PRESCHOOLERS' USE OF FORM CLASS CUES IN WORD LEARNING

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

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This project entitled “Preschoolers’ Use Of Form Class Cues in Word Learning” was prepared by Lau Mee Hiong and submitted to the faculty of Cognitive Sciences and Human Development in partial fulfillment of the requirement for a Bachelor of Science (Honours) in Cognitive Science.
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Abstract

This study was conducted to assess whether preschoolers in Malaysia override form class cues in the service of maintaining word-meaning assumptions. It was a replication of experiment two in "Preschoolers’ Use of Form Class Cues in Word Learning" (Hall, Quantz & Persoage, 2000). A total of 175 children participated in this study, in which 50 children were of age four, 55 children were of age five and 70 children of age six. Eight stuffed toys were divided into labeled-category objects and unlabeled-category objects used in this experiment. One pair of the objects, which consists of labeled-category object and unlabeled-category object was analyzed in this research. Children were required to choose a toy from labeled-category objects or unlabeled-category objects in response to the questions posted by the researcher. The questions were in the forms of either count-noun, adjective or proper-name.
Abstrak

1.0 Introduction

This chapter presents and discusses the background of this study, the problem statement, objectives of the research, conceptual model, hypotheses, significance of the research, definition of terms and the limitations of this research.

1.1 Background Of The Study

"Word learning is the product of a set of cognitive and linguistic abilities that include the ability to acquire concepts, an appreciation of syntactic cues to meaning, and a rich understanding of the mental states of other people." (Bloom, 2000). Children are active learners especially in word learning. They are estimated to know around 10,000 words before they enter school. Studies show that preschoolers utilize and transfer abstract information by using syntactic categories, such as noun and adjective in order to determine the meaning of novel words (Hall, Waxman & Hurwitz, 1993).

The vocabularies of children are growing at a high rate especially during early childhood. They love to try out new words. When they are introduced to new object labels, presented as count nouns, proper names, or adjectives, they prefer to override form class cues in order to learn the word (Markman & Wachtel, 1988). For example, they prefer the unlabeled-category object in count-noun condition, adjective condition, and proper-name condition but not in the no-word
condition if they override form class cues. Toward these, there are evidences that show the results. "Preschoolers will restrict the novel words offered syntactically as a proper name (e.g., "This is X") to the labeled object" (Hall & Graham, 1999). Most of the preschoolers learn unlabeled-category objects or non-obvious categories through their experience. They looked into the functional similarities between the category members. According to Woodward & Markman (1998), children tend to map a novel word to the whole object's category by using their extension pattern.

There are differences between word meaning assumptions and form class cues. According to Hall, Quantz & Persoage (2000), word meaning assumptions, such as whole object assumptions and taxonomic assumptions, suggest that children prefer to map a novel word to the unlabeled-category object and assume that the word belongs to the whole object. For example, children prefer to interpret a new word as labeling the entire object when they were taught a new word in the presence of the object. They would not interpret it as a part, a property, or an action of an object that the object is taking part in. However, form class cues are different. In form class cues, the word names one of the object's properties when cues indicate the word as an adjective. Students name the word as individual object when cues mark it as a proper name. However, the similarity between form class cues and word meaning assumptions is when form class cues show the word as a count noun that indicates the object's category.

This research serves as a comparison between the results of American preschoolers and Malaysian preschoolers in word learning. We want to explore how Malaysian children acquire this capacity of learning new words. Besides, this research focuses on early conceptual and
category development of word learning especially how language affects and interacts with category development as well as how children match their theories about the world.

1.2 Problem Statement

Word learning among preschoolers is an issue, which we are concerned with everyday. In this research, whether preschoolers override form class cues or not can help us know how they actually learn. Form class cues and word meaning assumptions are the ways that children use in word learning. Through this research, the researcher hopes that we can understand preschoolers better especially in word learning. Besides, the findings can be used as a teaching guide for preschool teachers.

1.3 Objectives Of The Research

The general objective of this study is to assess whether preschoolers override form class cues in word learning.

