



SUKMA: JURNAL PENDIDIKAN

ISSN: 2548-5105 (p), 2597-9590 (e)

Volume 3 Issue 2, Jul-Dec 2019, pp. 169-185

<https://doi.org/10.32533/03202.2019>

www.jurnalsukma.org

THE RELATION OF CARE-GIVER LANGUAGE AND CHILDREN'S KNOWLEDGE CONSTRUCTION It's Impact on Literacy Achievement

Evy I. Siregar

University of Indonesia, Jakarta, Indonesia

email: evy.siregar@gmail.com

Abstract

Literacy is a skill that develops along with the nurtured development of a person. For most school children in Indonesia this is a skill that is rarely encouraged, and yet this is the basic skill, the based foundation for academic growth. This paper looks at literacy development through child language development, its interaction with the carers and his/her environment. This is an attempt to look at the problem of the lack of literacy skills faced by Indonesians children and try to argue its stunted development through child language development, linked to their language development.

Subsequently, it also attempt to place this issue through an argument that link this early development with the schooling process at the primary level, and how it might impact children's literacy development.

Keywords: child development, literacy, language development, interaction and schooling

A. Introduction

For the last fifteen years the PIRLS', PISA's and TIMM's score for Indonesian teen agers have not changed significantly. The low scores have been denied, apologised for, explained, worked on with special effort and yet, the scores remain low. And the 2018 PISA score still showed the same position for Indonesian children. It leaves us the question of what the matter is with the low achievement, especially in literacy. Are Indonesians really that incapable of comprehending textual piece? Researches and articles have been published to explain these phenomena. The following article is yet another attempt to look into these phenomena and find a way to attempt to raise the standard of literacy through a theoretical perspective based on linguistic and language competence. But this time, with an attempt to look back further to childhood times, during the time of language growth and development, and try to find the connection to further knowledge construction, especially in literacy achievement.

Before going any further, this paper will involve arguments on language growth and linguistic abilities in growing children as the basic construction for further argument. Understanding about language growth and child development are necessary to understand the development of their cognitive abilities. These points have not been touched in any article discussing the scores of those international standardised tests. And yet, it is a crucial point to be explored as children need to have these basic skills before they can attain any literacy capability; as literacy skills are deemed important for academic achievement. Afterwards,

the discussion is followed by a look into the early primary education in Indonesia in general, as well as the language education and language of delivery in school. The above points are the important factors contributing to developing literacy skills. And finally, the paper will be completed with a recommendation to be considered to be taken into account in primary years as a way of raising literacy ability in young children.

B. Language Development and the Role of Care Givers

Child development including their language development is influenced by care giver. As babies are born, they start to develop their faculties. They interact with their parents and other adults caring for them, vocalizing their needs and intention. Generally, as quoted by Rahimpour (2004), there are traditional stages following periods of language development in children. The pre-linguistic development starts from birth to the end of the first year, and some researcher even claims that it starts in the womb, listening to the mother's voice (Dardjowidjojo 2010).

At the age of around two months, babies begin to make a firmer form to communicate their needs and the adult around them usually respond appropriately. The 'cooing sounds' take various unidentifiable forms (Dardjowidjojo 2010; Sprenger 2013) yet they are responded to accordingly. These cooing sounds shape and develop into forms of communication. This is the first step of developing meaningful interaction between babies and their environment. These developments are nearly the same for most children.

Between the age of one and two years most toddlers begin to speak in a one-to-two-word sentences. They begin to show the connection of sound and meaning and have the ability to express them. They can point to their fathers and name them, as well as reflecting request in this one-word sentence. If they are hungry they could point to their milk bottle and said 'milk' or 'drink' accordingly. These one-word sentences may express different semantic functions (Rahimpour 2004). The one-word sentence

of 'mama' may express 'I want Mama', when the child cannot see his/her mama, or 'That blouse belongs to Mama' when accompanied by pointing to the blouse, or a request of 'Can I please have that drink, Mama?' while pointing to a glass on the table.

