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How Pre-School Aged Siblings Influence Toddlers' Language Development

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Abstract

This study explores early first language development in toddlers, focusing on how children acquire semantic relations at the two-word stage. The purpose of the research is to examine this development through the lens of behaviorist theory and to investigate the influence of behavioral language input from family members, particularly mothers and siblings. The study involves four toddlers aged 24–28 months and compares two groups: children with no siblings and those with preschool-aged siblings. Data was collected over a three-month period through observation of the children's utterances, with analysis focusing on Mean Length of Utterance (MLU) measured three times and the types of semantic relations produced. The results indicate that children exposed to richer behavioral language input, especially those with older siblings, tend to show greater development in MLU and a wider range of semantic relations. These findings suggest that interaction within the home environment plays a significant role in language development at the two-word stage. The study highlights the importance of providing consistent and meaningful language input to support early linguistic growth in young children.

Keywords: First Language Development, Toddlers, Two-Word Stage, Semantic Relations, Behaviorist Theory, Mean Length of Utterance (MLU), Behavioral Language Input, Sibling Influence

Introduction

Language acquisition does not take place in a vacuum. As children acquire language, they acquire a sign system which bears important relationship, to both cognitive and social aspects of their life. Humans have minds and, in their minds, they have the means for producing and comprehending speech. According to stages of language development, at birth, they cannot comprehend speech or they cannot produce speech: Yet, by the age of 18-24 months, they can use their growing vocabularies to label objects and to interact socially. Speaking continues to develop while they are interacting with others.

Human beings begin to acquire language in their first months, long before they stay their first words. They pay attention to adult faces and are responsive to the language spoken to them; they take their turn in conversation, even if they turn in only the babble. The first language of an infant is cry. An infant usually cries when he/she is hungry and uncomfortable. Once, toddlers began to make certain sounds to express satisfaction or cool, and the babble, the source of language development, appears to have some universal characteristics.

After the stage of babbling, a baby will move to the next stage. Children utter their first word between 4 months and 18 months (or) even older (Steinbeng,Nagata, and Aline 2001). This stage is called Holophrastic stage. The young child can express a variety of semantic foundations and complex ideas using single words. (Greenfield & Smith, 1976; Bloom, 1973). For example, a child

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may point to a longyi and say, "ma ma", meaning "The longyi belongs to mama." The word "mama" may have different meanings. Children begin to produce two and three-word utterances at the age of 2. Children's language develops beyond two-word stage. They begin to understand the sentence patterns.

After the stage of telegraphic, children begin to use three, four or even more words. They begin to understand simple sentences. And they produce complex utterances like negative and interrogative. According to Bloom, there are non-presence, rejection and denial. For example, a child will say 'No money' for non-presence, 'No wear dirty clothes' for rejection, and not wear the shoes' for denial. Another developmental stage is interrogative.

Even if a child understands the interrogative, she can respond to them. Later, she can produce the interrogatives. The next stages are passive and other problems. In these stages, children begin to use passive structures with two or more verbs, but their acquisition is not complete until some years later. This paper is based on 24-28 months old children, focusing on how siblings could influence different aspects of language development.

The aim of this study is to investigate how different members of the family could affect different aspects of language development such as the ability to produce and comprehend the language. The objectives of the current study are as follows: To find out the reasons for different development in the language of the toddlers. To find out the development process of these children's first language acquisition.

Literature Review

There are two aspects: language acquisition and language development. Language acquisition consists of some theories according to some theorists, which serve as the foundation of this research. In language development, there are some stages of a child's language development from birth. Language acquisition is the process by which humans of different ages try to conquer the ability of perceiving, understanding and conveying many utterances to each other as a means of communication. In such a complex and challenging process, respective language users must deal with how to learn the syntax, vocabulary of each language and its phonetics. To investigate into how humans learn their language skills step by step, many researchers have been intrigued to much extent and consequently many theories have tried to explain about how humans start learning their languages and reach a complete level of doing so.

Although many types of language acquisition have been coming out according to ambitious and outstanding bilinguals or multi-linguals, researchers have gradually become enthusiastic with surveying on how infants or children try to learn their first language, rather than on second or more languages of some adults. Several theoretical positions can be identified: behaviorism, empiricism, nativism, cognitivism, innatism, and interactionism. Among them, behaviorism and innatism are mainly dealt with in this thesis.

This theory founded by Watson (1924) was extremely influential in the 1940s and 1950s, especially in the United States. Moreover, those who believe in "Behaviorism" undoubtedly today have also emphasized the fact that language learning is the result of imitation, practice, feedback on success and habit formation. Thus, they have also supposed that children continue to imitate and practice these sounds and patterns until they form "habit" of correct language use, receiving the encouragement of their environment. To be simple, this theory totally recommends the quality and quantity of the language the child hears, as well as the consistency of the reinforcement offered by others in the environment to influence the child's success in language learning.

Chomsky (1959) argues that the "Behaviorist Theory" fails to recognize what has come to be called "the logical problem of language acquisition". He also claims that a child's language learning is very similar to his way of learning to walk. In this process, he believes that the child's biological endowment is entirely responsible for acquiring the rules of a language with just a bit aid from the environment's basic contribution of the ability of people who speak to the child. As for him, parental corrections of language errors are totally nonsense because children often ignore their correction, continuing to use their correction, continuing to use their own ways of saying things.

To reinforce his theory, Chomsky relies much on a child's Universal Grammar (UG). "UG" is considered to consist of a set of principles which are common to all languages, and so the child inevitably exploits it in whatever he learns. ehaviorism is primarily associated with Classical Conditioning developed by Pavlov and Waston (1928) and Operant Conditioning promoted by Skinner (1938). Classical conditioning is a technique used in behavioral training in which a naturally occurring stimulus (present food) evokes a response (dog salivates). Next, a previously neutral stimulus (bell rings) is paired with the neutral occurring stimulus (present food). Eventually, the neutral stimulus (bell rings) evokes the response (dog salivates) without the presence of naturally occurring stimulus (present food). The two elements are then known as the conditioned stimulus and the conditioned response. This is also known as "Pavlov's dog's bell".

Therefore, according to Pavlov, learning is the involuntary association of stimulus and response. Moreover, according to Waston (1930), learning is a sequence of stimulus and response actions in observable cause and effect relationships. He emphasized the role he believed that one's environment and background are much more dominant than genetics in the determination of human behavior. He thought that one's established behavior. He also considered that if he could be in charge of a child's surroundings, he could shape that child into any type of person he sought. Operant conditioning is based on classical conditioning. Skinner 1938) expanded on the foundation of Behaviorism, established by Watson. According to Skinner, reinforcement is a consequence that increases the probability that behavior will occur. In other words, reinforcement will strengthen a behavior. Reinforcements are more effective when they are given as soon as possible after a subject performs the target behavior. A subject can be learned very rapidly due to this continuous reinforcement, but when the reinforcement stops, the behavior decreases rapidly too. There are two forms of reinforcement and punishment.

Positive reinforcement occurs when a behavior (response) is followed by a rewarding stimulus, increasing the frequency of the behaviors. For example, a subject praised for asking questions, as a result, he asks more questions. Negative reinforcement (escape) occurs when a behavior (response) is followed by an unpleasant stimulus, thereby increasing the frequency of the district behavior e.g. a son who is tired of hearing his father's nagging will do his homework to remove the nagging. Both types of reinforcement are used to increase the likelihood that preceding behavior will be repaired.

On the other hand, punishment is a consequence that decreases the probability of behavior occurring. Positive punishment occurs when a behavior (response) is followed by a stimulus, such as introducing a shock as loud noise, resulting in a decrease in that behavior e.g. if a teacher frowned when his subject asked a question, the subject would be less likely to ask question again. Negative punishment occurs when a behavior (response) is followed by the removal of a stimulus, such as taking away a child's toy following undesired behavior, resulting in a decrease in that behavior. Both types of punishment are used to decrease the likelihood that preceding behavior will be repeated.

