EXPRESSIVE VOCABULARY IN ENGLISH AND MALAY AMONG PRIMARY ONE SCHOOL CHILDREN: A COMPARISON BETWEEN BOYS AND GIRLS

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PhD ☐

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EXPRESSIVE VOCABULARY IN ENGLISH AND MALAY AMONG PRIMARY ONE SCHOOL CHILDREN: A COMPARISON BETWEEN BOYS AND GIRLS

TANG SWEE GEK

This project is submitted in partial fulfilment of the requirements for a Bachelor of Science with Honours (Cognitive Science)

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vii</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER ONE INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER TWO METHOD</td>
<td>12</td>
</tr>
<tr>
<td>CHAPTER THREE RESULTS</td>
<td>16</td>
</tr>
<tr>
<td>CHAPTER FOUR DISCUSSION</td>
<td>24</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX A ASSUMPTION TESTING FOR INDEPENDENT-SAMPLES T-TEST (H₀₁)</td>
<td>35</td>
</tr>
<tr>
<td>APPENDIX B ASSUMPTION TESTING FOR INDEPENDENT-SAMPLES T-TEST (H₀₂)</td>
<td>36</td>
</tr>
<tr>
<td>APPENDIX C ASSUMPTION TESTING FOR PAIRED-SAMPLES T-TEST(H₀₃)</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX D APPROVAL LETTER FROM KEMENTERIAN PENDIDIKAN MALAYSIA</td>
<td>38</td>
</tr>
<tr>
<td>APPENDIX E APPROVAL LETTER FROM JABATAN PENDIDIKAN NEGERI SARAWAK</td>
<td>39</td>
</tr>
<tr>
<td>APPENDIX F INFORMED CONSENT LETTER</td>
<td>40</td>
</tr>
<tr>
<td>APPENDIX G TEACHER'S SURVEY FORM ON STUDENT'S LANGUAGE AND LITERACY SKILLS</td>
<td>41</td>
</tr>
<tr>
<td>APPENDIX H SAMPLE OF QUESTIONS</td>
<td>42</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1 Number of Students from each School with Percentages ..................................................16
Table 2 Gender of the Students ........................................................................................................17
Table 3 Student’s First Language ....................................................................................................17
Table 4 Student’s Second Language .............................................................................................18
Table 5 Student’s Third Language ................................................................................................18
Table 6 Descriptive Statistics and Independent Sample Test of Expressive Vocabulary in English and Malay among Males and Females ..................................................................................22
Table 7 Paired Samples Test of English Expressive Vocabulary and Malay Expressive Vocabulary .................................................................23
LIST OF FIGURES

Figure 1 Simple view of reading model.................................................................2

Figure 2 The independent variables of this research are gender and expressive vocabularies in English and Malay. The dependent variable is the number of vocabulary that was answered correctly .................................................................10

Figure 3 Frequency of students based on first language (Sarawak Malay), second language (Malay) and third language (English). .................................................................19
ABSTRACT

This research compared the expressive vocabulary in English and Malay between male and female students. This research also compared the overall students’ performance of the expressive vocabulary in English and Malay. Data on 11 government primary schools ($N = 866$) were collected using random sampling. The research showed that females performed better than males in the both English and Malay expressive vocabulary. However, the females performed better in Malay expressive vocabulary than in English expressive vocabulary. These results highlight the influence of the order of language acquisition (e.g. first language versus second language learning).

*Keywords*: expressive vocabulary, boys and girls

Kajian ini menunjukkan bahawa prestasi pelajar perempuan dalam perbendaharaan kata ekspresif lebih baik berbanding pelajar lelaki di dalam kedua-dua Bahasa Inggeris dan Bahasa Melayu. Walau bagaimanapun, wanita menunjukkan prestasi yang lebih baik dalam perbendaharaan kata ekspresif Bahasa Melayu berbanding dengan perbendaharaan kata Bahasa Inggeris ekspresif.

Keputusan ini menunjukkan bahawa pengaruh peringkat penguasaan bahasa (contoh: Bahasa utama berbanding Bahasa kedua).

Kata kunci: perbendaharaan kata ekspresif, lelaki dan perempuan
CHAPTER ONE
INTRODUCTION

Vocabulary is one of the basic elements in a language (Loraine, 2008). According to Martin-Chang and Gould (2008), vocabulary has a strong correlation with reading comprehension, reading rate, and primary print knowledge. Therefore vocabulary is important for individuals to express themselves clearly, understand the text they are reading and understand the instructions given to them (Loraine, 2008). Vocabulary is a strong determinant of reading success (Biemiller, 2003). However according to Robinson and Lubienski (2010), females score better than males in reading when children start preschool education.

