The Effect of Multiple Sequential Activities Stimulation Techniques to Early Childhood Language Acquisition During Social Restriction of COVID-19 Policy in Indonesia

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ABSTRACT

Early childhood is a crucial period to acquire language. The role of mothers in providing stimulus to children in language acquisition is very important. This study aims to describe how the effect of multiple sequential activities stimulation techniques given by a mother to her 21 months old child on language acquisition during social restriction policy caused by the Covid-19 pandemic. Stimulus is given to a child by using The Multiple Sequential Activities Stimulation Techniques. Subjects and objects in this study are sounds, word forms, and sentences of 20 months old child, who initially is only able to pronounce a few vowels and consonants. The case study method is used in this research. The data were collected using participatory observation methods. Then, the data were analyzed using the grammatical match method. The results showed that the stimulation of techniques provided by the mother, who has an optimal contribution to the language development of early childhood. The stimulation techniques given by the mother showed that a child can pronounce all vowels clearly and only a few consonants that cannot be pronounced (f, g, k, r, q, z, v). Morphologically, a child can pronounce nouns, verbs, adjectives, and numerals. Syntactically, a child can pronounce telegraphic sentences.

Keywords: language acquisition, social restriction policy, stimulation, the roles of mothers

Introduction

The development of psycholinguistic studies related to children's language acquisition is indeed an interesting topic to be studied. In psycholinguistics, the view of behaviorism emphasizes that the process of acquiring language (first) is determined by the stimulus presented in the environment. The easier and more often a child sees and hears speech sounds from other people, the faster child will save these references in his memory (Steinberg et al., 2001). This argument makes it clear that one of the determining factors of children acquiring language is the input stimulus from the environment.

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Hörman (Hörman, 1979) emphasized that there is a response stimulus between children and their environment in obtaining language. The stimulus and responses are mentally processed through language acquisition tools in the brain. The environmental stimulus can be in the form of a family environment, geographical environment, and socio-economic environment. Stimulus factors from the family, especially the children's parents also affect language acquisition.

Since the COVID-19 pandemic in Indonesia, the DKI Jakarta government has issued a large-scale social restriction policy through Governor Regulation Number 33 of 2020 (Peraturan Gubernur Daerah Khusus Ibukota Jakarta, 2020). This policy strictly limits community activities outside, so the result is children cannot play freely outside. On the other hand, experts stated that stimulus is one of the determining factors for children to acquire language. From the aspect of environmental stimulus, the COVID-19 pandemic has an impact on limiting children’s language acquisition from the environment.

Researchers observe the importance of parental involvement during social restriction in stimulating children's language acquisition. The period of social restriction is the right time for parents to save their children at home. During social restrictions, parents can play and study together effectively. It is the right time for parents to provide various stimuli for children's growth and development, including the acquisition and development of children's language.

Parents can carry out various activities as the trigger to stimulate children's language acquisition. The results of Bennet's (Bennett et al, 2002) study showed that parents who regularly read books to young children have a significant effect on improving children's language mastery. The study concluded that children whose mothers often explain the terms around them can understand other people more quickly (Zufferey, 2010).

Another form of stimulus that can improve children's language acquisition is storytelling. Knauer (Knauer, 2020) conducted a study on the impact of parents telling stories on the language acquisition of two years old. She showed that parents, who tell storybooks to their children have an impact on increasing their vocabulary. Speaker (Speaker, 2004) stated that storytelling can improve early childhood skills in terms of acquisition of vocabulary, acquisition of grammar, the average length of speech, and sentence formation. Furthermore, the results of the storytelling stimulus, early childhood can form sentence formations such as interrogative sentences, negations, and complex sentences. Music and singing with children are also stimulus activities that parents can do. Vidal (Vidal, 2020) examined the impact of music experimentally on 44 children aged 3-4 years in Portugal. The result of this study indicated that music training in children can improve early childhood language skills, especially in the field of language sounds (phonology).

Playing with children is also a part of the parental stimulus to accelerate language acquisition. Playing can improve children's language development because playing is the basis for language acquisition in every child (Lindfors, 2008; O'Grady, 2005). Playing is described as a way for children to show themselves. Through play, children benefit from social and cognitive interactions that improve their language acquisition (Oates and Grayson, 2004; Menn, 2017). This is also confirmed by research from Toub (Toub et al, 2018). Toub (Toub et al, 2018) researched the role of playing and it can develop vocabulary in early childhood with low-income parents. He conducted two studies at once, both were conducted by reading books to children. The first study is reading books, then children are directed to play freely and play guided by toys related to stories in the book, free play. The second lesson is done by reading a book then inviting us to play with guidance and review it with picture cards. Both studies showed the increasing vocabulary during games. These results indicate the benefits of playing supported by adults, the development of early childhood according to age.