Three specific objectives of this stipulated general objective are:

- To determine whether the form class cues will be used as sources of information for preschoolers when they acquire new words.
- To assess whether preschoolers prefer form class cues or word-meaning assumptions in word learning.
- To study the intra-relationships between various ways of word learning by the preschoolers.
1.4 Conceptual Model

<table>
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<th>Dependent Variable</th>
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<tbody>
<tr>
<td>Age</td>
<td>Form Class Cues</td>
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<tr>
<td>Word condition (no-word condition, count-noun condition, adjective condition, and proper-name condition)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1.1: Experimental design of the study

1.5 Hypotheses

The null hypotheses that are related to this research are:

- $H_01$: There is no significant difference between no-word condition and age.
- $H_02$: There is no significant difference between count noun condition and age.
- $H_03$: There is no significant difference between adjective condition and age.
- $H_04$: There is no significant difference between proper name condition and age.

1.6 Significance Of The Research

This research is significant for proving the theory that preschoolers would override form class cues instead of word-meaning assumptions. We can see the differences in word learning between preschoolers (4- to 6- years old) in Malaysia and preschoolers (2½- to 5- years old) in America. The results of this study will determine whether there is similarities or differences that exist in words learning between Malaysian preschoolers and American preschoolers. Besides that, the
finding of this research can be used as a teaching guide for the preschool’s teachers and operators.

As a whole, it is hoped that the findings of this study will help us to have a better understanding about word learning among preschoolers and compare these findings with the findings in America.

1.7 Definition of Terms

1.7.1 Form

Form refers to the shape and structure of an object and to constitute or compose a basic element, part, or characteristic.

1.7.2 Class

Class refers to a comprehensive division of animate or inanimate objects, grouped together on account of their common characteristics and to assign an object in groups.

1.7.3 Cue

Cue refers to a hint or reminder or signal, such as a word or an action used to prompt another event in a performance.
1.7.4 Form class cues

Form class cues means classes of hints or signals with the shape or structure of an object.

1.7.5 Preschool

Preschool is defined as a school for early childhood education whereby there is children fostering children’s growth and development before they enter primary school. It is also called early childhood education.

1.7.6 Learning

Learning means a relatively permanent change in knowledge or behavior that results from practice or experience.

1.8 Limitation Of This Research

The limitation of this research is that the samples consist of children with age from four to six and those children who are studying preschool now. This research did not consider those children who were not studying in preschools even though they were between ages four to six. The stimuli used in this research may differ from the previous research because the researcher chose the unlabeled-category object. Moreover, the respondents answered questions in four conditions, which were no-word condition, count-noun condition, adjective condition, and
proper-name condition. Each respondent is supposed to answer the question in one condition only.

The novel words in this experiment were not disyllabic and carried a y suffix except in adjective condition. This may cause the differences in the result. Moreover, this research was analyzed with the Chi-Square Test, as the researcher was difficult to get the mean proportion of each condition.

1.9 Summary

The introduction of the background, problems, objectives and limitation of this study made us understand better about this study. It forms the preliminary understanding this study.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

To support this study, a literature review was conducted to investigate word learning in early childhood. Different characteristics of word learning related to the academic field were reviewed, such as form class cues and word-meaning assumptions. Other literature reviews that conducted were preschool in Malaysia, language development in preschool education, and semantic development.

2.1 Preschool in Malaysia

Most parents send their children to preschools or early childhood services. An integrated perspective on the child's functioning in various areas of growth and development is essential. This is because opportunities and experiences at the child's developmental age will determine the extent to which early academic skills are presented upon entering school. The child's changing attitudes and behaviors in academic learning and life, reflects their cognitive, communicative, social, and emotional growth.

In Malaysia, preschool education is main for children between age four to six years old. It is consider an informal education system, which is conducted largely by the private social organization in the urban areas and various government agencies. According to Majzub (2004), there are more than one million preschoolers at the age between three to five years old in
Malaysia. 63% of the preschoolers studied in private sector while the others studied in government sector.