There are four types of vocabulary, which are listening vocabulary, speaking vocabulary, reading vocabulary, and writing vocabulary (Montgomery, 2007). Words that are heard are known as listening vocabulary whereas words that form speeches in our daily lives are known as speaking vocabulary. Reading vocabulary means words that are visually understood when we read. Writing vocabulary are words that are used when we write to express ourselves (Montgomery, 2007).

The Importance of Vocabulary for Reading Comprehension

Vocabulary knowledge functions as background knowledge which is significant in reading comprehension. Vocabulary knowledge facilitates decoding which is an important part of reading (Qian, 2002). According to Moghadam, Zainal, and Ghaderpour (2012), vocabulary knowledge is an important part of reading comprehension. Many studies have shown the relation between vocabulary knowledge and reading comprehension (Joshi & Aaron, 2000; Martin-Chang & Gould, 2008; Zhang & Annual, 2008).
Components of Vocabulary

There are two components in English vocabulary, which is expressive vocabulary and receptive vocabulary (Moghadam, Zainal, & Ghaderpour, 2012).

**Expressive vocabulary.** Expressive vocabulary can be defined as productive vocabulary or active vocabulary. It is involved in speaking and writing (Moghadam, Zainal, & Ghaderpour, 2012). It is used to express meaning through spoken or written language thus producing and retrieving an appropriate spoken or written word form (Nation, 2001). In other words, it is the language output conveying messages to others through both spoken and written language (Moghadam et al., 2012).

**Receptive vocabulary.** Receptive vocabulary can be also called passive vocabulary. It is the words we hear or see (Moghadam et al., 2012). According to Nation (2001) meaning is retrieved through receptive vocabulary while listening or reading. It is the language input received by learners through listening or reading and the meaning is then figured out (Moghadam et al., 2012).

**Simple View of Reading (SVR)**

<table>
<thead>
<tr>
<th>Word Recognition</th>
<th>Specific Reading Comprehension Difficulties</th>
<th>Normally Developing Readers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Mixed Reading Disability</td>
<td>Reading Disability (Dyslexia)</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>Good</td>
</tr>
</tbody>
</table>

**Oral Language Comprehension**

*Figure 1. Simple view of reading model.*
Figure 1 shows the SVR model. This model was developed by Gough and Tunmer (1986) to represent the proximal causes of reading difficulties. This model has two parts to it, where reading (R) is divided into two constituent components which are word recognition (D) and oral language comprehension (C). Each of these components is equally important and is necessary for reading to occur successfully.

Another important feature of the SVR model is that it provides a framework for conceptualizing the three broad categories of reading difficulties (Aaron, Joshi, Gooden, & Bentum, 2008; Aaron, Joshi, & Williams, 1999; Gough & Tunmer, 1986; Joshi, 2004; Tunmer & Hoover, 1992). The model predicts that reading comprehension problems can result from the weakness in recognizing printed words, understanding spoken language, or both (see Figure 1). Students who can understand text at the level corresponding to their age when it is read aloud but experience severe difficulties in learning to decode words although evidence-based instruction and intervention have been given are referred to as student with dyslexia. Students who can read the words accurately but cannot construct the meaning of text correctly are described as having specific reading comprehension difficulties (Nation, 2005). On the other hand, students who have difficulties in both word recognition and oral language comprehension are referred to as having a mixed reading disability (Catts & Kamhi, 2005) and are also described as garden-variety poor readers (Gough & Tunmer, 1986).

\[ R = D \times C \]  \hspace{1cm} (1)

The equation above (1) is the formula for reading comprehension. If a student has high word recognition ability but low oral language comprehension skill, he will be a poor reader (i.e., if \( D = 1.0 \), where 1.0 is perfection, and \( C = 0 \), then \( R = 1.0 \times 0 = 0 \)) whereas if someone has low word recognition ability but high oral language comprehension skill, he or she is still a poor
reader (i.e., if $D = 0$ and $C = 1.0$, then $R = 0 \times 1.0 = 0$). In short, students who face difficulties in either word recognition or oral language comprehension will have problems in understanding the overall text (Gough & Tunmer, 1986).