Noam Chomsky is the prominent figure of Innatism theory (The Innatism Theory: A Brief Overview). His hypothesis is that language is an innate ability. It is a biological development that the child goes through, and it only acquires a fair amount of communication with the environment to develop. The innatisms believe that every child is provided with universal grammar which encourages their ability to discover their own mistakes within time. This kind of grammar is an idea of a general set of principles which could be applied as universal to all languages. Chomsky's theory is often associated with the critical period hypothesis (CH) that describes a certain skill or knowledge learnt at a certain time according to our genetic process schedule. If these qualities are not acquired at this specific time, it will be difficult or even impossible to acquire them later. Nevertheless, there are a few cases where this theory has been able to be tested and has been proven to make a point. One possibility is that the children might have had other influences that affected their ability to learn a language such as brain damage, specific language impairment or developmental delays (Lightbown and Spada, 2006).

Owen (2005) defines input as the repetitiveness of daily verbal and nonverbal routines as well as a parents' feedback as to whether the child's utterance was understood or not. The form of the input children get in the home from their parents seems unlimited, constant and variable in terms of quality and quantity. Children receive input from many sources mother, father,

siblings, relatives, friends, etc. (Nwokah, 1987; Bavin, 1992). And such inputs have specials linguistic characteristic. The speech which parents and others use in talking to children consists of immediacy and concreteness, grammatically simple structures, simple and short pitch and stress. According to behaviorism, language was a set of habits that resulted from associating particular stimulus and responses. Habits were formed and hence, language was acquired, through the process of imitation and repetition of input (i.e., stimuli). Children pick out patterns of language mainly through input from adults and other caregivers then they try to create new forms and new uses of words until they finally figure out how the forms are used by adults. Owen (2005) states that there is a strong correlation between the variety of parental verb usage and the child's development of verbs. Therefore, the development of language acquisition largely depends on the speech input given by the environment. In other words, language input plays a key role in language acquisition.

Among the theories mentioned above, behaviorist theory is mainly applicable to the acquisition of native language while the rest can account for foreign language acquisition. It is an undeniable fact that native language growth must have the way for foreign language growth. As behaviorist theory mainly concerned with spoken language, behaviorist theory believes that infants learn oral language from other human role models through a process of imitation, stimuli rewards, and practice. When a child attempts to learn oral language or imitates the sounds or speech patterns, they are usually praised and given affection for their efforts. In this way, praise and affection becomes the rewards. And behaviorist theory is the habit formation theory of language teaching and learning. According to this theory, an infant obtains native language habits through varied babbling which resemble the appropriate words repeated by a person or object near him.

Since his babbling and muttering, he is rewarded. This reward reinforces further articulation of the same sort into grouping of syllable utterances are reinforced by comprehension and approval, and acceptable utterances are inhibited by the lack of reward. In this way, he gradually learns to make finer and finer discriminations until his utterances close more and more to the speech of the community in which he is growing up (Wilga M. Rivers, 1968;73). In other words, children's social environments whose importance both over language learning and teaching must never been underestimated. Besides according to this theory, a highly complex learning task can be learned by being segmented into small habits. Due to this effort, correct or incorrect responses can be occurred which are rewarded or punished respectively (Hubbard Jones and Thornton Wheeler, 1983;326). Thus, it is clear that the acquisition of learning in infancy governs the acquisition of other habits. And there are some main principles of behaviorism in language learning. They are Language learning is habit formation. It is like learning type, so it is a conscious process, and Speech is very important to show the performance and evaluate learning through that performance. Performance is the actual use of language (Dineen, 1967;80). Learning in infancy governs the acquisition of other habits. And there are Some main principles of behaviorism in language learning. They are Language learning is habit formation. It is like learning type, so it is a conscious process, and Speech is very important to show the performance and evalute learning through that performance. Performance is the actual use of language (Dineen, 1967;80).

There are numerous proposals for stages of language development in the child language. They are pre-linguistic stage, holophrastic stage, telegraphic stage and morphemic stage. 2.5.1 Pre-linguistic Stage The pre-linguistic stage is the time period before children say their first meaningful words which lasts from approximately 0-13 months. (Shaffer, et.al., 2002). During this stage, infants will bring attention to objects non-verbally by pointing and touching. Accordingly, infants communicate by crying, cooking, and babbling (Siegler, Alibali, 2005).

Before infants learn spoken language, they can respond to sound and speech. During this stage, caregivers tend to speak to infants in higher pitches and tones which can be referred to as prosity (motherese or baby talk). This baby talk however varies from culture to culture. Babies usually respond to these higher pitches in speech by matching the pitch of the person who is speaking to them. They will often respond non-verbally by expressing mood change, smiles, or bright eyes.

Infants will also respond vocally during the pre-verbal stage. At age 2-6 months babies begin to babble, and at about 4 months babies will add consonant sounds to their babbles. Babbling is important for infants because it helps them learn the sounds of speech. The babbles of infants have been found to be universal, and they have also been found to match linguistic rhythms (Petti to, et, al, 2004). During the end of the pre-linguistic stage at about 7-8 months infants will start to learn turn talking in speech.

In the second year of life, toddlers often continue to babble. Babbling helps toddlers develop their ability to produce early sounds. Toddlers may repeat single syllables (e.g. "bababa") or say string of different syllables (e.g."bagidabu" by around 12 to 13 months. toddlers more often produce babbles that have a variety of early speech sounds. The sound that toddlers produce is affected by the language or languages they hear. For example, toddlers who are learning Mayan may produce the sound during babbling. These toddlers' babble is very different from toddlers learning English which do not usually produce. Some toddlers continue babbling even after they are saying words. Other toddlers may stop babbling before producing their first words (Bennett, 2012). Enumeration of children's vocabulary is probably the oldest approach to the study of language acquisition. When children begin to acquire a vocabulary, they have already been exposed to a great deal of language and have had a wide range of individual experiences. Steinberg, Nagata, and Aline (2001) states that children utter their first word between 4 months and 18 months (or) even older.

According to Berko Gleason, Nelson finds that children mostly produce words for food (juice), toys' (ball), vehicles (car), clothing (socks), animals (dog, people (mama), actions (run), modifier such as dirty and mine. Research has shown that the young child can express a variety of semantic functions and complex ideas using single words (Greenfield & Smith, 1976). For example, a child may point to a shoe and may describe a complex situation by using a series of single word holophrases. For example, 'car, go, bus' was to describe a situation in which hearing the sound of a car reminded a child of a child that had been on a bus the day before (Sollon, 1976).

In this stage, around 2 years of age or so children begin to produce two and three-word utterances. Children use two-word utterances to improve communication. For example, "Mommy come' is more effective than just 'come' or 'mommy'. It seems that the order of words appears quite regularly. The utterances involve such semantic relations and concepts as agent, action, object, location, and possession (Steinberg, Negata, & Aline, 2001). Brown has found eight semantic relations at two-word stage (Table 1):

Table 1: Common Semantic Relations in Early Two-Word Stage

1.	Agent	+	Action	Daddy	sit
2.	Action	+	Object	Driver	car
3.	Agent	+	Object	Baby	book
4.	Action	+	Location	Go	park
5.	Entity	+	Location	Cup	table
6.	Possessor	+	Possession	Mommy	dress
7.	Entity	+	Attribute	Box	shiny
8.	Demonstrative	+	Entity	That	car

Children's language develops beyond two-word stage. In other words, sentences get longer as children begin combining two or more basic semantics relations. For example, agent + action and action + object may be combined to yield agent + action + object, as in "Adam hit ball". The process of acquisition of major grammatical morphemes is gradual and lengthy.