Then it is followed by the first word combination around one and a half year to two years of age. And finally, the single and complex sentences from the third year, where the language system is fully in place. Even though language skill is a natural skill, Panigrahi (2018) argues that to acquire language children depends on their cognitive development. They need cognitive prerequisites, as cognition is assumed to be the underlying language skill. In other words, children will only acquire linguistic forms, when they have developed the cognitive bases for those forms. For example, the child will learn the concept of place before the concept of time, and this order is cognitively determined. Hence, specific grammatical structures are acquired by language learners along with their cognitive growth which develops before the learners' linguistic development.

These developments occur within the home environment, with older people and care givers who spend time with the baby. At this stage, it is important to keep speaking to the baby. As Sprenger (2013) explains that children need to hear phonemes of their language. Listening to carer's voice children learn to make connection, developing their language skills through social interaction.

Furthermore, language growth relies on experience. When children listen to carer's explanation of what is going on, reasons of occurrence around them, making responses to question and explanation, they are making the connection of sounds and the world around them. By doing so, their language begins to take shape. Zimmerman et al (2013) finds in their study that adult-child conversation contributes significantly to the child language development. Listening and talking to children, creating meaningful conversation helps children construct their understanding of the world around them. These are the experiences that help

children understand and construct their world knowledge.

Rahimpour (2004) citing Stork and Widdowson (1974) states that besides an innate human potential for the acquisition of a language, another necessary condition is a linguistic environment for a child to be stimulated by linguistic input. A linguistic environment with linguistic inputs is represented by dialogue, model of communication as well as form of turn taking. It is a social interaction between children and their carer. Sterling (2007) quoting Blooms (2002) states that 'the loving care-givers who socialize babies and young children are crucial for ensuring the power to use language as a rich symbol system that permits humans to share meaning with one another and to advance learning. Language learning depends on genetic potential and on social interactions.' It is clear from these arguments that a 'linguistic rich environment' is an environment filled with meaningful interaction with care-givers. It is a prerequisite fundamental to a child language development.

Care-givers are the one presenting nurture physically as well as mentally in young children. The type of care-giver language use is a model for young children. The content of the language is also a measure of the type of meaning children follow. Honig (2007) argues that the 'baby talk' children listen to is a good way to make and stimulate babies' interest in oral conversation and a means to direct their attention to words and dialogues. The verbal and non-verbal exchange help babies to create meaning to be expressed in the sounds they hear and respond to in their daily activities. These are their way of developing their language skills.

Furthermore, Minami (2002) finds that from early childhood on, children become accustomed to culturally valued narrative discourse skills through interactions with their mothers. He further illustrates that human development, however, is not only a cultural transmission but it is also a sociocultural model that conceptualizes parent and child as interactive partners in the creation of cultural meanings. What children understand and

express are constructed in the environment they are brought up. From this perspective it can be concluded that child language development is not only influenced but shaped in constant interaction with their environment.

As children grow, they learn and acquire their mother tongue including all aspects of the five domains of language making them the agile user of language. These domains are phonology, syntax, semantics, morphology and pragmatics. Acquiring these language domains mean the ability to use language skilfully with all its nuances and subtlety required to hold an appropriate social interaction. Honig (2007) find that children as young as pre-schoolers have the ability to express meaning according to their addressee. When these pre-schoolers wrestle over toys they could call their friends names, such as 'poopy-head', and yet, they would not use these expressions when visiting with grandparents. These are social communication skills learned and acquired without their knowingly have mastered, as they develop it in their daily activities in their environment as well as in interaction with the carer. Having the ability to appropriately respond to messages is a highly acquired skill necessary for further learning and development. This put the carer in position of importance regarding children language development and language skills. Romeo (2018) reasons that exposure to language through conversation shows that children with more exposure 'exhibited greater left inferior frontal (Broca's area) activation, which significantly explained the relation between children's language exposure and verbal skill.'

This is an important finding showing how children language development is closely related to language exposure. Romeo further states that 'Specifically, the language quantity (e.g., number of words) and quality (e.g., sentence complexity, lexical diversity) that young children hear are the foundation of later language and literacy skills (Hirsh-Pasek et al. 2015; Rodriguez & Tamis-LeMonda 2011; Rowe 2012) and nonverbal capacities, including executive functioning (Sarsour et al. 2011), math ability (Levine, Suriyakham, Rowe, Huttenlocher & Gunderson

2010), and social skills (Connell & Prinz 2002). This supports the argument that language exposure is the foundation for further growth linguistically as well as cognitively. This fact confirms that first language exposure comes from contact with the care-giver, the parents or other adults who nurture them. It is a very important element in any child environment and should be taken into consideration when looking into their cognitive development.