**Reading Disability among Students**

**Specific reading comprehension difficulties.** Children with specific reading comprehension difficulties have good word recognition skills (Oakhill, 1982, 1984; Stothard & Hulme, 1992, 1995) but they face problems with comprehension monitoring (Nation & Snowling, 1998). They show difficulties in tasks that require semantic processing (Stothard & Hulme, 1995). Besides that, they are weaker in reading accuracy, tapping anaphoric reference, inference making skills and sentence integration (Nation & Snowling, 1998). According to Perfetti and Hogaboam (1975), children who have specific reading comprehension difficulties are slower in reading words, especially non-words, compared to normal children. Children with difficulties in specific reading comprehension also have poor verbal skills and this weakness impacts their reading development (Nation & Snowling, 1998). This is because semantic coding for words is important for early reading development (Vellutino, Scanlon, & Spearing, 1995). Stothard and Hulme (1992) also found that children who have specific reading comprehension difficulties have weak listening comprehension and also weak receptive language skills.

**Mixed reading disability.** Children with mixed reading disability are children who possess difficulties in both word recognition and oral language comprehension (Catts & Kamhi, 2005). Their performance in synonym judgment indicates that they have difficulty processing meanings of words and their semantic knowledge of abstract items is very poor (Nation & Snowling, 1998). Besides that, children with mixed reading disability also have poorer listening
comprehension, lower verbal ability and weaker receptive language skills as compared to normal readers (Stothard & Hulme, 1995).

**Specific reading disability.** Children with specific reading disability are children with dyslexia. It causes problems with language skills, especially reading (International Dyslexia Association, 2008). According to Tunmer and Greaney (2009) there are four key components to the definition of dyslexia. It refers to persistent literacy learning difficulties especially in word recognition, spelling and phonological recoding (the ability to translate letters and letter patterns into phonological forms). Therefore, despite exposure to high quality, evidence-based literacy instruction and intervention, due to impairment in the phonological processing skills required to learn, to read and to write, dyslexic children face problems in learning. Their ability to comprehend is more advanced than their ability to decode (Frith & Snowling, 1983). Children living with dyslexia have word recognition problems so they benefit less from the “riches” of reading experiences and are at a disadvantage when they grow older (Stanovich, 1986). Reading experiences for children with dyslexia are less likely to improve because they are less sensitive to contextual information (Nation & Snowling, 1998).

**Normally Developing Readers**

Children who are good in both word recognition and oral language comprehension are normally developing readers (Gough & Tunmer, 1986). Normal readers are faster in reading single words (Perfetti & Lesgold, 1979).

**Order of Language Acquisition**

Most language research focus on the structure and properties of language but rarely there is research concerned about how people learn and acquire language.
First language learner (L1). L1 acquire their first or second language through implicit learning (Ellis, 2008). The proficiency in their language depends on how much linguistic input is given by their parents (Cook, Long, & McDonough, 1979; Ellis, 2008). Indeed, language acquisition is best implemented during their critical period, which ends at about the puberty stage (Snow & Hoefnagel-Höhle, 1978). After the critical period, language acquisition seems to become harder for the young learners.

Second language learner (L2). L2 learn their second language through explicit learning (Ellis, 2008). The proficiency in their language depends on the exposure to the linguistic environment (Cook, Long, & McDonough, 1979). However, older children or adults who have passed the critical period will find it hard to learn a new language. They need to learn the second language though conscious learning and explicit instructions (Ellis, 2008). Therefore, students may learn the language through schooling or tuition.

Third language learner (L3). L3 is a person with bilingual capability and acquires a third language after the critical period (Hammarberg, 2001). Third language learners possess unintentionally do code switching and produce lexical access errors in grammar when they speak to other people (Jordà, 2005). According to Jordà (2005), this is due to lexical interference in the previous acquired language and a slower rate of third language acquisition. Similar to L2 learner, L3 learner requires a linguistic environment as a medium to enhance the target language (Hammarberg, 2001).

Factors of Poor Vocabulary/Reading Comprehension

There are several factors that are related to poor vocabulary and reading comprehension. For example, order of language acquisition and gender differences.
**First language learners and second language learners.** According to Lervag and Aukrust (2010), first language learners (L1) show better reading comprehension skills and faster growth in these language skills over time as compared to second language learners (L2). Vocabulary is a critical predictor of the early development of reading comprehension skills in both L1 and L2 learners (Lervag & Aukrust, 2010). Joshi and Aaron (2000) also found that vocabulary knowledge is a strong predictor of reading ability when factoring in speed with decoding and comprehension. The lack of vocabulary skills in L2 learners cause them to show a slower development in reading comprehension skills (Lervag & Aukrust, 2010).