Grammatical morphemes, even though they do not carry independent meaning, they do subtly shade the meaning of sentences. Once two-and three-word utterances have been acquired, children have something on which to elaborate. They start to add function words and inflections to their utterances. Function words like the prepositions 'in' and 'on', the articles 'the', 'a', and 'an', the modals 'can', and 'will', and the auxiliaries 'do', 'be', and "have', begin to appear, together with inflections such as the plural / s/ on 'cats' and / z/ on 'dogs' and tense markings such as the / t / past tense form on 'worked.' The development of grammatical morphemes is studied by psycholinguist Brown (1973). The morpheme group studied by Brown includes 14 grammatical morphemes. He has found that children acquire morphemes in a similar order.

Brown noted that children usually make a distinction between animates beings and animate objects. Animate beings are things that are alive such as dogs, cats, horses, people and so on. All of these are capable of acting under their own vocalization. Brown used the term Agent to describe the semantic category that includes words that refer to animate beings. Examples of Agent words would, therefore, include mummy, dady, Fido. In contrast to animate beings, animate objects are not alive, and they are, therefore, not capable of acting indecently or of making decisions. The semantic category used to include all inanimate objects is simply labeled object. This category would, therefore, include such things as table, spoon, cup, and similar, usually concrete, objects.

A third semantic category is that of Action. Words in this category express the ideas of action include such words as kick, run, bark and so on. Words in this semantic category express the notion of place. They may indicate where an Agent or Object is, or moves to, and where an Action is performed. Examples include garden, house, bath. Buckley (2003) suggests that children begin to combine words into short combinations when their expressive vocabulary has reached between 50-100words. However, the two-word utterances that children produce are not the product of random combinations of words. Rather, children are systematic and logical in the way they combine words to express meaning. Roger Brown noted that children produce utterances by relating one semantic category to another. We will consider these next. A common relation found in the majority of children between the age of about 20-30 months is that of Agent + Action.

Again, dog refers to animate being. Whilst a dog may not be considered capable of making decisions in the same way a human is, it nevertheless is alive and can act independently. It is, therefore, considered to be an Agent. The word "bark" is another expression of an Action in this case; an action typically associated with a dog and not a daddy. Another common semantic relation is that of Action + Object. Here, kick is an Action in the same way that bark is considered an Action in dog bark and go was considered an Action in daddy go. The animate Object in two-word utterance is clearly the ball. Now, the exact meaning the child intends when uttering a phrase like kick ball needs to be gleaned the context in which it is said. For example, if the child is kicking a ball, then this utterance may be intended to mean, "I'm kicking the ball!". However, if the ball is on the floor in front of you and the child points to you and says, "kick ball!" then this may be meant as, "you kick the ball now". The first interpretation is more like child describing what he or she is doing and the second more like giving instructions.

For most children the so-called two-word stage is completed by 30 months of age. The next stage of development involves the child adding a third word to the two-word combinations. This is the three-word stage. The two-word combinations are, therefore, used as the building blocks for the longer three-word utterances. Consider the earlier examples of an Agent+ Action, daddy go. Using this as the foundation, the child can expand it by adding a third semantic category. Here, home represents the child has, thus, expanded the Agent + Action + Location. It is used to see, then, how two-word combinations can be used as building blocks to produce a variety of different meanings by the addition of different Location words. MLU is a method of measuring the syntactic development of a language. Its basic concept is to count the comprehensible units through words, morphemes or phonemes etc.

(Dobbinson, Griffiths Trott 2004). The tool of measuring syntactic development by MLU was introduced to analyses of morphology and transcriptions by Roger Brown and his colleagues (1973). These researchers established the MILU as a way for measuring the child's language acquisition. Usually, a sample of 50 to 100 utterances is analyzed to know about the child's overall production. Each word a child produces is broken down into morphemes. A morpheme is the smallest, indivisible unit of meaning. For example, the word "walk" is one morpheme, while "walked " is two morphemes. "Walk" carries its own meaning and "ed" signifies past tense. The formula is as follows:

$$\text{MLU} = \frac{\text{Total number of morphemes}}{\text{Total number of utterances}}$$

Typically, a child's MLU corresponds closely to their age. Brown (1973) described five stages of language development based on MLU. The following table outlines typical MLU development (Table 2):

Table 2: Mean Length of Utterances (MLU) by Age

Stage	MLU	Approximate Age (In Month)
I	1.0-2.0	12-26
II	2.0-2.5	27-30
III	2.5-3.0	31-34
IV	3.0-3.75	35-40
V	3.75-4.5	41-46
V+	4.5+	47+

Methods

In this research, four 24-28 months old Myanmar children's first language development is examined at word level. Descriptive methods and qualitative methods are used to present the research as well as to analyze the collected data. Moreover, the study has been conducted to explore how the children develop their first language by means of behavioral language input but to find out the different development of the children as they receive the different behavioral inputs.

The survey period is from 1" December 2015 to 28" February 2016. The recordings take place in home settings and are done by their mothers. Families were asked to play with their children at home for about fifteen minutes and videotaped the procedure. The most typical activities during taping are playing with the same instruments that they used to play. All the families were told to act as normally as possible as if there were no videotaping in order not to affect the child's behavior. The researcher sometimes participated in the videotaping based on the utterances extracted from each month, their MLU (Mean Length of Utterances) is calculated to assess their language development. At the same time, their stages of words level have been checked up and identified monthly by means of Brown's (1973) Semantic Relation at Two-word utterances. In addition, both a comparative analysis of all the MLU data and a comparative analysis of children's two-word utterances are performed and identified by means of column charts and line charts.

After the utterances of the Subjects are transcribed from three-month recording, each subject's MLU is calculated to identify the development of language in the second month and the third month. Then, based on the collected MLU data and semantic structure, their language levels have been identified by means of Brown's eight semantic relations at two-word stage. The researcher uses observation checklists in the study in which sibling's presence influencing language acquisition through playing, interactions and instructions are videotaped. Children are observed in their homes also during play time. It is naturalistic research where the researcher talks to the subjects naturally and watches their behavior. The following table shows the number of utterances that the subjects have uttered in the first month and subjects' current level can be seen in this table 3.

Table 3: Subjects' MLU Results in the First Month

No	Subjects	Age	Number of Utterances	Number of Morphemes	MLU
1.	Subject (A)	25 months	8	12	1.5
2.	Subject (B)	25 months	15	25	1.6
3.	Subject (C)	26 months	18	26	1.4
4.	Subject (D)	25 months	10	14	1.4

According to Table (1) presented in Literature Review, the MLU of a 25-month child is expected to be between 1.0 and 2.0 and that of a 26- month child between 1.0 and 2.0. And then, all the subjects, A, B, C and D are at the expected levels (Table 4).

Table 4: Type of Semantic Relations at Two-word Stage Uttered in the First Month

No	Subjects/MLUs	Semantic Relations	Example	Number of Uses
1.	Subject (A) (MLU-1.5)	Entity + Location	နားလေး.....ဟိုမှာ မုန့်မုန့်.....ဒီမှာ	3

		Possessor + Possession	မေ့မေ့ဖုန်း	5
2.	Subject (B) (MLU-1.6)	Demonstrative + Entity	အဲ့ကား	5

The table above describes the sample of subject's utterances in the first month. Subject A makes Entity + Location 3 times, Possessor + Possession 5 times. In the first month, according to Miller (1981), he is in stage I in terms of age and his MLU is not at the expected level. In this month Possessor + Possession is most frequently used, and Entity + Location is the least. Subject B produces Demonstrative + Entity, 5 times, Action + Object 4 times, Entity+ Location 3 times. According to Miller (1981), She is in stage I in terms of age and her MLU is not at the expected level. In the first month, Demonstrative + Entity and Entity + Location is the most frequently used and Action + Entity is the least. Then, Subject Cutters Agent + Action 4 times, Action+ Object 3 times, According to Miller (1981), She is in stage I in terms of age and her MLU is not at the expected level. In the first month, Agent + Action is the most frequently used and Action + Object is the least. And the last Subject, Subject D utters Agent + Action 4 times and Demonstrative + Entity 3 times According to Miller (1981), he is in stage I in terms of age, but his MILU is not at the expected level. And in this month, Agent + Action is the most frequently used and Demonstrative + Entity is the least. The following table shows the number of utterances that the subjects have uttered in the second month, and this table can describe the rate of subjects' language development (Table 5).

