Factors Affecting Children’s Language Development

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Abstract: This article aims to review research journals about the factors that influence children's language development. This review was carried out on 30 international journals published between 2000-2018. The results of the review indicate that there are several external and internal factors that influence the development of children's language. The external factors include the environment, stimulation from family, and customs or habits, while the internal factors are maternal health during pregnancy and parental genes.

Keywords: review, children's language development

Introduction

Language is a means to express and receive information in specific ways (Hartanto et al., 2016). According to Mackey (1986), language is a form and not a condition, or an arbitrary sound-symbol system, a system of many systems, a system of an order, or an order in systems. Language development is one indicator of the overall development of children's cognitive abilities related to success in school (Nelson et al., 2006). In the beginning, children's language was egocentric, that is, a form of language that emphasizes itself more. Then it continues to gradually develop into a social language, which is used to relate or exchange ideas and influence others. In this case, the form of language used is often in the form of complaints, bad comments, criticisms, and questions. When a child's language changes from egocentric to social language, the union between language and thought is essential for the formation of the child's mental or cognitive structure.

Language is a means of communication by symbolizing thoughts and feelings to convey meaning to others (Hurlock, 2000). The process of speaking involves two stages of mental activity that forms the mind, including choosing the words to be used and then regulating the motor vocalization and the actual work of the vocalization itself. The coordination system of the body and language control are located in the area of the Broca and motor cortex in the anterior, and Wernicke area in the posterior in the left hemisphere of the brain.

Information from the primary and secondary auditory cortex is passed on to the posterior temporary parietal cortex (Wernicke area), which is compared to stored memories. Then the answers are formulated and channeled by the arcuate fasciculus to the anterior part of the brain where motor responses are coordinated. If there is an abnormality in one of these impulses, there will be speech abnormalities. Damage to the posterior portion will result in receptive speech disorders, whereas damage to the anterior section will cause expressive language disorders.

The function of language is the most complicated process among all phases of development. The language function, together with the development function of Visio-motor problem solving, is the best indicator of the presence or absence of intellectual development disorders. The combination of these two functions of development will be a function of social development. Language development requires receptive and expressive functions. The receptive function is the ability of children to recognize and react to someone or to the events in the surrounding environment, to understand the meaning of mimic and tone of voice, and finally to understand words. The expressive function is the ability of children to express their thoughts, starting from preverbal communication (before the child can speak), communication with facial expressions, body movements, and finally, by using words or verbal communication (Soetjiningsih, 2002).

In addition to the factors above, there are several other factors that influence children's language development. For years, many several studies on the development of children's language were conducted. The author feels the need to explore and understand other factors that have been studied by previous researchers in several countries. The purpose of conducting this review is to find out some factors influencing children's language development. This review used 20 journals published from 2000 to 2018. The keyword used in searching the journal literature is children's language development. With these keywords, several journal articles were obtained. Using the inclusion criteria, 30 journals were selected.

Discussion

Children’s Risk Factors

The research subjects of these 30 journals were all children aged up to eight years. There were several groups of children involved, including those who have physical or mental disabilities. Among this group were children with hearing impairment. Children with hearing
impairment were examined using assistive devices or cochlea. The relationship between maternal contributions (e.g., involvement, efficacy, linguistic input), receptive, and expressive (oral and sign) language skills in children with cochlear implants were investigated. Some of the participants were born prematurely. The language development of very low birth weight (VLBW) preterm children must be measured and monitored from the age of toddlers and beyond. Special attention must also be paid to the measurement of their hearing processing.

Besides children with special needs, there were also groups of children with dyslexia or impairments in their development of literacy. Autistic children were also involved to see their development if the language is stimulated by gestures.

However, these journals not only investigated children with special needs but also children who are physically and psychologically healthy. Among those children were pre-school children, ranging from 0-month babies to 24 months of age and school children not older than eight years old. Some of the studies looked at the children’s language development since they were infants, and some others included the environment where the children live.

