Early Lexical Development of 50 Words and Individual Differences in the First Language Acquisition: A Case of two Minangkabaunese children

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Abstrak: *Penelitian ini dilatarbelakangi oleh perbedaan hasil penelitian tentang jenis kata yang diucapkan anak dan perbedaan individu yang mempengaruhuinya pada fase perkembangan 50 kata. Bertolak dari latarbelakang tersebut, penelitian ini bertujuan memaparkan pemerolehan bahasa pertama anak pada fase perkembangan 50 kata dan faktor yang mempengaruhi pemerolehan bahasa tersebut. Penelitian ini dilakukan terhadap anak Minangkabau yang dalam kesehariannya menggunakan bahasa Minangkabau. Subjek penelitian ini ada dua orang, yaitu satu orang anak perempuan berumur 16 bulan dan satu orang anak laki-laki yang berumur 18 bulan. Data dikumpulkan dengan cara interaksi verbal langsung, perekaman, dan pencatatan. Berdasarkan analisis data ditemukan bahwa pada fase perkembangan awal 50 kata, kata benda paling banyak diucapkan oleh kedua anak tersebut. Anak kelahiran pertama menghasilkan sedikit kata dibandingkan anak kelahiran berikutnya. Selain itu, jika orang tuanya lebih banyak menggunakan kata dan kalimat majemuk, pemerolehan bahasa anak juga akan lebih banyak. Namun, penelitian ini tidak menemukan apakah anak yang sering diajak bersosialisasi oleh ibunya lebih produktif dalam menghasilkan kata jika dibandingkan dengan anak yang jarang diajak bersosialisasi.*

Kata kunci: *Perkembangan/pemerolehan awal 50 kata; perbedaan individu; pemerolehan bahasa*

INTRODUCTION

Child early lexical development has long been interested to study with various focuses, such as vocabulary acquisition, the content of early lexicon, first words produced, and the adult grammar produced by young children. These areas

of focuses provide useful insight not only for child language development itself, but also for other fields of study, such as education, psychology, and medicine.

In the area of the first words produced, the nature of the first words produced and understood by young children is important and interesting to study. According to Liu (2007), many researchers believe that the first words related to the acquisition of the first language must be considered as one of the most important achievements of early childhood. In addition, knowing what kinds of words first produced is also essential. It is essential because before producing the first words, young children have already had the knowledge of the words stored in their mental lexicon (Hoff, 2005 & Parrisse, 2007). The words stored in their mental lexicon are influenced by environment and child factors (Hoff, 2005).

Crago (2008) further specifies some factors influencing child first language development. There are individual differences, such as environment, age, gender, and birth order. Therefore, the research questions in this study were:

1. What kinds of words do young Minangkabaunese children produce most in their early lexical development at 50 words with the age of 16 months for the girl and 18 months for the boy in producing Minangkabau language as their first language?
2. Are there any individual differences influencing the young Minangkabaunese children early lexical development at 50 words with the age of 16 months for the girl and 18 months for the boy in producing Minangkabau language as their first language?
3. What factors influence individual differences of young Minangkabaunese children early lexical development of 50 words with the age of 16 months for the girl and 18 months for the boy in producing Minangkabau language as their first language?

The Age for the First Words to 50 Words

There have been some studies conducted to find out the age for the children producing their first 50 words. A study done by Nelson (1973) proved that 18 English children who spoke English as their first language acquired their early 50 words slowly; the first 10 words were acquired at 1;3 (age range 1;1-1;7), and the first 50 words at 1;8 (age range 1;3-2;0). A longitudinal study by Kunnari (2000) reported that ten children produced their first words at 11 months and 7 days and acquired their first 50 words at 17 months and 7 days. Young children generally achieved 50 words from the first words at the age ranging from 15 to 24 months (Hoff, 2005). Liu in her study (2007) found the different finding from Hoff. She found that after preliminary sound practices such as cooing and bubbling, children started to produce their first words around the age of 12 months. Then,

on average, around 18 to 20 months of age, many children showed rapid increase of their vocabulary size or achieve 50 words. From the findings of longitudinal studies above, it can be concluded that the range of the child 50 words is from 12 months to 24 months (Nelson, 24 months; Kunary, 17 months; Hoff, 15-24, and Lin, 12 months). Therefore, in this study the children were observed at the age 16 months for the girl and 18 month for the boy.