The language development of toddlers is the first language they are brought up in. By the age of five or six, most children have the ability to understand and to use complex grammatical patterns of their first language, even though their language is still developing through their school years (Saville-Troike 2006). Researches also show that first language development and acquisition follow predominantly the same sequence of language development which we may see as a constant process of acquiring more and more complex sets of structures and rules. As children mature, so are their language abilities (Saville-Troike 2006). Language abilities, especially their pragmatic skills, is built upon social interaction.

Minami's research (2002) shows that specific communicative competence is acquired through interaction in the home environment and develops further into language skills. In this respect, carer language skills are modelled and developed by the children. At this point, it can be argued that we can firmly say that carer language skills are the one model of children's language acquisition.

Moreover, to help and stimulate this growth, starting from the toddler-age-years, it is the appropriate time to introduce children to books. Research shows that home with books leads to a repertoire of language development for children (Sprenger 2013). Reading to infants and toddlers helps them to develop their vocabularies, helping to create background knowledge which in turn will lead them to appreciate the sounds of the words. Books are necessary to stimulate language growth. It is a window to the world expressed in dialogue between carer and children, leading

them to have the foundation skill for further learning. In the impoverished environment, such opportunities are lacking. There is no interactive exchange with their direct environment to build on developing the linguistic element. These children will not have the experience of conversational dialogue to help them create a foundation skill for learning. The impact is seeing the world differently, maturing with acquiring less vocabulary to understand and express knowledge which means less understanding of what is happening around them, leading to less chance of growing academically.

C. The Case of Indonesia

Indonesia is a land of diversity even though we have one language, Indonesian. Most Indonesians are bilingual at the very least. They are proficient at their mother tongue, the language any Indonesian is born into and Indonesian as the language of unity. This is a blessing as well as a challenge. Raising children and preparing them for further living, especially in term of their education, have raised many discussions when put into context. Aside for personal development, the country's diversity also means diversity in access to education with all its challenges. One of the most prevailing fact is, it is common for girls to marry at a young age (15 years; Pusdatin 2014), skipping even years of basic education. This condition leads to girls being married, most often without their consent. They do not plan their family, having children just happened as a consequence of being married off. So girls as young as sixteen year of age often have to tend to their babies. This means, among other things, they are still children themselves while they have to rear up their own children. Health matters aside, child development become problematic. As has been discussed earlier, children develop and grow in a first language condition, and in Indonesia it means they grow up, learn, making meaning, constructing their world and knowledge in their first language, which is not Indonesian for most people. In addition, many are reared by carers who have not completed

their own basic education, so they are reared by people with limited knowledge and understanding. They are rearing their children instinctively, and most of the time, without much help from their own environment. These condition leads to a variety of degree of competence of carers leading to a difference in knowledge construction in children before they start schools.

Having discussed the matter of carer competence, the children condition faces another challenge when they start school. As the language of unity, Indonesian is the formal language. Children come into contact with Indonesian when they start school. For most children, this means working with a new language as well as starting academic routines. They learn to read, write, arithmetic, science subject in Indonesian. Children have to deal with second language acquisition at the same time as they start to learn academic subject. Children have to learn and acquire a new language system while at the same time they also have to learn new subjects in that new language. This condition alone needs to be looked into as it significantly will affect ways of learning.

Primary years are the foundation for academic success, and these children are doing all these activities while they are learning their second language. It seems to be assumed that children will acquire their second language naturally, without formal instruction. Language acquisition is perceived to take place through meaningful language input of any kind and to develop into a full second language mastery with communicative competence regarding the rules system and rules of use. They have to cope with acquiring a second language as well as creating their knowledge construction. This is a challenging condition for children lucky enough to be prepared by their care giver and the environment they are raised in, so that they are ready for school. But, for those who are not yet ready for school this condition leads children to struggle with their knowledge construction from the basic stage, learning to read and acquiring the literacy skill. This situation put many children in a disadvantage condition. For further discussion, the following looks at language skills needed for schooling