Preschool education prepares children for primary school. It provides cognitive, social physical and spiritual stimulation for those who enter preschool education. According to Choong (2003) in The Star newspaper, the ministry will begin a new rule in the year 2007 and all of the primary schools are compulsory to have at least one preschool class for children between four to six years old. In preschool, children are active learners who will develop social and cognitive skills. With these skills, they are able to interact with the people in their surrounding. The cognitive skills of preschoolers such as telling stories, drawing pictures, singing and listening to music will be developed when they are educated at the preschool level.

Besides this, children will engage in self-care skills and simple problem solving tasks in their life, such as dressing and eating. Preschoolers can tell you how they feel. They feel happy when they are praised and encouraged. Moreover, entering preschool can ensure that children are equipped with good language development, cognitive skills, self-control and self-concepts regardless of their family background or personal characteristics when they enter first grade. According to Currie (2001), self-control is important for the development of formal cognitive skills. Therefore, self-control can serve as an important tool to children to be successful in life.

Preschool education plays an important role to develop social skills in children as well as to help and foster their skills to enjoy learning (Soon, n.d.). We need to guide them to have a greater interest in learning, as the development of their interest is essential for the further development of
children. It helps to stimulate our country towards knowledge-based economy where knowledge
and information develop the first step of our socio-economical environment.

2.2 Language Development in Preschool Education

Language serves as a variety of important purposes for the development of children. It is the
most complex system of rules that we have to learn. Halliday (1978) discusses that language
helps children interact with others, and understand what is going on at their surrounding by
asking “Why” and “How” questions. Besides that, language helps children to express their
meaning, views, feelings, and wishes so that we know what they are thinking about.

There are three theories on how children develop their language. Operant conditioning and
imitation are two important ways of how language is learned in the theories of Skinner and other
behaviorists. But, a child is regarded to equip with language acquisition device in the Chomsky’s
nativist view. They can control the structure of language themselves. From the perspective of
Interactionist theorist, innate abilities and social contexts must be combined to promote language
development.

At the age of five, children learn language well in the classroom and are able to engage in
conversations. It is well documented that, in general, preschool children acquire new words at a
surprisingly rapid rate (Carey, 1978). They start to learn the nouns, verbs and they are interested
in word meaning. Their abilities to learn vocabulary increases rapidly and they love to talk with
people at their surroundings. They intend to know the words. Sometimes, they like to use words,
which they are neither familiar nor understand. They are unsure of what they are talking, but
happy to use new words. According to Vygotsky (1962), young children used language to plan,
guide, and control their behavior in a self-regulatory fashion instead of social communication. Young children are curious to know the real answer of the things in their surroundings. Thus, the development of the language in children is very important. It is affected by other areas of development, such as physical development, cognitive development, social development and emotional development. Parents and caregivers need to spend extra time with their children if the children's developments are slow. They need to talk to children and play with them.

Figure 2.1: A Summary of Language Development
According to Jalongo, M.R. (1992), there are five stages in the language development of children. One of the stages is as below:

<table>
<thead>
<tr>
<th>Stage Four: Using Complete Sentences</th>
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<td>(Approximately 4-6 years)</td>
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<table>
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<tr>
<th>4 years</th>
<th>Pronunciation and grammar improve</th>
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<td></td>
<td><em>Vocabulary:</em> 1400 – 1600 words</td>
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<tr>
<td></td>
<td><em>Social:</em> child seeks ways to correct misunderstandings; begins to adjust speech to listener’s information needs; disputes with peers can be resolved with words and invitations to play are more common.</td>
</tr>
</tbody>
</table>

| 5 to 6 years | Complex, grammatically correct sentences; uses pronouns; uses past, present, and future verb tenses; average sentence length per oral sentence increases to 6.8 words. |
|             | *Vocabulary:* use approximately 2,500 words, understands about 6,000, responds to 25,000 |
|             | *Social:* child has good control of elements of conversation. |

Table 2.1: Overview of Language Development (Continued)
(Source: Cited in Dale, 1976; Loban, 1976; Maxim, 1989 & Papalia and Olds, 1986)