteen words from a scale of 1 (non-emotional) to 7 (emotional) based on how they feel about the words. Scale 1 represented non-emotional which participants would rate if they do not feel any emotional attachment towards the words and scale 7 represented emotional which participants would rate if there is a greater emotional attachment towards the word. Recall task took place after the participants had rated the words. Based on the words they had rated, they wrote down as many words as they could recall.

4. Findings

From the demographic questions, we found that 70% (21) of the participants used Malay the most while 30% (9) of the participants used English in their daily lives. The result also showed that 73.3% (22) acquired English from 1 to 7 years old, while the remaining 26.7% (8) acquired English after 7 years old. The highest score for the self-rating questions is 5 while the minimum score is 3. Participants rated their understanding as the highest while reading and speaking as the lowest. Most of the participants rated their fluency in understanding and writing in English as either very good or native-like while the remaining rated their fluency in speaking and reading as either good or very good.

4.1 Rating Task

The rating task consisted of 4 categories; positive, negative, neutral and taboo. The rating task contained 114 emotion words of Malay and English. Participants were required to rate these words on a scale from 1 (non-emotional) to 7 (emotional). Each of the rated words are then calculated by Anova: Two Factor Without Replication to find the average and the overall result.

We found that English positive word has the highest emotional rate compared to Malay positive word. We identified that the word '*love*' was rated as more emotional (6.57) compared to the word '*cinta*' (6.03). The second graph shows that negative word in English has the highest rate compared to negative word in Malay. The word '*pain*' was rated (6.3) compared to the word '*kejam*' (5.8). We found that both neutral words in Malay and English show an almost similar results, however the participants rated the word '*pekerjaan*' (3.50) in Malay as more emotional

than the word 'name' (3.33) in English. Taboo word in Malay has the highest emotional rate compared to the taboo word in English. The participants rated the word 'celaka' (5.9) as more emotional than the word 'whore' (5.73).

We found that the emotional rating for the four categories show an even result. English emotion words were found to be most emotional in positive and negative category, while Malay emotion words were found to be most emotional in neutral and taboo category. However, English emotion word was found to be the most emotional compared to Malay emotion word. We found that the word 'love' has a stronger emotional association to the participants compared to the other emotion words.

4.2 Recall Task

In the last section of the questionnaire, participants were required to recall the emotion words that they have rated. The total number of emotion words is 114 which consisted of 32 words of Malay and English from three categories (positive, negative and neutral) and 18 Malay and English taboo words. We predicted that participants would recall at least half of the emotion words stated however, none of the participants managed to recall all the emotion words and the highest number of words recalled by the participants was 40 out of 114. We found that some of the participants managed to recall the words less than 10 out of 114.

We compared the number of emotion words recalled in Malay and English. Participants managed to recall all English positive words compared to Malay positive words, though with only a slight difference of 6.25%. Next, negative words in English were recalled higher than Malay emotion words with a difference of 12.25%. Participants had managed to recall all neutral words in English compared to Malay neutral words. The result displayed a significant finding where participants successfully recall taboo word in both languages.

We identified that majority of English emotion words were recalled higher than Malay emotion words. Positive, negative and taboo words in English were managed to recalled successfully by participants. The result also showed an interesting finding where participants managed to recall all taboo word in both languages.

4.3 The Words Participants are able to Recall to the Time They Acquired the English Language

In this section, we analyzed the difference of the words recalled by participants who acquired English from 1 to 7 years old and after 7 years old. Based on the demographic questions, 73.3% (22) participants acquired English from 1 to 7 years old and the remaining 26.7% (8) acquired English after 7 years old. To measure whether there is any significance difference between the words participants were able to recall and the time they acquired the English language, we conducted the findings using analysis of variance (ANOVA). Each of the words recalled by the participants were recorded and we excluded the words which contain typing errors and not available in the list.

For the first part, we compared Malay emotion words recalled by participants and the time they acquired the English language from 1 to 7 years old and after 7 years old. We found that there is no significant difference between age and the relationship between age with emotion. However, based on the four emotions (positive, negative, neutral and taboo) we found there is a significant difference in emotion $t(6)$, $p = 0.015$ where p-value is less than 0.05.

Although we could not find the significant difference between age and emotion, nonetheless we obtain an interesting result from the means of recall from participants who

acquired English from 1 to 7 years old and after 7 years old. We predicted that participants who acquired English from 1 to 7 years old would obtain a higher recall result in all category. We identified that positive words recalled by participants who acquired English after 7 years old is higher negative words recalled by participants who acquired English from 1 to 7 years old. The result also shows that Malay taboo words are recalled slightly higher by participants who acquired English after 7 years old compared to participants who acquired English from 1 to 7 years old. We predicted that participants who acquired English from 1 to 7 years old would obtain a higher recall result in all category.