The vocabulary development of early childhood enters a critical period at the age of 2-3 years. At that age, children are in the fastest period as the fastest period of increasing vocabulary (Jalongo, 2007). In that period, the brain is in a very sensitive condition to accept and process language input so that children's natural...
ability to language will be obtained very well. By around 2 years of age, children can master 50-200 words and sentences telegraphically with two or three words. By the age of 3 years, children have mastered 200-300 words and show expressions of frustration if the communication is not implemented by adults. This is in line, research which stated that at the age of 1.6 years to 1.8 years children can master about 50 words. As for Dardjowidjojo, who has researched his grandson Echa, the number and types of words that Echa mastered were sent to the input he received, Echa, who was 2.6 years old, received 500 words (Dardjowidjojo, 2014). Furthermore, he found that Echa’s grandson’s language mastery was 328 nouns, 215 verbs, 106 adjectives, and 85 function words. The quality of children’s language acquisition is also measured by three factors, namely: (1) individual maturity, (2) experiences or individual interactions of children as learners (Musfiroh, 2017). In line with individual maturity, young children begin to string words together into multi-word utterances starting about age 2 (Traxler, 2012).

This study focuses on Hanan, a 21 months old child. Researchers focused on the form of stimulus to children and the number of sounds, vocabulary, and sentences obtained. Children approaching 2 years enter the “golden age”, this period is believed as the golden age of children to learn various things. Furthermore, the researchers use sequential multiple activity stimulation techniques. It is a combination of one activity with another. The activities in this technique are 1) telling stories with picture books, 2) playing guessing pictures with flashcards, 3) reading stories, 4) playing hide and seek, 5) playing train stacking, 6) telling stories with the character of dolls, 7) singing, and (8) dancing. Activity (1) can be combined with activity (5) at one time.

Previous research only provided two forms of stimulus to children and saw their impact on only one aspect of language, this can be seen in the research of Vidal (Vidal et al., 2020) which observed the impact of music and singing on phonological acquisition. The research of Toub (Toub et al., 2018) also recently examined the stimulus to play with instructions according to the storybook and its impact on children’s vocabulary acquisition (morphological aspects). Speaker’s research (Speaker et al., 2004) was more comprehensive because it examined the impact of a storytelling stimulus not only on vocabulary but also extends to the sentence level (syntactic aspect). This study has advantages over previous studies in terms of the amount of stimulus and the extent of its impact on children’s language acquisition. This research is more comprehensive because it combines several forms of stimulus given by the mother and examines the impact on the children’s language acquisition from the vowels and consonants produced (phonological aspects), word acquisition according to the type of category (morphological aspects), as well as sentence pronouncing to the structure of sentence composing spoken by children (syntactic aspect).

**Material and Methods**

This research uses a naturalistic approach. It examines children’s language as naturally as possible (Lust, 2006). To deepen this research, a case study method is used. Yin (Yin, 2018) stated that the case study method is very appropriate for studying phenomena deeply and naturally. The subject in this research is Hanan, a 21 months old. The objects in this research are sounds, word forms, and sentences uttered by the research subject. Before doing the multiple sequential activities stimulation techniques, the research subject only pronounces a few vowels and consonants. The research period is carried out for five months, from April to August 2020 during the social restriction of the Covid-19 pandemic. The multiple sequential activities stimulation techniques are used as a stimulus to a child. The activities in this technique are 1) telling stories with picture books, 2) playing guessing pictures with flashcards, 3) reading stories, 4) playing hide and seek, 5) playing train stacking, 6) telling stories with the character of dolls, 7) singing, and (8) dancing. Activity (1) can be combined with activities (5) and (8) at one time. The data collection uses the participatory observation method when a child is stimulated using this technique. During this observation, data is recorded using an audio-visual recorder. The data records are then transcribed into tabulated data.
Furthermore, the data are analyzed using the grammatical match method and presented descriptively.

**Results and Discussion**

Hanan, a 21 months old child, after being stimulated using multiple sequential activities stimulation techniques for five months during the social restriction period increased a language acquisition and was able to show intended references to the language spoken. The rapid increase in children's language mastery can be seen from the increase in aspects of vowels and consonants mastery (phonology), the addition of word mastery (morphology), and the progress of the ability to pronounce sentences (syntax).

From a phonological aspect, Hanan has been able to pronounce all vowels [a], [i], [u], [e], [o]. This can be seen from the words spoken by Hanan such as [meja] pronounced [meja] means table, [ular] pronounced [ula] which means "snake", [mobil] is pronounced [mobi] means "car". For consonant sounds, Hanan still has difficulty to pronounce consonants of [f], [g], [k], [r], [q], [z], [v]. This can be seen in the mention of consonants in words. The consonant [f] in [fajar] 'dawn' is called [aja]. The consonant [g] in [gajah] 'elephant' is called [ajah]. The consonant [k] in [kuda] 'horse' is called [uda]. The consonant [r] in [roti] 'bread' is called [oti]. The consonant [q] in [Quran] 'quran book' is called [uwan]. The consonant [z] in [kaka] Zafran 'brother Zafran' is called [tata] Aswan]. The consonant [v] in [vas] 'vase' is called [pas].