Early Lexical Development at 50 Words

At the range of the age 12 months to 24 months, it is debated what words are produced first and what words are produced most by young children. This debate is indicated by some existing studies done by different researchers. Some researchers found out in their studies that the first 50 words produced by young children are always nouns, while others proved that nouns are not always produced first (Caselli, et.al., 2009).

Some researchers found that nouns are the first words produced at 50 words by young children at the age ranging from 12 months to 24 months. Reznick & Goldfield (1992) in their study found that early 50 words of English-speaking children often included some common nouns in reference to objects with solid functional and physical properties like *ball, box, bubble, car* and words describing people or things in their immediate environments, such as *daddy, mommy,* and *baby.* Tardif (1996) in his study to Korean and Chinese young children indicated that verbs were produced at the same rate as nouns. A longitudinal study by Goldfield (2000) found out that the proportion of noun compared to other lexical categories was universally quite large in words produced by children at early ages. This proportion was indicated by his finding that of 548 words collected in his study, 362 words were nouns (53%), 123 were action words (18%), and 63 were descriptive/ adjective words (9%). Hoff (2005: 146) concludes from several findings of the studies that one feature of vocabulary at the first 50 words was nouns. She also states that the first and common words produced by young children were names for people, food, body parts, clothing, animals, and household items. The second ones were routines like *night-night* and *bye-bye.* The third ones were verbs, such as *eat, drink, kiss, look, go, come* and *sing.*

Some other researchers found that nouns are not the first words produced by young children at 50 words. Griffiths (1985) found out that nouns were not the first words produced by the young children. It was found in this study that the first words produced at 50 words were functional words, such as *oh, no* and *uh.* They then produced very few nouns referring to the names of their caregivers. Parrisse (2007) in his study to young French children at the age ranging from 18 months to 24 months found that the first 50 words produced by young children were

functional words, such as *oh, no, that, there, uh, yes, what, ah*, and *yeah*. They then produced some expressive words, such as *hello* and *bye*. They, in turn, produced some nouns, such as *Mummy* and *Daddy*. Interestingly, a child used bye with handwaving, but out of context. In another case, a child used *bye* after the person had left. Still another child used *bye* as a request to have the door opened. Some other young children in this study used the word *oh* for multiple possible meanings. It was for the expression of surprise, pain, disapprobation, and attention gained. Parrisse then concludes that there is a process before the children produce the right words for the right contexts called understanding.

In sum, the study of the first words produced by young children at 50 words is one of the important studies in recording language development. It is clear from the above studies that what the first words are produced by young children from the age ranging from 12 months to 24 months are not consistent from one finding to another. Some researchers found out that the first words produced at 50 words and proportion of words produced are nouns, while others find out that nouns are not always first produced. This inconsistency is due to many factors such caregivers and environment as found by Hoff (2005). In addition, it is also found out that some young children use a certain word for multiple meanings. Some use them in reference to the contexts called referential words, but others use them out of the contexts called context-bound words.

Therefore, in this study one of the purposes was to find out what kind of words were mostly produced at first 50 words by two young Indonesian children acquiring Minangkabau language at the age ranging from 12 months to 24 months. This was to find out whether the findings of this study were in line with one of the views described above, that, the first 50 words are nouns or not. In order to achieve such purpose, the classifications of words used by Hoff (2005) and Parisse (2007) were used in this study. The classifications were functional words, expressive words, nouns (names for people, food, body parts, clothing, animals, and household items) and verbs.

Individual Differences at the First 50 Words.

As it has been indicated that there are some differences found at the first 50 words, either differences in kinds of words produced first, the proportion of kinds of words, or the referential meanings of certain word, Hoff (2005: 153-160) states what makes the differences is individual differences- in language style and in the rate.

She further specifies that individual differences in language style are caused by some factors. First, the contexts in which young children hear the words given explicitly are understandable or not. Second, the child's approach to language

acquisition tasks whether they use analytical or holistic approach. In analytical approach, the speech they hear is classified into small bits (words or even parts of words). In holistic approach, the speech they hear is understood as the whole. Third, the risk-taking strategy makes individual different in producing the first 50 words. Some children jump into talking with minimal understanding of what they are saying, while others delay using some words until they fully understand about the words. Last, socialized children are willing to use some words even though their understanding about the words used is still incomplete, as the results; they possess more words than less socialized ones.