For the final part, we compared English emotion words recalled by participants and the time they acquired the English language from 1 to 7 years old and after 7 years old. Similar to the first set of results, we found that there is no significant difference between age and the relationship between age with emotion. Similar to result in Malay emotion words, we found there is a significant difference in emotion (positive, negative, neutral and taboo). There is a significant difference where $t(6)$, p-value is less than 0.05.

Similar to first set of results, we found that there is no significant difference between emotion and age; nevertheless, we found there is a significant difference in the means of recall from participants who acquired English from 1 to 7 years old and after 7 years old. Since participants who acquired English from 1 to 7 years old would have an advantage in recalling English emotion words better, we predicted they would obtain a higher recall result than participants who acquired English after 7 years old. However, we found a surprising result where the means of recall for participants who acquired English after 7 years old in taboo and positive are much higher than participants who acquired English from 1 to 7 years old. The result also displays negative words recalled by participants who acquired English from 1 to 7 years old is lower than participants who acquired English later. From this result, we can indicate that majority of the participants who acquired English after 7 years old, managed to recall English emotion words compared to participants who acquired English from 1 to 7 years old.

5. Discussion

Our primary goal is to investigate the recalling of English emotion words among ESL learners. We replicated bilinguals' recall and recognition of emotion words (Aycicegi & Harris, 2004): whether emotional affects were present in Malay or English language. In addition, we also analyzed whether there was any significant difference between participants who acquired English from 1 to 7 years old and after 7 years old with the words they were able to recall.

5.1 Emotional Rating Task

We had made an earlier prediction on the result that Malay emotion word would receive the highest emotional rating, however the result showed that English emotion word obtained the highest emotional rating. We identified that both Malay and English positive words obtained the highest rating in each language category. 'Cinta' and 'love' had the same meaning but the result showed that 'love' received the highest emotional rate. The emotional effects in the second language is much stronger than the first language in the particular word. This contradicts Anoooshian and Hertel's (1984) study which suggested that the first language is much more emotional than the second language.

This result however proposed that participants may have a greater emotional association in particular words (e.g., love) in the second language compared to their native language. In contrast to the result that we found however, previous study by Aycicegi and Harris (2009), found that there was a significance emotional effects in the first language compared to the second language. We consider the disparity of the results is due to the difference of the participants experience of English. While the participants in the current study are English majors, participants in the previous study were relatively late learners of English. The difference of the rating task in both current and previous studies might have affected the result of the emotional strength in the rating task in both languages.

5.2 Recall Task

We identified that none of the participants managed to recall all of the emotion words but nonetheless one participant managed to recall 40 out of 114 words. As we began to analyse the data, we also found that some of the participants typed words that were not available and some of the words also contained typing errors. These words were not included in our data. The recall task showed an unexpected result where English words were recalled higher than Malay emotion words. In contrast to our earlier prediction where the Malay emotion words would be recalled the highest, the result showed otherwise. Although the result showed an almost even result, English emotion words were recalled better by participants. Another interesting result that we found was, English neutral words were strongly recalled by participants. Neutral words like table, chair, branch and number were most of the common words recalled by the participants.

All taboo words were surprisingly recalled by participants in both languages. Jay, Harris and King (2008) stated that taboo words contain rare connotative meanings unlike taboo words which are more denotative. Another factor which contributes to the success of the recall of taboo words was the arrangement of the emotion words. The words were arranged according to respective categories starting from positive, negative, neutral and lastly taboo words. We used a mixed design where participants could not guess what language of the next word would be. Ferre et al. (2010), however stated that such design would be intricate to find whether there is any memory effects present in the second language as it promotes covert translation in participants. Our participants reported that they could recall taboo words better as the words were arranged at the very end thus it would be easier for them to recall the words.

5.3 The Words Participants are able to Recall to the Time They Acquired the English Language

We extended our study to find whether there is any significance between the words the participants were able to recall to the time they acquired the English language. In this study, we are focusing on the age of the participants who acquired English from the age of 1 to 7 years old and after 7 years old. We identified the participants' age group and 73.3% (22) acquired English from 1 to 7 years old, while the remaining 26.7% (8) acquired English after 7 years old.

In the first section, we compared the Malay emotion words participants were able to recall to the age they acquired the English language. We found there is no significant difference between age and the relationship between age with emotion. However, there was a significant difference in emotion (positive, negative, neutral and taboo).

We found that participants who acquired English after 7 years old obtained a higher mean of recall in Malay positive words compared to participants who acquired English from 1 to 7 years old. In the next section, we compared the English emotion words participants were able to

recall to the age they acquired the English language. Similar to the first result, we found there is no significant difference between age and the relationship between age with emotion. However, there was a significant difference in emotion (positive, negative, neutral and taboo). We found a similar pattern emerging in the result where participants who acquired English after 7 years old obtained a higher mean of recall especially in positive and taboo words. This was an interesting finding since participants who acquired English after 7 years old was less than those who acquired English after 7 years old.