Factors of Children’s Language Development

There are some internal factors that affect children's language development. First, the history of childbirth, which influences children's language development at the age of 2 years. VLBW preterm children achieved a much lower score on the language test. Also, they were found to use shorter and less mature sentences (Jansson-Verkasalo et al., 2004). The second internal factor is nutritional intake. Indeed, there is a relationship between language development and nutritional status (Nurwijayanti, 2016; Nurwijayanti, 2016b).

In addition to internal factors, there are several external factors that affect children's language development. The first factor is stories, which influence the length of the child’s sentence formation (how many words he uses to tell stories). The amount of information received and thought by children influences the longest utterance taken as an index of children's expressive language abilities. Phonological working memory skills are indexed by memory ranges and the ability to repeat words, and the ability to repeat words makes a significant contribution to variations in children's speech (Anne-Marie Adams, 1996).

The second external factor is the treatment for children who are hearing impaired. After cochlear implantation and language training, it showed that there was a significant increase in the mastery of children's spoken language (Niparko et al., 2010). The third is the school environment. It includes 1. School institutions that meet nine educational standards, 2. The quality of the overall classroom environment, 3. Interactions and emotions between children and teachers in the classroom (Mashburn et al., 2008).

The fourth external factor is the level of parental knowledge about verbal stimulation with the language development of preschool (Handayani et al., 2013). Besides, the home environment influences children's language development. The measurement used the "Emotional and Verbal Responsivity of Mother" subscale and "Provision of the Right Play Material," which includes crucial aspects for the language growth during the first two years of life. The environmental factors vary in their level of relationship with language development (Elardo et al., 1977).

The next external factor influencing children's language development is the pattern of parenting. There is a relationship between parenting parents and children's language development (Joni, 2015). The last external factor is the type of traditional game, which has a role in developing aspects of children's primary development, especially the development of children's language (Khasanah et al., 2011).

Conclusion

Children's language development is very complex and influenced by several factors. The internal factors include stories (genetics) and nutritional intake from prenatal to birth. Whereas, the external factors include stimulation in the form of stories, hearing loss, school environment, level of parental knowledge, family environment, parenting patterns, and traditional game.

References

Anne-Marie Adams, Su. E. G. (1996). Phonological working memory and spoken language development in young children. Test, (1), 216–233.

Azizah, N. (2013). Tingkat ketertampilan berbicara ditinjau dari metode bermain peran pada anak usia 5-6 tahun. Universitas Negeri Semarang.

Desjardin, J. L., & Eisenberg, L. S. (2007). Maternal contributions: Supporting language development in young children with cochlear implants. Ear and Hearing, 8(4), 456–469.

Elardo, R., Bradley, R. H., & Caldwell, B. M. (1977). A longitudinal study of the relation of the infant's home environments to language development at age three. Child Development, 595–603.

Gunawan, G., R, D., & Rusmil, K. (2011). Gambaran perkembangan bicara dan bahasa anak usia 0-3 tahun. Sari Pediatri, 13(1), 21–25.

Handayani, A., Samiasih, A., & Mariyam. (2013). Hubungan tingkat pengetahuan orang tua tentang stimulasi verbal dengan perkembangan bahasa pada anak prasekolah di TK PGRI 116 Bangetyu Wetan. Jurnal Keperawatan, 6(2), 76–83.

Hartanto, F., Selina, H., H, Z., & Fitra, S. (2016).
Pengaruh perkembangan bahasa terhadap perkembangan kognitif anak usia 1-3 tahun. Sari Pediatri, 12(6), 386. https://doi.org/10.14238/sp12.6.2011.386-90

Hurlock, E. B. (2000). Psikologi Perkembangan: Suatu Pendekatan Sepanjang Rentang Kehidupan (Terjemahan). Jakarta: Erlangga.