Table 5: Subjects' MLU Results in the Second Month

No	Subjects	Age	Number of Utterances	Number of Morphemes	MLU
1.	Subject (A)	26 months	13	21	1.6
2.	Subject (B)	26 months	18	33	1.8
3.	Subject (C)	27 months	10	14	1.4
4.	Subject (D)	26 months	12	22	1.8

According to Table (1) presented in Literature Review, the MLU of a 26-month child is expected to be between 1.0 and 2.0 and that of a 27-month child, between 2.0 and 2.5. However, in the first month, Subject A, B and Dare at the expected level though Subject C has not reached the standard (Table 6).

Table 6: Types of Semantic Relations at Two-word Stage Uttered by the Subjects in the Second Month

No	Subjects/MLUs	Semantic Relations	Example	Number of Uses
1.	Subject (A) (MLU-1.6)	Agent + Action	နာပေးမယ်	5
		Possessor + Possession	မေ့မေ့ပုံ	5
		Entity + Location	ဟိုပေါ်မှာကား	3
		Action + Object	ကိုကို့ကိုရိုက်	5
2.	Subject (B) (MLU-1.8)	Agent + Action	မီးမီးယူမို့	4

		Entity + Location	ဒီမှာရုပ်ရုပ်	3
		Agent + Object	ကိုကိုစာအုပ်	4
3.	Subject (C) (MLU-1.4)	Agent + Action	မေမေဖယ်ဖယ်	3
		Action + Object	မေ့မေ့အင်္ကျီ	3
		Agent + Location	စားပွဲမှာရုပ်ရုပ်	3
4.	Subject (D) (MLU-1.8)	Agent + Action	ဖေဖေ....လာ	6
		Agent + Object	မေမေပဲနို့	3
		Demonstrative + Entity	ဒီဖုန်း	5

The table above describes the sample of subject's utterances in the second month. Subject A utters Agent + Action 7 times, Possessor+ Possession 5 times, Entity + Location 3 times and Action + Object 2 times. In the second month, according to Miller 1981), he is in stage I in terms of age and also his MLU is at the expected level. In this month, Agent + Action is most frequently used, and Action + Object is the least. Next, Subject B makes Agent + Action 6 times, Entity + Location 5 times and Agent + Object 2 times. In this second month, according to Miller (1981), she is in stage I in terms of age, but her MILU is also at the expected level in this month, Agent + Action is most frequently used, and Agent + Object is the least.

Then, Subject C produces Agents + Action 5 times, Possessor + Possession 5 times and Entity + Location 3 times. In this second month, according to Miller (1981), she is in stage I in terms of age and her MLU is not at the expected level. And this month, Agent + Action is the most frequently used and Entity + Location is the least. And the last subject, Subject D utters Agent + Action 6 times, Agent Object 3 times and Demonstrative + Entity 5 times. In the second month, according to Miller (1981), he is in stage I in terms of age and his MILU is at the expected level. And this month, Agent + Action is the most frequently used and Agent + Object is the least. The following table shows the number of utterances that the subjects have uttered in the third month, and this table can describe the rate of subjects' language development.

According to Table (1) presented in Literature Review, the MLU of 27-month child is expected to be between 2.0 and 2.5 and that of a 28 - month child, between 2.0 and 2.5. However, all the subjects A, B, C and D are not at the expected level. The table above describes the sample of subjects' utterances in the third month. Subject A utters Agent + Action + Object 2 times, Agent + Action 5 times, Possesor + Possession 5 times, and Action + Location 4 times. In the third month, according to Miller (1981), he is in stage Il in terms of age, and his MLU is not at the expected level. In this month, Agent + Action and Possessor + Possession is the most frequently used and Agent + Action + Object is the least. In the last month of this research, Subject A develops beyond two-word stage. In other words, sentences get longer as the child begins combining two or more basic semantic relations. For example, Agent + Action and Action + Object may be combined to yield Agent + Action + Object as in ‘ကိုကို မုန့် စားတယ့်’.

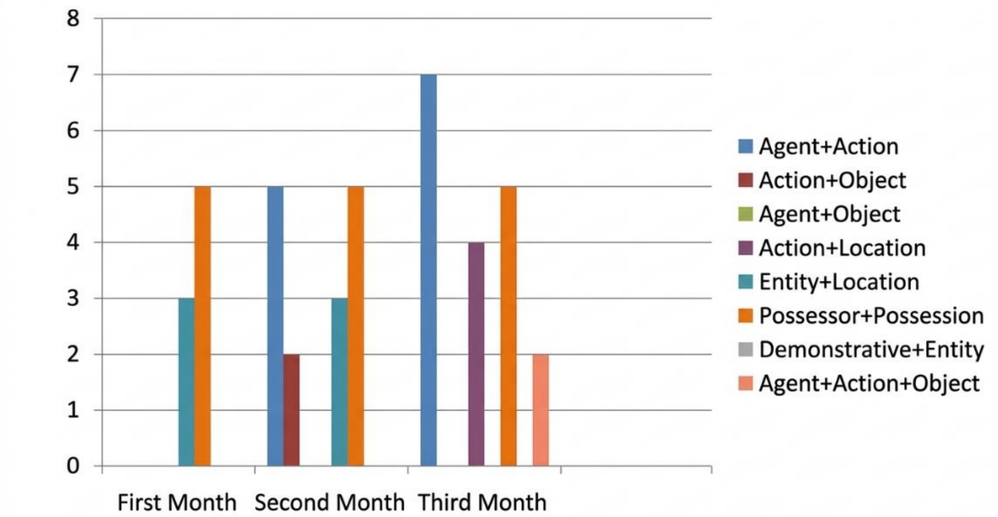
Subject B produces Agent + Action + Object 2 times, Action + Object 4 times, Entity + Location 4 times and Agent + Action 6 times. Subject B also develops beyond two-word stage. For example, Agent + Action and Action + Object may be combined to yield Agent + Action + Object as in " ‘မမမမရှိ က ကကိုကို’. In the third month, Agent + Action is the most frequently used and Agent + Action + Object is the least. Then, Subject C makes Agent + Action + Object 1 time, Action + Object 5 times, Agent + Action 5 times and Entity + Location 3 times. In the third month, according to Miller (1981), she is in stage II in terms of age and her MLU is not at the expected level. In this month, Action + Object and Agent + Action is the most frequently used and Agent +

Action Object is the least. In the last month of this research, Subject C develops beyond two-word stage in " မ တား မ တား ဒါကက ပြိုက ". Next, Subject D utters Action + Object 4 times, Agen t+ Action 4 times, Action + Location 3 times and then Subject D also develops beyond two-word stage in 'သ တားသ တားမနမ နစ တားမယ ' "According to Miller 1981), he is in stage Il in terms of age and his MLU is not at the expected level. In this last month of research, Action + Object and Agent + Action is most frequently used and Agent + Action + Object is the least.

ll the subjects in this study are 24-28 months old. They are equally divided into two categories of 2 each. One category has two children who have a sibling at home although genders are not the same. Another category has also two children with different genders who have no sibling at home. To discuss the effect of siblings on toddlers' language development, all subjects' interactions with their mothers and siblings are analyzed so that the reader can understand easily what this study wants to convey. Column charts and bar charts present the subjects' semantic relation at two-word utterances and MLU development over the three-month period.