In terms of morphology, Hanan increased significantly in word mastery. Hanan, who previously only mastered no more than 15 words, added 215 words in five months since the stimulus given (Figure 1).

*Figure 1. Types of words acquisition*

Figure 1 above shows the new words he has acquired. The child can pronounce words classified as types of nouns, verbs, adjectives, numbers, and adverbs. Adverbs can be mastered, there are 5 words. In the numerals words, a child can pronounce numbers from 1 to 10. In the type of adjective, a child has increased by 21 words including mentioning top-down position, pain, and the taste of food. For this type of verb, a child's mastery is increased by 41 words which are related to the activities that a child does himself. In the type of noun, a child's mastery increased by 138 new words. The number of noun mastery addition was the highest. The various types of nouns that have been pronounced by a child are shown in the following figure.
Figure 2 of the graph above illustrated the addition of a child’s noun mastery of very varied types. Variations of nouns consist of the type of body part, the name of the object, color, greeting words, types of vegetables, types of animals, names of fruits and plants. The child is able to show and name body parts such as eyes, head, [ambut] for [rambut] "hair", [tewinga] for [telinga] "ears", [peyut] for [perut] "stomach", and [tati] for [kaki] "legs". The child is also able to show and name objects around him such as [mobil] for 'car', [woneka] for [boneka] 'doll', [eta] for [kereta] "train", and [bowa] for [bola] 'ball'. Regarding noun names, this variant dominates the number of nouns controlled by a child. Next, a child is also able to name the color of the object but its nature is limited to the main colors, such as [mewah] for [merah] 'red', [nung] for [kuning] 'yellow', [jiu] for [hijau] 'green', [biyu] for [biru] 'blue'.

The mention of types of nouns appears in the mention of vegetables that are eaten daily by a child, such as [tomat] 'tomatoes', [wote] for [wortel] 'carrots', [botoli] for [brokoli] 'broccoli'. The child is also able to greet other people according to their form of greetings, such as the [tata] for [kaka] 'brother', [nin] for [nenek] 'grandmother', [ayah] 'father', and [ibu] 'mother'. The child is also able to show and introduce the names of these animals such as [ajah] for [gajah] 'elephants', [jeyapah] for [je-rapah] 'giraffes', [bewuang] for [beruang] 'bears'. Finally, a child can show the type of fruits and plants, such as [pisang] 'bananas', [jeyu] for [jeruk] 'oranges', [daun] for [daun] 'leaves', and [bunga] 'flowers'.

Syntactically, a child is also able to pronounce telegraphic sentences. The child has been able to combine two words referring to the sentences he conveys to others. Telegraphic sentence structure consists of noun + verb, noun + adjective, noun + adverb. The sentence structure of the noun + verb appears in the [ayah puwang] for 'the father' (noun) 'going home' (verb). The sentence structure of noun + adjective appears in [peyut Hanan atit] for 'stomach' (noun) 'pain' (adjective). The noun + adverb structure sentence appears in which [eta mana] for 'where is the train'; [bewuang sana] for 'bear' (noun) 'there' (adverb). Overall, the telegraphic sentences that were spoken were 21 sentences with 3 variants of a combination of two types of words.

**Conclusion and Recommendation**

The results show that the mother’s stimulus using multiple sequential activities stimulus technique to Hanan, 21 months old, was a significant effect on the children’s language mastery. From the phonological aspect, a child is only able to pronounce a few consonant sounds and is not yet able to pronounce the vowel sound [e]. After the stimulus is given by the mother, the child is able to pronounce all vowels [a], [i], [u], [e], [o]. For consonant sounds, Hanan still has difficulty to pronounce...
consonants [f], [g], [k], [r], [q], [z], [v]. In terms of morphology, Hanan increased significantly in word mastery. Hanan, who previously only mastered no more than 15 words, added 215 words in the five months since the stimulus was given. The child can pronounce words classified as types of nouns, verbs, adjectives, numbers, and adverbs. Also, syntactically, a child can pronounce telegraphic sentences. The child can combine two words that refer to the words he conveyed to others. Telegraphic sentence structure consists of noun + verb; noun + adjective; and the noun + adverb. Overall, the telegraphic sentences that can be pronounced are 31 sentences with 3 variants of the combination of two types of words. Previously, a child was only able to pronounce holophrastic sentences.

These results indicate the advantage of this study compared to previous studies which only provide one to two forms of stimulus to children and observe the effect of only one aspect of language. This can be seen in the research of Vidal (2018) which observed the influence of music and singing on phonological acquisition, Toub (2018) observed the impact of stimulus in playing with instructions according to story-books and its effect on the morphological aspects of children’s language, Speaker (2004) only examined the impact of storytelling stimulus on morphological and syntactic aspects. Regarding the multiple stimuli at a time and their impact on children’s language acquisition, further researchers can review the aspects of semantic acquisition and sentence intent that are not yet explored in this study due to time constraints.

References