D. Language Skills Required for Academic Achievement

Schooling nowadays is a common activity for children. Most of them began formal education by the age of seven. The aim of this primary and secondary education is to get students ready for their future lives by empowering them with the appropriate skills and knowledge to facilitate them to live and work as social and independent human beings. To reach this goal, students need language skills to acquire knowledge and master the requirements of school and of a variety of different contexts outside school (Moe et.al, 2015). Formally language is not considered as part of other subject such as math, science or history, but many stakeholders view this differently nowadays. "Whatever the subject, all knowledge building in the school context involves working with language." (Beacco, Coste, van der Ven & Vollmer 2010, 6).

Addressing language for schooling experience, in general terms, it is common to refer to language proficiency as BICS (Basic Interactional Communication Skills) and CALP (Cognitive Academic Language Proficiency) where each language category has a standard proficiency. BICS is the everyday language used in informal interaction and is said to be context-embedded, a situation where it is often a conversation of a face-to-face interaction where cues are rich to help understanding. Meanwhile CALP is designated as a language mastery associated with general education. Students need to master CALP, even though they might have started with BICS. CALP is assumed to have a context-reduced communication with fewer non-verbal cues. In developed countries, each state has some kind of a national standard regarding language use for education. For example, The National Governors Association Center for Best Practices and the Council of Chief State School Officers (from the United States of America) strongly believe that all students should be held to the same high expectations outlined in the Common Core State Standards. This

includes students who are English language learners (ELLs). Every student is expected to maintain 'standard language' for everyday school experience. However, those students who are not speakers of the main language are help with additional time, appropriate instructional support, and aligned assessments as they acquire both English language proficiency and content. Teachers are advised to attend to the different language need of their students to develop the CALP proficiency.

In the European Union, the same condition is also treated with care (Moe 2015) Child Speakers of other than mother tongue receive help to master the new language with which they have to learn at school. In this way, children are not left to fend for themselves in the learning process of understanding new knowledge. They are supported to construct their knowledge. The condition discussed above should also be considered in the Indonesian case, especially as children would start their academic journey with different level of language skills. Most children would come to their first grade with language skills in their mother tongue, which would not be Indonesian. On the one hand, this is the situation and condition of children across the archipelago and on the other hand, research shows that children most likely may experience poverty and impoverished language input at home. Meanwhile, early exposure to a rich language environment is crucial for children's academic success (Konishi et.al. 2014). With their first non- Indonesian language, the poverty and impoverished language input at home as a given condition, especially with children with young mothers, most children are at a challenged condition when they start primary education. For these reasons, children in Indonesia need more attention to their language development. This is the basic skill children need to be able to join in the conversation of knowledge sharing.

E. Nurturing Language Development

Having discussed the points on child and language development as well as its impact on schooling experience, it is now time

to discuss how to help children develop cognitively and linguistically. Previously it was thought that children acquire their first language completely by the age of five years, but further research show that it is not the case (Cameron 2001). Children's language and formal literacy skills are developing at five and six years of age, with a strong link to experiences in infancy. When children are brought up with listening to stories, they are accustomed to listening to spoken language. This gives them the experience of listening to structures in spoken language which lead to acquisition of linguistic and language skills.

As early as 1985 Hart and Risley from the University of Kansas, found in their study of 42 families from differing socio-economic background to study the ways in which parents and children interact. In this cutting-edge study they revealed that there was an unprecedented discrepancies between the total numbers of words spoken as well as the types of messages conveyed among their subjects. The four year-long studies showed a great difference in not only children's knowledge but also in their skills and experience of children from high-income families compared to children from families on welfare. Children from high-income family are exposed to 30 million more words. Further studies showed that these differences in language and interaction experiences leave a long-term effect on a child's performance for life. Their shortcoming in language skills give them a difficult start in their academic life with a very limited chance of catching up with their peers if they are left to fend for themselves.