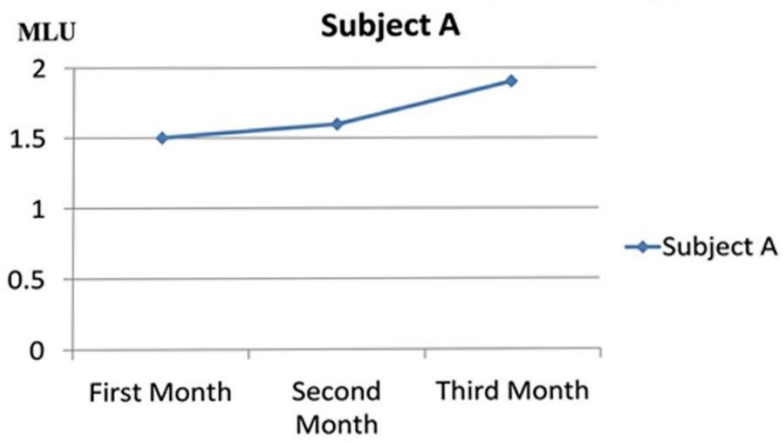
Figure (1) shows Subject A's semantic relations development in the three-month period. In this figure, a blue bar represents Agent+ Action, a red one represents Action + Object, a green one represents Agent + Object, a purple one represents Action + Location, a light blue one represents Entity + Location, an orange one represents possessor+ possession, an indigo one represents Demonstrative + Entity and a pink one represents Agent + Action+ Object.

Figure 1: Language Development of Subject A



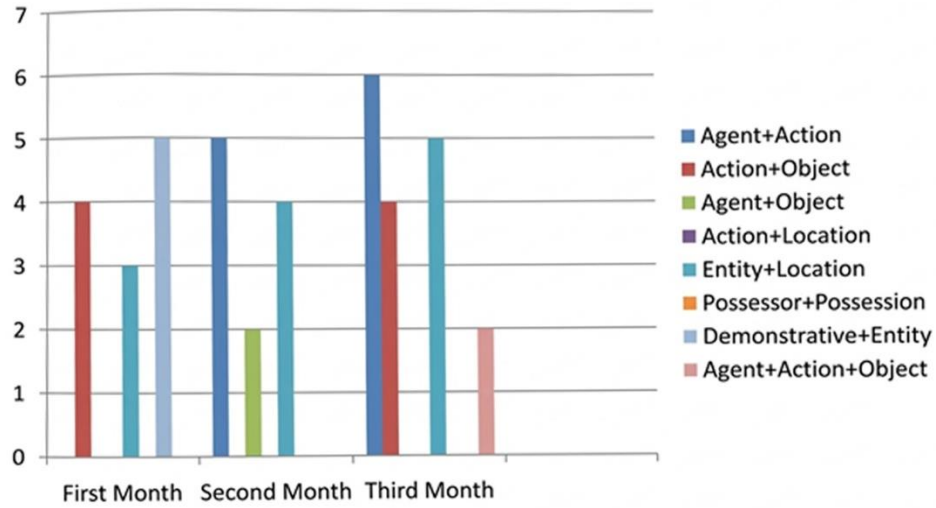
This figure shows the types of semantic relations at two-word utterances that Subject A utters in a three-month period. Children, when they first combine words, talk about objects: pointing them out, naming them, indicating their location, what they are like, who owns them, and who is doing things to them. They also talk about actions performed by people, and the objects and locations of these actions. Out of eight types of sentence structure, Agent + Action and Agent + Action object is more important because these relations can indicate the children's language development. According to the figure, in the third month, Subject A develops the use of two-word utterances particularly Action + Location. And also, he develops beyond two-word stage as Agent + Action + Object because his utterances become a little bit complex as he adds additional words in the third month. Figure (2) shows the comparative analysis of Subject A's MLU development over the three-month period.

Figure 2: MLU Development of Subject A



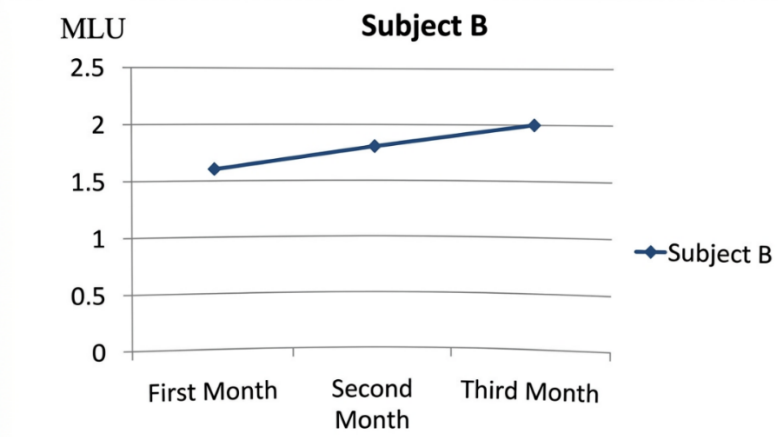
MLU Method can be used to measure the children's semantic development of language. According to Brown's five stages of language development, Subject A's MLUs are at the expected level by means of his age. Therefore, Figure (2) illustrates that Subject A starts its MLU from 1.5 in the first month. From this point onward, they grow steadily to just above 1.9 in the third month. Figure (3) shows Subject B's development in semantic relations in the three-month period. In this figure, a blue bar represents Agent Action, a red one represents Action + Object, a green one represents Agent-Object, a purple one represents Action + Location, a light blue one represents Entity + Location, an orange one represents possessor + possession, an indigo one represents Demonstrative + Entity and a pink one represents Agent + Action+ Object.

Figure 3: Language Development of Subject B



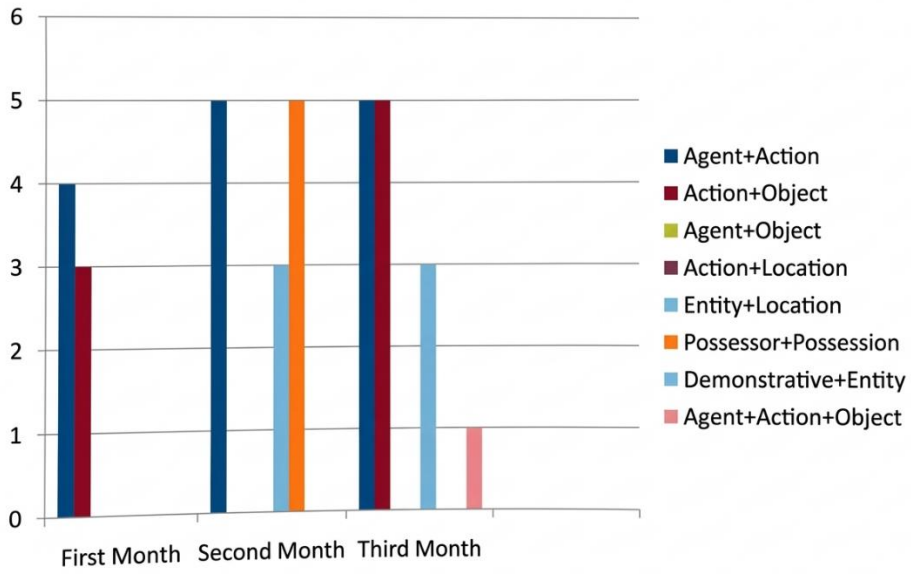
This figure shows the types of semantic relations at two-word utterances that the Subject Butters in the three-month period. Out of eight types of semantic relations, Agent+ Action and Agent+ Action + Objects are more important because these relations can indicate the children's language development. The children begin to combine two or more of the basic semantic relations as their utterances grow in complexity. Around 30 months of age. According to this figure, in the third month, Subject B develops the use of semantic relations particularly Entity + Location and Agent + Action + Object as her utterances become a little bit complex as she adds additional words in this month. Figure (4) shows the comparative analysis of Subject B's MLU development over the three-month period.