She also specifies more that individual differences in the rate are caused by environmental factors and child factors. There are three environmental factors related to the difference in rate. First, the amount of speech addressed to the young children contributes to numbers and kinds words produced by the young children. Second, the later- born has more interaction with adults, therefore; they have more words than the first- born. Hoff stresses that unfortunately only very few studies related to this. Third, children of more educated parents have larger vocabularies than children of less-educated parents. There are three child factors contributing to the rate differences. First, Children who are very out- going elicit more input which in turn support more rapid language development. Second, Children with better phonological memory- the ability to remember a sequence of unfamiliar words- have more advanced vocabularies. Third, in sex differences, girls have more advanced vocabularies than boys.

Liu (2007) conducted a study to children acquiring Mandarin and Cantonese found some individual differences in early lexicons at 50 words for young children. The first difference was the kinds of input exposed to young children. She found that Mandarin –speaking parents tended to use more verb token than nouns, but English –speaking parents tended to use more nouns that verbs. The second difference was the exposure to language. She indicated from her study that young children who were more socialized will produce more words than young children who were less socialized.

Hurtado, et.al. (2008) reported individual differences at early 50 words. The first difference was due to how many times caregivers said the same word. It was found that a word said by a mother more than seven times was recognized more by the young children. Moreover, young children with larger vocabularies at 24 months were also faster to identify familiar words in fluent speech at that age. In addition, the quality and the quantity of caregivers's speech at 18 months made a difference in early acquisitions. Children whose mothers produced more words and more complex utterances during the play session at 18 months were significantly faster in comprehension and production.

Caselli, et.al. (2009) in their study to English and Italian young children at the age ranging from 15 months to 24 months found that individual differences at 50 words were due to cultural differences. They found that the adjective *hot* appeared more at first 50 words produced by English-speaking children since their mothers often used it to warn infant away from stove, lightbulbs, and other dangerous items. In turn, the English-speaking children always used the adjective *hot* to name the bright objects. The Italian-speaking children often use negation *NO NO* to refer to the same things as the English-speaking young children. In addition, the words *nonna* (grandmother) and *nonno* (grandfather) appeared more among the first 10 words. These findings indicate that Italian families were more likely to live in the same city with grandparents and other relatives. This condition results in early acquisition of the names for family members.

A study by Stolt (2009) proved that gender had a clear effect on the lexicon size. It was `found that young girls were more ahead in their early 50 word lexical development that boys. Girls were consistently outperformed boys in language measures. Unfortunately, Stolt did not give further explanation to this difference.

To summarize, individual differences have a clear picture of the differences on the acquisition and the development of young children at the age ranging from 12 months to 24 months at their 50 words. The individual differences found from the studies above are consistent to one another. Individuals are different in two aspects- in style and in rate- at 50 words. In style the differences are due to context (Hoff, 2005), child approach (Hoff, 2005), risk-taking strategy (Hoff, 2005), and socialized or less socialized (Hoff, 2005; Liu, 2007). In rate, environmental and child factors make the differences. The influential factors of the environment are the amount of speech addressed (Hoff, 2005; Hurtado, 2008), birth order (hoff, 2005), culture (Casselli, 2009) and educated or less educated parents (Hoff, 2005). Influential factors for the child factors are out-going young children (Hoff, 2005; Liu, 2007), Phonological memory (Hoff, 2005), and sex differences (Hoff, 2005; Stolt, 2009). In this study, factors influencing early lexical acquisition and development were taken into account only observable factors. They were only four -socialized or less socialized young children (out-going children), birth order, educated and less educated parents, and sex differences. Other factors, such as context, child' approach, risk-taking strategy, phonological memory were difficult to observe in this study.

RESEARCH METHODS

This study was the combination of longitudinal study and cross-sectional study. Larsen-Freeman and Long (1991:13) recommend that it is possible to

combine of longitudinal and cross-sectional approaches in language acquisition. It was longitudinal since the data collected were gained from natural settings in which the researcher did not make up the setting. The researcher was only as an observer in the existing settings. In addition, the data were collected four times from two participants. They were taken three times during their play at volley ball field because it was a place for children to play every afternoon and once at "arisan RW" (see appendix 1). It was cross-sectional because the data were collected only at the short time, one month only.