We noticed that the recall differences in the second language was much stronger than the second language and we propose that the participants' course of study might be a factor contributing to the outcome of the result. In this study, participants were English majors and received Band 4- Band 6 for their MUET (Malaysia University English Test). In Aycicegi and Harris' (2004) study, they found that there was emotion-memory advantage in the second language despite their participants were late learners of English. Similar pattern was also found in the current study where the second language showed a higher emotional rate and recall result despite the time participants were exposed to English language.

6. Conclusion

Emotion-memory effects can be found in the second language regardless the age of the second language acquisition. Future research should enhance the variety of the age group to obtain a more specific pattern as to determine the relationship between the words participants are able to recall and the age of acquisition of the second language. Aycicegi and Harris (2009) stated that bilinguals may debate the claim that the first language contains more emotional association than the second language based on the maudlin of a new language. In order to reach for a more unambiguous outcome, different types of evaluation should be conducted to measure the emotional strength in the first and second language.

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References

- Anooshian, L. J., & Hertel, P. T. (1994). Emotionality in Free Recall: Language Specificity in Bilingual Memory. *Cognition and Emotion*, 8, 503-514.
- Aycicegi, A. & Harris, C.L. (2004). Bilinguals' recall and recognition of emotion words. *Cognition and Emotion*, 18, 977-987.
- Aycicegi, A., Gleason, B., & Harris, C. L. (2006). *When is a First Language More Emotional? Psychophysiological Evidence from Bilingual Speakers*.
- Aycicegi, A., & Haris, C. L. (2009). Emotion-memory effects in bilingual speakers: A levels-of-processing approach. *Bilingualism: Language and Cognition*, 12(3), 291-303.
- Bloom, L., & Beckwith, R. (1989). Talking with feeling: Integrating affective and linguistic expression in early language development. *Cognition and Emotion*(3), 315-342.

- Bond, M. H., & Lai, T. (1986). Embarrassment and code-switching into a second language. *Journal of Social Psychology, 126*, 179-186.
- Dewaele, J. M., & Pavlenko, A. (2002). Emotion Vocabulary in Interlanguage. *Language Learning, 52*(2), 263-322.
- Ferre, P., Garcia, T., Fraga, I., Sanchez-Casas, R., & Molero, M. (2010). Memory for emotional words in bilinguals: Do words have the same emotional intensity in the first and in the second language? *Cognition and Emotion, 24*(5), 760-785.
- Gonzalez-Regiosa, F. (1976). The anxiety arousing effect of taboo words in bilinguals. In C.D. Spielberger and R. Diaz-Guerrero (Eds.). *Cross-cultural anxiety*, (pp. 89-105).
- Greenough, W. T., & Black, J. R. (1992). Induction of brain structure by experience: Substrates for cognitive development. *Developmental behavioral neuroscience, 24*, 155-200.
- Kensinger, E., & Suzanne, C. (2003). Memory enhancement for emotional words: Are emotional words more vividly remembered than neutral words? *Memory & Cognition, 31*(8), 1169–1180
- Khairudin, R., Valipour, G. M., Nasir, R., & Zainah, A. Z. (2012). Emotions as Intermediaries for Implicit Memory Retrieval Processing: Evidence Using Word and Picture Stimuli. *Asian Social Science Vol., 8*(10).
- Kulkofsky, S., Wang, Q., & Hou, Y. (2010). Why I remember that: The influence of contextual factors on beliefs about everyday memory. *Memory & Cognition, 38*(4), 461-473.
- Levin, J. R. (1993). Mnemonic strategies and classroom learning: A twenty-year report card. *The Elementary School Journal, 94*(2), 91-98.
- Mohammadipour, M., Md Rashid, S., Rafik-Galea, S., & Thai, Y. N. (2018). The Relationships between Language Learning Strategies and Positive Emotions among Malaysian ESL Undergraduates. *International Journal of Education & Literacy Studies, 6*(1).
- Nelson, K., & Firush, R. (2004). The Emergence of Autobiographical Memory: A Social Cultural Developmental Theory. *American Psychological Association, 111*(2), 486-509.
- Noels, K. A., Pon, G., & Clément, R. (1996). Language, identity and adjustment: The role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology, 15*(3), 246-264.
- Otoya, M. T. (1987). A study of personal memories of bilinguals: The role of culture and language in memory encoding and recall. Unpublished doctoral dissertation, Harvard University.
- Pavlenko, A. (2002). *Bilingualism and Emotions* (Vol. 21).
- Ponari, M., Rodriguez-Cuadrado, S., Vinson, D., Fox, N., Costa, A., & Vigliocco, G. (2015). *Processing advantage for emotional words in bilingual speakers*.
- Ross, A. S., & Rivers, D. J. (2018). Emotional experiences beyond the classroom: Interactions with the social world. *Studies in Second Language Learning and Teaching, 8*(103-126).
- Schoenemann, T. P. (2009). *Evolution of Brain and Language*. Paper presented at the Language as a Complex Adaptive System Conference Language Learning Research Club.
- Thompson, R. A. (2001). Development in the First Years of Life. *The Future of Children, 11*(1), 21-33.