Figure 4: MLU Development of Subject B



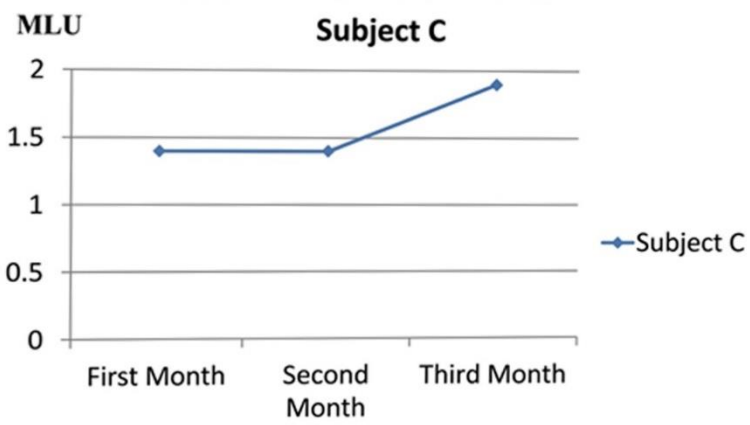
MLU method can be used to measure children's semantic development of a language. According to Brown's five stages of language development, Subject B's MLU are at the expected level by means of her age. Therefore, this figure illustrates that Subject B starts her MLU from 1.6 in the first month. From this point onward, it grows steadily to just above 2 in the third month. Figure (5) shows Subject C's semantic relations development in the three-month period. In this figure, a blue bar represents Agent Action, a red one represents Action + Object, a green one represents Agent + Object, a purple one represents Action + Location, a light blue one represents Entity + Location, an orange one represents possessor + possession, an indigo one represents Demonstrative + Entity and a pink one represents Agent + Action + Object.

Figure 5: Language Development of Subject C



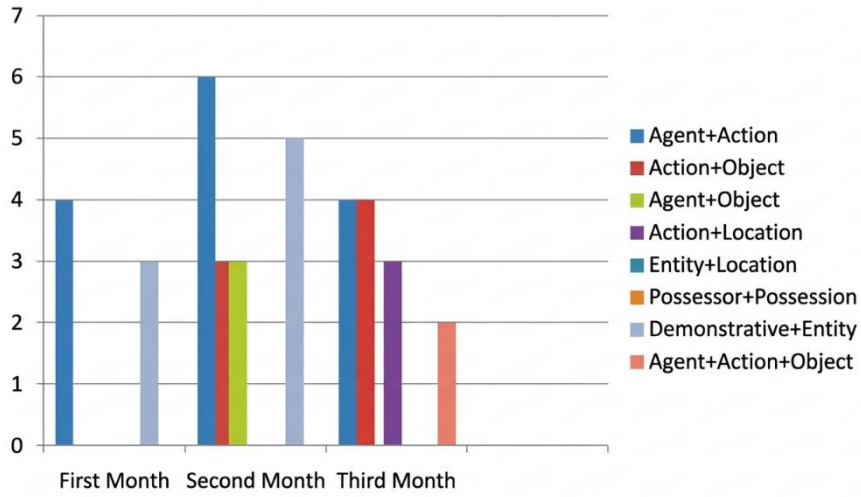
This figure shows the types of semantic relations at two words utterances that the Subject Cutters in a three-month period. Out of eight types of semantic relations, Agent + Action and Agent + Action + Object are more important because these relations can indicate the children's language development. The children begin to combine two or more basic semantic relations as their utterances grow in complexity around 30 months of age. According to this figure, in the third month, Subject C develops the use of semantic relations particulary Agent + Object and Agent + Action+Object as her utterances become a little bit complex as she adds additional words in the third month. Figure (6) shows the comparative analysis of Subject C's MLU deveopment over the three-month period.

Figure 6: MLU Development of Subject C



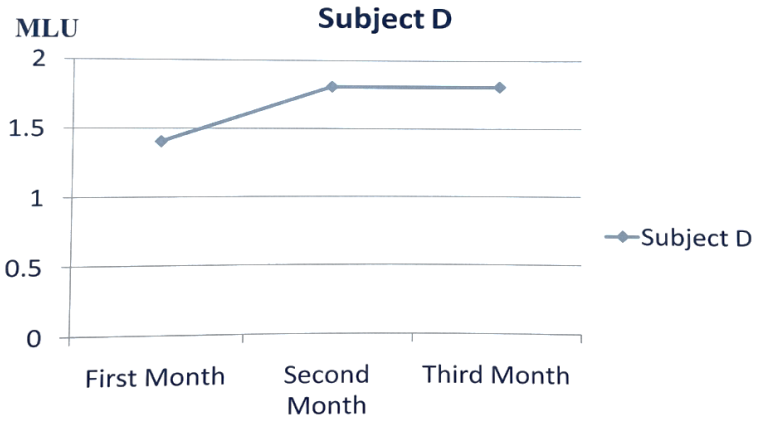
MLU method can be used to measure the children's semantic development of a language. According to Roger Brown's five stages of language development, Subject C's MLU are not at the expected level in the last month of this research. Therefore, this figure illustrates that Subject C starts her MLU from 1.4 in the first month. From this point onward, they grow steadily to just above 1.9 in the third month. 4.5.4 Subject D's Semantic Relations and MLU Development Figure (7) show the Subject D's semantic relations development in the three-month period. In this figure, a blue bar represents Agent + Action, a red one represents Action + Object, a green one represents AgentObject, a purple one represents Action + Location, a light blue one represents Entity + Location, an orange one represents possessor + possession, an indigo one represents Demonstrative+ Entity and a pink one represents Agent + Action + Object.

Figure 7: Language Development of Subject D



This figure shows the types of semantic relations at two words utterances that Subject D utters in the three-month period. Out of eight types of semantic relations, Agent+ Action and Agent +Action +Object are more important because these relations can indicate the children's language development. The children begin to combine two or more basic semantic relations as their utterances grow in complexity around 30 months of age. According to this figure, in the third month, Subject D develops the use of semantic relations particularly Action + Object, Action + Location and Agent + Action + Object as his utterances become more complex as he adds additional words in the third month. Figure (8) shows the comparative analysis of Subject D's MLU development over the three-month period.

Figure 8: MLU Development of Subject D

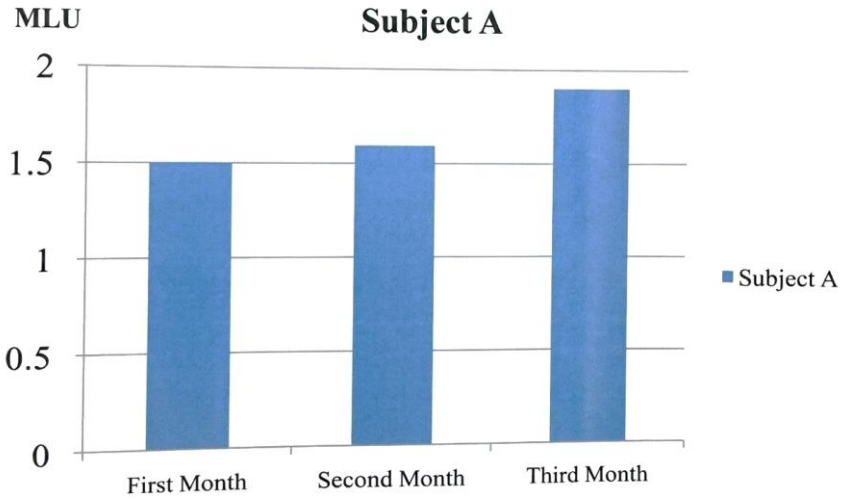


MLU method can be used to measure children's semantic development of a language. According to Brown's five stages of language development, Subject D's MLU are at the expected level. Therefore, this figure illustrates that Subject D starts its MLU from 1.4 in the first month. From this point onward, it grows steadily to just above 1.8 this month.