Jansson, E., Valkama, M., Vainionpää, L., Piäkkö, E., Ilkko, E., & Lehtihalme, M. (2004). Language development in very low birth weight preterm children: A follow-up study. Folia Phoniatrica et Logopaedica, 56(2), 108–119. https://doi.org/10.1159/000076062

Joni. (2015). Hubungan pola asuh orang tua terhadap perkembangan bahasa anak prasekolah (3-5 tahun) di PAUD Al-Hasanah Tahun 2014. Jurnal PAUD Tambusai 1(6), 42–48.

Khazanah, I., Prasetyo, A., & Rakhmawati, E. (2011). Permainan tradisional sebagai media stimulasi aspek perkembangan anak usia dini. Jurnal Penelitian PAUDIA, 1(1), 91–105.

Mackey, W. F. (1986). Analisis Bahasa. Surabaya: Usaha Nasional.

Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., … Howes, C. (2008). Measures of classroom quality in kindergarten and children’s development of academic, language, and social skills. Child Development, 79(3), 732–749. https://doi.org/10.1111/j.1467-8624.2008.01154.x

Mundy, P., & Kasari, C. (1990). A longitudinal study of joint attention and language development in autistic children. Journal of Autism and Developmental Disorders, 20(1), 115–128. https://doi.org/0162-3257/90/0300-0115506.00/0 9

Muryanti & Tirtawati, W. D. P. D. (2013). Peran pola asuh orang tua dalam kemampuan bahasa anak usia 4 – 5 tahun. Jurnal Terpadu Ilmu Kesehatan, 3, 172–174.

Nelson, H. D., Nygren, P., Walker, M., & Panoscha, R. (2006). Screening for speech and language delay in preschool children: systematic evidence review for the US Preventive Services Task Force. Pediatrics, 117(2).

Newman, R., Ratner, N. B., Jusczyk, A. M., & Jusczyk, P. W. (2006). Infant’s early ability to segment the conversational speech signal predicts later language development: A retrospective analysis.

Developmental Psychology, 42(4), 643–655. https://doi.org/10.1037/0012-1649.42.4.643

Niparko, J. K., Tobey, E. A., Thal, D. J., Eisenberg, L. S., Wang, N. Y., Quittner, A. L., & Fink, N. E. (2010). Spoken language development in children following cochlear implantation. JAMA - Journal of the American Medical Association, 303(15), 1498–1506. https://doi.org/10.1001/jama.2010.451

Nurwijayanti. (2016a). Hubungan perkembangan bahasa dan status gizi anak di wilayah kerja PUSKESMAS wilayah selatan kota Kediri. Jurnal Care, 4(2), 11–21.

Nurwijayanti. (2016b). Jurnal Care Vol. 4, No.3, Tahun 2016. Jurnal Care Vol. 4, No.3, Tahun 2016, 3(4), 38–49.

Payne, A. C., Whitehurst, G., & Angel, A. L. (2000). The role of home literacy environment in the development of language ability in preschool children from low-income families. Early Childhood Research Quarterly, 9, 427–440.

Russell, M., Brown, C., Skilling, A., Series, R., Wallace, J., Bonham, B., … Sn, W. (1996). Applications Of automatic speech recognition to speech and language development in young children. In Proceeding of Fourth International Conference on Spoken Language Processing. ICSLP'96 1 (pp. 176–179).

Soetjiningsih. (2002). Tumbuh Kembang Anak. Jakarta: EGC.

Stelmachowicz, P. G., Pittman, A. L., Hoover, B. M., Lewis, D. E., & Moeller, M. P. (2004). The importance of high-frequency audibility in the speech and language development of children with hearing loss. Archives of Otolaryngology-Head & Neck Surgery, 130(5), 556–562.

Torppa, M., Lytyninen, P., Erskine, J., Eklund, K., & Lytyninen, H. (2010). Language development, literacy skills, and predictive connections to reading in Finnish children with and without familial risk for dyslexia. Journal of Learning Disabilities, 43(4), 308–321. https://doi.org/http://dx.doi.org/10.1177/0022219410369096

Tsao, F., Liu, H., & Kuhl, P. K. (2004). Speech perception in infancy predicts language development in the second year of life: A longitudinal study. Child Development, 75(4), 1067–1084.