The instruments for this study were tape recording, field notes and observation sheets. Tape recording was to record the two Minangkabaunese utterances. Field notes were taken to collect the data about kinds of words produced by the two young children, the age of 16 months and 18 months. As it has been stated above that the field note sheets contain the classifications of words used by Hoff (2005) and Parisse (2007). The classification was functional words, expressive words, nouns (names for people, food, body parts, clothing, animals, and household items) and verbs. The procedures in analyzing the collected data replicated the procedures conducted by Parisse (2007) as follows:

1. All the words heard from the two young Minangkabaunese children were recorded in the written forms.
2. They were then classified into under the columns for functional words, expressive words, nouns (names for people, food, body parts, clothing, animals, and household items) and verbs for each child.
3. The percentage of words in each classification was counted by using MLU, $x = \frac{the\ number\ of\ word\ forms}{\text{The total number of words}}$ x 100%

Observation sheets were used to collect the data about the individual differences. As it has been stated above they were four individual differences observed -socialized or less socialized young children (out-going children), birth order, and sex differences. Educated or less educated parents were not analyzed in this study because the researcher did not have much involvement and did not see how parents communicate at home with the participants. The procedures in analyzing the collected data for these individual differences replicated the procedures conducted by Parisse (2007) as follows:

1. The data were organized into each category- socialized or less socialized young children (out-going children), birth order, and sex differences.
2. The descriptions of the individual differences are correlated to the findings of the studies above.

FINDINGS AND DISCUSSION

Early Lexical Development

There were three findings of this study to answer the first research question. First, both boy and girl produced more nouns than functional words, expressive words, and verbs. This finding is consistent with the findings found by Hoff (2005) and Liu (2007) and not consistent with Griffths' finding (2008). Second, of the two, the boy produced more nouns. This was because there were more boys than girls playing at volleyball field. Therefore, the more words were produced by boys. Last, both produced the right words for the right contexts due to the natural and direct exposure of the setting- volleyball field and a house where "arisan RW" was held.

It was also found that Even though both produced more nouns, there were some differences. The girls tended to use more functional and expressive words than the boys. However, she used less nouns and verbs than the boy.
The Findings specifically were distributed in the following table:

Lexicon	Ridho (Male: 18 months old)	Nadia (Female: 16 months old)
Functional Words	20%	27.5%
Expressive words	12 %	22.5%
Nouns	38%	32.5%
Verbs	30%	17.5%

Individual Differences Influencing at the First 50 Words

Socialized or Less Socialized Young Children

The findings about individual differences about socialized or less socialized young children found in this study were not in line with the findings found by Stolt (2009). Both girl and boy were socialized. Because young children playing at volleyball field were more boys than girls, there was a difference between the two participants due to different opportunity to use Minangkabau language. Therefore, boys produced more words than girls. In addition, since there was more chance for the boy to produce the language, boys were more a head in producing language. This could be seen from the finding that boys were able to produce two word utterances (see appendix 2).

Birth Order

The finding about the birth order is consistent to Hoff (2005) who states that later- born are more advanced in producing words. However, in this study

this was not only because the birth order that made the boy was more ahead than then girl. It was influenced by the number of friends or playmates he had, and the opportunity to play. Therefore, more research needs to be conducted in this case.

Sex Differences

Individual differences in sex were not really discovered in this study since researcher observed both participants only for an hour in each observation. In this study there was a difference between the boy and the girl, but only one influential factor discovered, that is, time and opportunity for playing with playmates. In other words, analyzing sex differences for the young children acquisition and production of early lexical development at 50 words needs more time and longitudinal data.

CONCLUSION

This study provides information about early lexical development at 50 words for young children at age of 16 months and 18 months. It is important to study it since first words indicate the child's understanding about the words produced. Two of the findings are consistent with the findings of the previous studies like more nouns produced and birth order. One finding whether or not more socialized child is more productive in producing lexical development is not consistent with the previous findings. The Minangkabaunesee young child who frequently hears the speech as the whole produces more words. The last one is about individual differences in sex, in this study, did not have enough evidence to discover whether the difference is caused by the difference in sex or not. With this finding it is implied that teaching the first, the second, or the foreign language should start from the parts of speech-noun, verb, adjectives, and adverbs. Teacher should model using English as the whole. This is due to the result of this study and previous studies that young children produce their early lexical development from those parts of speech, not from the tenses.

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