Findings and Discussion

The relationship between behavioral language inputs and subjects' language development is discussed first. The comparison between MLU development of four children in the three-month period is presented using figures and discussed based on the collected data. Once the research starts, Subject A is at the age of 25 months. He has a sibling. In other words, he has been exposed to behavioral language input from not only his mother but also his brother for about 25 months. In the three months of the research, Subject A's MLU development can be seen is the following figure.

Figure 9: Subject A's MLU Development



According to Figure (9), in the first month, Subject A's MLU is 1.5, which is at the expected level according to Brown's five stages of language development based on MLU. And he is a quiet child. Subject A is less likely to imitate all the utterances of his brother. However, in the third month, he increases the MLU rather than the previous two months.

Figure 10: Subject A's Language Development

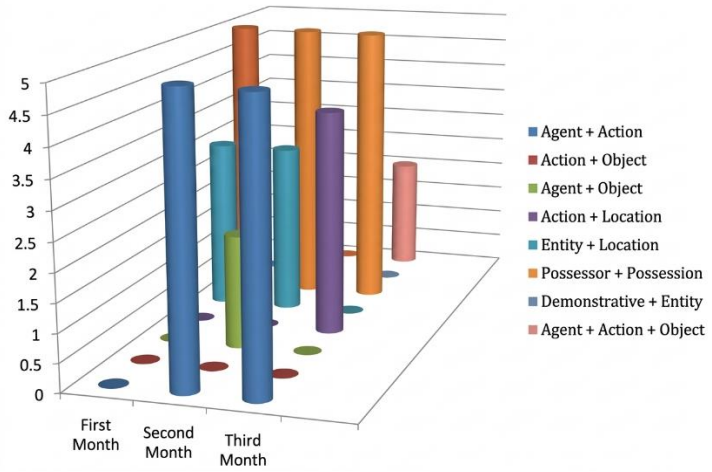
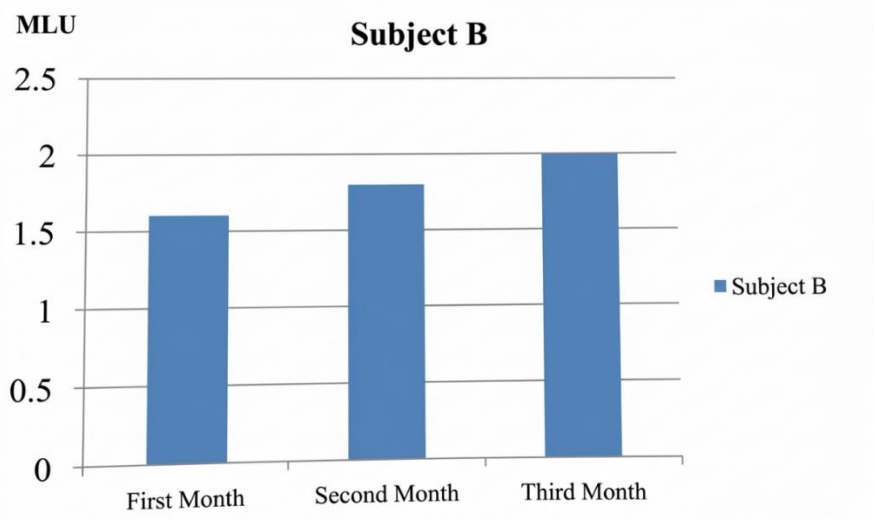


Figure (10) shows the frequency of the semantic relations at two-word stage that he utters in the three-month period. As shown is this figure, in the third month, he is able to produce more Agent + Action as 'မမမမ မက ာ်းမက ာ်း' because this relation plays an important part in the developmental process of children's language acquisition. And then, Subject A produces Action + Location as " ဟ ိုကျ ိုသ ာ်း:". Besides, Subject A can even produce Agent + Action + Object as " က ိုကျ ို မိုန မိုန ့် စ ာ်း့် ". Around 30 months, his utterances become more complex as he adds additional words.

Therefore, according to the data above, he receives linguistic input mostly from his environment especially from his mother and sibling. The child produces imitated utterances more in the presence of the older sibling as the older sibling is a little more proficient in communicating linguistically, the toddler language will improve due to a more complex and challenging language environment created by siblings. Once the research starts, Subject B is 25 months old. She has only one sibling and she has been exposed to behavioral language inputs not only from her mother but also from her brother almost all the time. Subject B's MLU development can be seen in the following figure.

Figure 11: Subject B's MLU Development



As shown in Figure 11, in the first month, her MLU is 1.6, which is at the expected level according to Brown's five stages of language development based on MLU. And she does not speak a lot. She uses to make egocentric speeches when she is alone. Subject B imitates some of the utterances of her brother. Most of her imitations are just the main words and she cannot imitate full utterances. However, in the third month, she increased the MLU rather than the previous two months.

Figure 12: Subject B's Language Development

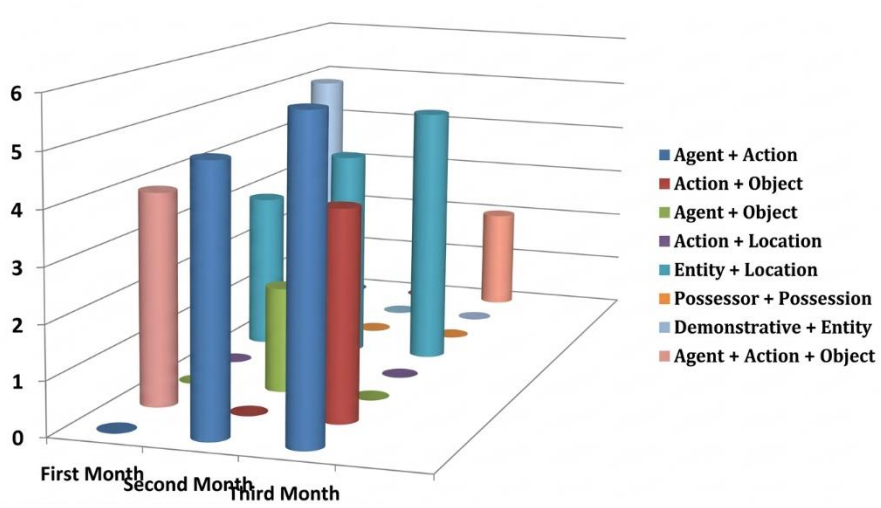
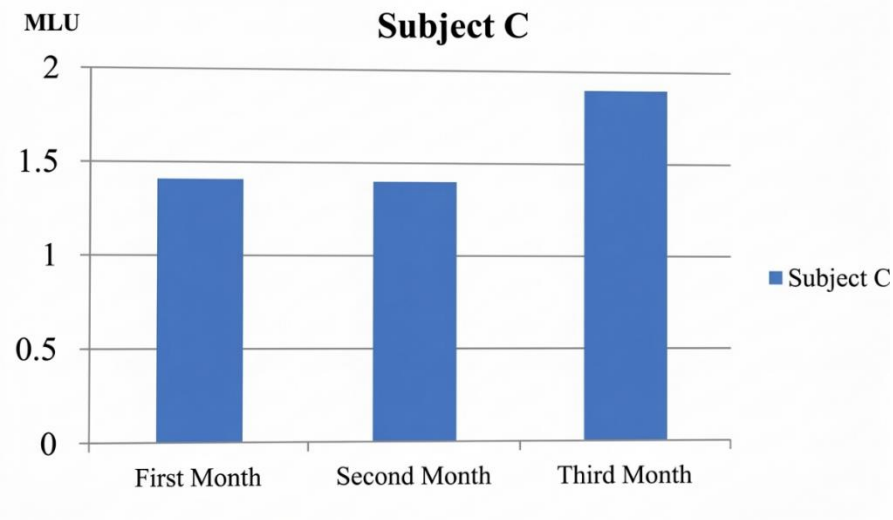