**Gender differences.** Gender is being divided into male or female groups. Gender identity means the awareness of one’s femaleness or maleness that develops in early childhood. However gender differences show psychological or behavioral differences between males and females (Papalia & Feldman, 2012).

Boys are more active than girls in the beginning of the prenatal period. Females react to stress less and are more likely to survive infancy (Davis & Emory, 1995; Keenan & Shaw, 1997). The size of a male’s brain at birth is about 10 percent larger than a female’s brain and such difference continues into adulthood (Gilmore et al., 2007).

According to Hyde (2005), physical characteristics contribute largely to gender differences. Males show higher activity level, superior motor performance especially after puberty and by the age 2, they show higher tendencies towards physical aggression (Archer, 2004; Baillargeon et al., 2007; Pellegrini & Archer, 2005). However, according to Maccoby (1980), male and female children are equally sensitive to touch and begin teething, sitting up, and walking at about the same ages. They also achieve other motor milestones during infancy at about the same time.
The accomplishment gap begins while the students are still very young (Arnold & Doctoroff, 2003; Chatterji, 2006; West, Denton, & Germino-Hausken, 2000) and it was also confirmed by Lee and Otaiba in year 2015. According to Lee and Otaiba (2015), among 462 kindergarteners from 10 public elementary schools, girls showed better performance in alphabet knowledge between groups of students from both low-poverty households and high-poverty households (Lee & Otaiba, 2015). Besides, girls are also better in spelling among students from high-poverty households (Lee & Otaiba, 2015). Analyses conducted based on ECLS-K also corroborates that girls outperformed boys in reading, specifically, increasing from a difference of .17 SD units in kindergarten to .31 SD units in first grade reading (Chatterji, 2006).

On the contrary, some studies reported that there is no significant difference in early literacy skills among boys and girls (e.g., Keenan & Shaw, 1997; Robinson & Lubienski, 2010; Spelke, 2005). According to the research conducted by Robinson and Lubienski (2010), it is confirmed that there is no gender gap in mathematics achievement among kindergarteners. Spelke (2005) found that cognitive gender differences among human infants, preschool children and students at all levels are few and small. In terms of the overall intelligence test scores among preschool children, there are no gender differences (Keenan and Shaw, 1997). Both male and female children performed equally well in tasks which involve basic mathematical skills. Both genders were equally capable of learning mathematics. However, there were small differences in specific abilities, for example girls performed better in verbal fluency, mathematical computation and memorizing locations of objects while boys performed better in verbal analogies, mathematical word problems and memorizing spatial configurations. However, most studies show that these differences do not continue until elementary school or later (Spelke, 2005).
As for achievements, there are many reasons that can explain the gender gaps. The causes of gender differences in achievement have been examined over three decades and involved multiple disciplines, for instances psychology, sociology, biology and education. Researchers have also investigated the causes in different fields. For example, the role of parents’ beliefs and practices in shaping gender patterns affects academic achievements (Jacobs, 1991; Lubienski & Grane, 2009), students’ attitude and self-confidence in reading (Baker & Wigfield, 1999; Rathbun et al., 2004).

In the book Overcoming Dyslexia written by Sally E. Shaywitz (2003), it is said that fewer females are identified as having dyslexia in schools because they always show good manners and are less physically aggressive. So it is hard to identify girls with dyslexia. On the other hand, Shaywitz (2003) stated that boys with dyslexia might be a bit more rambunctious yet still within the normal range of behaviors displayed by boys. They may be perceived as having behavior problems and are referred for further evaluation because they display more physical aggression and lack of self-control (Shaywitz, 2003).

Thus this research is focused on the expressive vocabulary in English and Malay among primary one school children. The aim is to find out the strength of expressive vocabulary in English and Malay languages between male and female students, the effect of expressive vocabulary towards reading abilities and the effect of first language learners and second language learners towards the mastery of expressive vocabulary in English and Malay. According to Biemiller (2003), there are many children with reading disabilities who possess smaller vocabulary compared to children with no reading disabilities. The findings from this research would also be important in determining the level of vocabulary of pupils and the risk of reading disabilities among them.
The Conceptual Framework

This study aims to examine the strength of expressive vocabulary in English and Malay among male and female students in Kuching. The conceptual framework for this research (Figure 2) is based on the research objectives. There are three objectives for this study, which are to examine the differences in English expressive vocabulary between male and female, to examine the differences in Malay expressive vocabulary between male and female and to examine the differences between English expressive vocabulary and Malay expressive vocabulary.