Furthermore, research also finds that there is a connection between children's early experience with language use in their families, as well as their language development in various domains. Family's habit on developing narratives round the dinner table on topics surrounding their parents' activity at work or siblings at school show faster development of narrative and discourse skills, while families with habits of using wide vocabulary leads to faster development in the lexical domain (Cameron 2001) Lightbown and Spada (1996) discover that there are important similarities between first language learners and second

language learners; they go through sequences of stages in the development of particular structures. They state that this developmental sequences are similar across learners from different background, what is learned early by one learner is similarly learned early by others. Meanwhile, Philp, Mackey and Oliver (2008) quoting Pienemann's study in 1984 state that instruction in a foreign/second language will not enable language learner to skip developmental stages. In other words, language development would grow in line with the children's cognitive development.

In the English speaking communities, Parera in 1984 found that the acquisition of certain structural pattern comes late, as late as eleven years old. More complex grammatical patterns are only acquired when they reach the age of fifteen. The acquisition of complex structural pattern requires children to have developed logical understanding and the language in which to express it. In the same way, discourse skills will continue to develop throughout the early school years. It is also argued that at the age of seven children is still learning to acquire the skills for extended discourse (Cameron 2001). These skills are necessary for telling narratives where children learn how to create thematic structure through language. This is the basic skill to share information in the construction of knowledge, the basic skills in learning. Without these skills, children miss the opportunity to create their own understanding of the world.

At the start of primary education, the foundation of further studies is fostered from the first to at least third year of schooling. During the time span children learn to read, write and do arithmetic. These are the basic skills for academic life, and they are constructed through language. For most Indonesian children, they have to face academic life by, first and foremost, dealing with and mastering Indonesian language, the prerequisite to a successful study. This fact is a taken for granted condition for schooling for as long as the history of the Indonesian system of education. It was never seen as a hurdle to the process of learning.

Taking this point of view further, for Indonesian, it is neces-

sary to consider the fact that when starting primary years, children would be on the 7th year. Even though their first language skills are nearing maturation, the process of complete mastering of the first language will continue up to the 15th year. It is imperative to consider the previous discussions of language development and developing literacy skills. When schooling is regulated to using Indonesian as a medium of instruction, then it is necessary to understand the factors that promote second language acquisition, for it is clear that children are coerced to master Indonesian as their second language while they are at school.

Looking at the literature of second language learning for young learners, it is very important to tailor approaches to match changes in the children cognitive maturity with changes in language teaching strategies. In addition, as a diverse country with cultural diversity, mother tongue should not be left out of the picture. A balanced programme of developing mother tongue and acquiring a second language should go hand in hand. This would entail an inclusive approach of nurturing first language maturity as well as developing mastery of the second language. As instructions will not be able to skip developmental stages, and stages of childhood follow a developmental change which corresponds with qualitatively different way of thinking (Berk 2006), programme should be rich in offering opportunities to cater for these needs in children. Therefore, the use of first language as a medium of instruction should still be permitted, and learning material should also still be provided. This is an approach offered to facilitate learning.

F. Conclusion

Increasing literacy skills as well as numeracy skills are basic skills to grow academically. As has been argued previously, language plays an important role in fostering academic success. Understanding numeracy, the skill of information processing, comprehending textual information are presented through language. It is necessary to pay attention to language development

and language mastery for children. The 'poverty and impoverish input from home' needs to be taken care of before children are expected to flourish and be successful in academic life. An appropriate approach to acquire the first three Rs (reading, writing and 'rithmetic) should be constructed through interaction in the first language and then promoted sequentially in the national language. This way no children are discriminated in the process of learning and they all have the same chance of sharing their knowledge as well as an equal opportunity to construct their understanding of the world. When the development of language/ languages is accommodated, children would have the opportunity to construct their knowledge and develop their cognitive skills accordingly, and this, in turn, might help develop their literacy and numeracy skills.

BIBLIOGRAPHY

- Amin, Md. R. 2019. "Developing Reading Skills through Effective Reading Approaches." *International Journal of Social Sciences & Humanities* 4 (1) 2019, 35-40, <https://doi.org/10.5281/zenodo.2557919>.
- Bailey, A.L., C.A. Maher and L.C. Wilkinson (eds). 2018. *Language, Literacy, and Learning in the Stem Disciplines*. Routledge. New York. London.
- Benner, G.J. et.al. 2002. "The Effects of the Language for Learning Program on the Receptive Language Skills of Kindergarten Children." *Journal of Direct Instruction*, <https://www.researchgate.net/publication/234667949>.
- Berk, L.E. 2006. *Child Development*. 7th ed. Pearson Education. Boston.
- Cook, A. 1997. *How Well Does Your Child Read? A Step-by-step Assessment of Your Child's Reading Skills and Techniques to Improve*. Franklin Lakes: The Career Press.
- Dalton-Puffer, C, Tarja Nikula and Ute Smit (eds). 2010. *Language Use and Language Learning in CLIL Classroom*. Amsterdam: John Benjamin B.V.