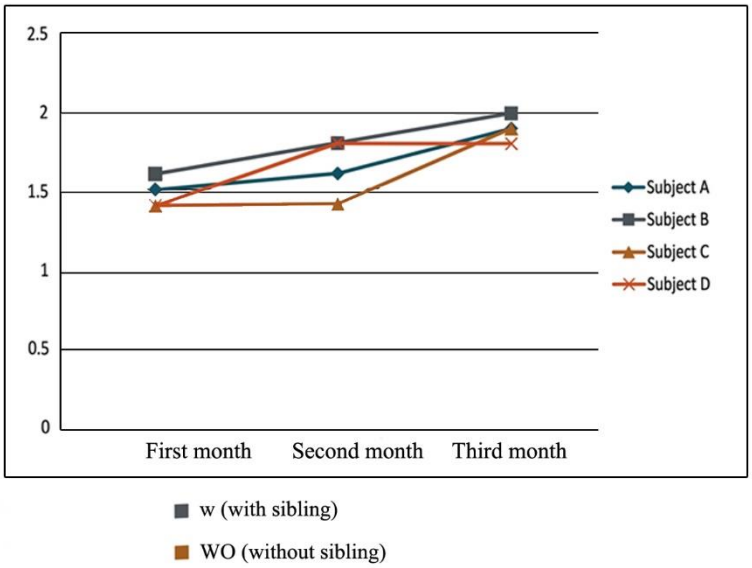
Figure (12) shows the frequency of semantic relations at two-word stage that she utters in the three-month period. As shown in this figure, in the third month, she is able to utter more Agent + Action as " မမမအေပ အေပ " and Entity + Location as " ဟ ိုးမ သစ ပင" than previous month. However, which Subject B attended to contact the utterance " မမမအေပ အေပ" was used in two different ways. The first could be glossed as "let her mother sleep", while the second could be glossed "tell her mother that she wants to sleep". Besides, Subject B can even produce Agent + Action + Object as " မမမရိ က က ိုးက ိုး " which is not found in previous two months. Therefore, according to the data above, she receives linguistic input mostly from her environment, especially from her mother and sibling. According to Waston's behaviorist theory (1924) children's environment and background are much more dominant than genetics in the determination of their behavior and children's environment is the main stimulus that establishes behavior. Once the research starts, Subject D is 26 months old and she has been exposed to behavioral language inputs from her mother. Unlike the other subjects, in this research, she has no sibling. She is the first child and the youngest in her family. Subject C's MLU development can be seen in the following figure.

Figure 13: The First Month



As figure 13, in the first month, her MLU is 1.4, which is not at the expected level according to Brown's five stages of language development based on MLU. She responds to the researcher very strangely. But when the researcher meets her two or three times, she becomes familiar with the researcher and speaks a lot. The following figure shows the comparison between MLU development of all children in the three-month period. Moreover, it also answers the research question of whether the presence of older siblings influence the young children's language development.

Figure 14: The Comparison between MLU Development of Four Children by Month



In figure (14), all subjects' MLU results are compared between subjects within siblings and subjects without siblings. To see whether the presence of siblings influence the development of language in children, all children are equally divided into two categories of 2 each. One category comprises of the children who have siblings at home (W) and another category comprises of the children who have no siblings at home (WO). Between the two categories, children who have no siblings can have a chance to imitate only their parents, especially mothers. According to the above figure, Subject A and Subject B are one category of children who have siblings. Their MLU result inclines at about 1.9 and 2 respectively in the last month, which is at the standard level. Another category, Subject C and Subject D are of children who have no siblings.

Their MLU result also inclines about 1.9 and1.8 respectively. However, by comparing these two categories, the one who has sibling scored better than those without sibling while one of the Subjects, Subject C who has no sibling is the same as Subject A who has a sibling. In fact, this may be because of gender differences in language learning. Researchers have long agreed girls have superior language abilities to boys (Burman, 2007). However, when researchers compare the same gender, two girls, Subject B (W) and Subject C (WO), Subject B (W) attained better in MLU development than Subject C (WO). As the younger children produce more imitated utterances include sounds and words in the presence of the older sibling. According to the MLU result, presence of older siblings influences the young children's language development.

Conclusion

Children start learning languages at a very tender stage immediately after birth. This is at times exhibited by crying when irritated. Language development involves multiple factors, both within the child's and the child's social environment to learn language. A child must attend the input in his or her environment in a sociolinguistic context to pair words with object events. There are three main sources for this involvement, mother, father and the siblings around. Parents have influence in language acquisition of young children. Young siblings (brother, sister, cousin play a very important role in language. And according to the detailed analysis of subjects' language sample provided in research methodology and findings, the result of a simple process of imitation, repetition and practice reinforcement.

In this study, the result of MLU data provides the subjects' semantic development of first language. Even though the paces of their language development are not the same, they all develop their first language in three months by means of behavioral language inputs given by mother and siblings at home. According to the collected MLU data, Subject A and Subject B are one category of the children who have siblings, Subject A's MLU grows steadily from 1.5 in the first month to 2 in the last month. Moreover, Subject C and Subject D are another category of children who have no siblings, Subject C's MLU results 1.4 in the first month and then her MLU inclines steadily to 1.9 in the final month. Next Subject D's MLU results 1.4 in the first month and his MILU rises

gradually to 1.8 in the last month. By seeing the MLU result, the significant is that there is gender differences in language learning.

Moreover, by comparing the same genders, two girls, subject B(W) and Subject C(WO), Subject B scored better in MLU development than Subject C. Likewise, by comparing the same gender, two boys, Subject A (W) and Subject D (WO), Subject A attained better in MLU development than Subject D. According to the result, presence of older sibling influences the young children's language development. Along with their MLU development and growing different words or usages, all the Subject B's MLU grows steadily from 1.6 in the first month to 2 in the last month. Subjects' use of semantic relations at two-word stages develops through Agent+ Action, Action + Object because these are the common relations found in most children between the ages of about 20-30 months. In accord with the collected data mentioned in Research Methodology section and Findings and Discussion section, all the subjects in this study use these two semantic relations in the final month more than in the previous month. There are two main language acquisition theories and each of their perspective contributes to getting a full picture of the process of a child's first language development. Since the acquisition of language is home based, children and parents and other siblings should find time for each other all the time.

However, there are still some limitations. Firstly, this study can point out the development of children's first language only in three months. The longer they are given time to parties, the more characteristics of language development can also be found out. Secondly, learning environment should be used with relevant materials like pictures for them. Thirdly, children should have more facilities to learn a language both at home and at school. According to the parents or siblings in this research, the development of the child's speech might be different. Among four children, the development of mother tongue is not the same. If his/her mother or siblings cannot guide them to learn a language well, a child may appear to be a little slower than others during her developing stages. He/she may lose confidence in a certain situation. On the other hand, it is noted that if parents and siblings take care of the child very well, the child will learn a language very fast. To sum up, this study is carried out with only four children. This research on toddler's language development at two-word stage is specifically done. For further studies of this research, toddler's multi-word stage can be studied more.

Ethics approval

The study was conducted in compliance with the Declaration of Helsinki.

Competing interests

All the authors declare that there are no conflicts of interest.

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Underlying data

Derived data supporting the findings of this study are available from the corresponding author on request.

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