Expressive vocabulary. Expressive vocabularies comprise words that people use to communicate or express themselves when speaking or writing (Burger & Chong, 2011).

The Present Study

The size of a male’s brain at birth is about 10 percent larger than a female’s brain and such difference continues into adulthood (Gilmore et al., 2007). However, some studies found that the gender gap in reading (Robinson and Lubienski, 2010), cognitive (Spelke, 2005), and
Overall intelligence test scores (Keenam and Shaw, 1997) are relatively minor. Given these studies, this research focused on determining whether there is gender gap in both English expressive vocabulary test scores and Malay expressive vocabulary test scores. If there are, then what are the reasons for the gap? In summary, three questions have been suggested to achieve the objectives of the study is as written below:

1. Is there any difference in terms of mastery of expressive vocabulary in English between males and females?

2. Is there any difference in terms of mastery of expressive vocabulary in Malay between males and females?

3. Is there any difference in terms of mastery of English expressive vocabulary and Malay expressive vocabulary?
CHAPTER TWO

METHOD

Context of the Larger Study

This research was supported in part by a larger study entitled “Development of a Comprehensive Diagnostic Instrument for the Identification and Classification of Language and Literacy Skills in Primary School Children with Reading Disabilities”. There are two categories of tests for this study which are group administered tests and individually administered tests. Some of the tests are bilingual which are in both English (BI) and Malay (BM). In group administered tests, there is name writing, letter writing (capital letters and small letters), coloured progressive matrices (Sets A and B), spelling (BI & BM), reading comprehension (BI & BM), and listening comprehension (BI & BM). In individually administered tests, there is letter name knowledge (capital letters and small letters), letter naming fluency, rapid automatized naming (BI & BM), word reading accuracy, word reading efficiency (BI & BM), non-word reading accuracy, oral reading fluency (BI & BM), reading comprehension (BI & BM), receptive vocabulary (BI & BM), expressive vocabulary (BI & BM), blending, elision (BI & BM) and phonological memory (BI & BM). For now, this larger study is still in the progress.

The sampling technique used in this study is random sampling. The Schools were randomly selected and the students were also selected randomly with consent from their parents. All the participants share similar characteristics, for example, their age-group. This technique is chosen because this research involves a very large population. This method also decreases the amount of time spent to gather participants for this study and incurs less expenses.

Participants

The population involved is all the Primary 1 students from different demographic backgrounds. The original targeted sample was 1000. However, as a result of absenteeism and
informed consents not given by parent(s), only 866 students were tested. This research was conducted at 11 Sekolah Kebangsaan (SK) government schools around Kuching, specifically, SK Combined \((n = 55)\), SK Major General Datu Ibrahim \((n = 122)\), SK Tabuan Hilir \((n = 130)\), SK Green Road \((n = 146)\), SK Tabuan Jaya \((n = 53)\), SK Song Kheng Hai \((n = 21)\), SK Gita \((n = 98)\), SK Tabuan \((n = 67)\), SK Kenyalang \((n = 33)\), SK Satria Jaya \((n = 93)\), and SK Merpati Jepang \((n = 48)\).

**Measures**

The measure used in this research is same as in the larger study. The research was conducted in 11 government primary schools around Kuching. The instruments used in this research are a survey questionnaire and a test. The measure is divided into two parts which is demographic background (Part A) and the vocabulary test (Part B).

Part A includes gender, name of school, first language, second language and third language learnt. That information was collected from the school teachers at each school.

Part B contains 20 pictures of vocabulary which was adapted from the standard one English text book. Those pictures are the same for both the English test and Malay test.

**Procedure**

Before the actual study was conducted, the procedures were first tested. The pilot study provides an opportunity for the researchers to modify any unsuitable pictures. Besides it also allows researchers to gauge the expected time needed for data collection. The pictures had to be appropriate and easily understood. This study also investigates the factors that would negatively influence the score of pupils and thus tries to minimize its effect. The instrument was administered to 200 primary one pupils.