- European Centre for Modern Languages of the Council of Europe. 2015. *Language Skills for Successful Subject Learning*. CEFR-linked descriptors for mathematics and history/civics.
- Kim, Y.-S. G., & M. Davidson. 2019. *Promoting successful literacy acquisition through structured pedagogy: Global Reading Network Critical Topics Series*. Prepared by University Research Co., LLC. (URC) under the Reading within Reach (REACH) initiative for USAID's Building Evidence and Supporting Innovation to Improve Primary Grade Assistance for the Office of Education (E3/ED). Available at www.globalreadingnetwork.net.
- Ghosn, I-K. 2013. Language Learning for Young Learners in *Applied Linguistics and Materials Development*. London: Bloomsbury Academic.
- Hewitt, D. 2008. *Understanding Effective Learning; Strategies for Classroom*. Glasgow: MC Graw Hill-Open University Press.
- Konishi, H., et. al. 2014. *Developmental Neuropsychology* 39 (5), 404-420. <https://doi.org/10.1080/87565641.2014.931961>.
- Kwon, EY and ZH. Han. 2008. "Language Transfer in Child SLA; A Longitudinal Case Study of a Sequential Bilingual." In *Second Language Acquisition and the Young Learner, Child's Play?* Edited by Philp, J., R. Oliver, A. Mackey (eds.). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Lin, A.M.Y. 2016. *Language Across the Curriculum and CLIL in English as an Additional Language (EAL) Context; Theory and Practice*. Singapore: Springer Science + Business Media.
- Lightbown, P.M. and N. Spada. 1996. *How Languages are Learned: Oxford Handbook for Language Teachers*. Oxford: Oxford University Press.
- Minami, M. 2002. "Culture-specific Language Styles; The Development of Oral Narrative and Literacy." In *CHILD LANGUAGE AND CHILD DEVELOPMENT 1* edited by Li Wei. Sydney: Multilingual Matters Ltd.
- Moe, E., wt. all. *Language skills for successful subject learning*.

Council of Europe Publishing. FR-67075 Strasbourg Cedex.
<http://book.coe.int>.

- Noorderhaven, N. and Anne-Wil Harzing. 2009. "Knowledge-sharing and social interaction within MNEs." in *Journal of International Business Studies* 40, 719-741.
- Pang, M. 2015. "Developing Reading Comprehension." *Educational Psychology* 35 (1), 128-135. <https://doi.org/10.1080/01443410.2014.910979>.
- Panigrahi, B.S. 2018. "Cognitive Prerequisites and Language Acquisition: A Developmental Perspective." *International Journal of Innovative Research in Science, Engineering and Technology* 7 (7). <https://doi.org/10.15680/IJRSET.2018.0707038>.
- Peccei, J.S. 2006. *Child Language: A Resource Book for Students*. London and New York: Routledge.
- Philp, J., R. Oliver, A. Mackey (eds). 2008. *Second Language Acquisition and the Younger Learner; Child's Play?* Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Pierce, D. 2016. *Closing the 30 Million Word Gap*. California: Napa County.
- Pritchard, A. 2009. *Ways of Learning; Learning Theories and Learning Styles in the Classroom*. London and New York: Routledge.
- Romeo, R.R., et.al. 2018. "Beyond the 30-Million-Word Gap: Children's Conversational Exposure Is Associated With Language-Related Brain Function." *Psychological Science*, 1-11. <https://doi.org/10.1177/0956797617742725>.
- Smith, Frank. 2004. *Understanding Reading*. Mahwah, New Jersey, London: Lawrence Erlbaum Associate.
- Stone, C. A., et.al. (eds). 2004. *Handbook of Language and Literacy; Development and Disorder*. London-New York: The Guildford Press.