The Promotion of Reading Behavior in Early Childhood in a Densely Populated Area of Bangkok

Parichard Sa-nguanlak¹ & Piyathida Khajornchaikul¹

Correspondence: Piyathida Khajornchaikul, Faculty of Public Health, Mahidol University, Bangkok, Thailand. E-mail: piyatida.kha@mahidol.ac.th

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Abstract

This research aimed to study the factors associated with the promotion of reading behavior in early childhood, in a densely populated area of metropolitan Bangkok, Thailand. A self-administered questionnaire was used to collect data from 228 families with children aged 3-6 years old. It was analyzed by obtaining the correlations and variables influencing reading behavior promotion. The research findings revealed that factors associated with promotion of reading behavior in early childhood with statistical significance (p<0.05) were age, education, family income, and community environment. It is therefore suggested to promote reading behavior in early childhood by building a network or organization within community environments; supporting convenience, proximity, and opportunity for local families to access information on reading.

Keywords: reading, behavior, early childhood, family, language

1. Introduction

Reading is a fundamental resource for: building oral language skills, creativity, acquisition of new knowledge, obtaining information through the media, books, television, and the computer; and it is an effective means of systematic development of language and personality (Chettri & Rout, 2013; Kourkouta et al., 2018).

Statistics from the UNESCO Institute for Statistics (UIS) (UNESCO Institute for Statistics, 2017) estimate that 56% of children in the world are unable to read proficiently until they complete primary education. Sub-Saharan Africa reports that 88% of children and adolescents are unable to read proficiently until they complete primary and lower secondary education too. The United Kingdom, in the year 2014, showed that one in every five children could not read at a satisfactory level until age 11 (Department for Education, 2015). In addition, the National Statistics Office (NSO) of Thailand, (2020) reported that in 2015 and 2018 the reading rates of young children, aged less than 6 years old, were 60.2% and 61.2%, respectively. Rates for girls were 60.9% and 63.0%, respectively, and for boys 59.5% for both years. For young children in Bangkok the reading rate was 76.2% whereas in the Northeast it was only 55.9%. However, there were no statistics for young children in densely populated areas.

Noam Chomsky's theory of language emphasizes early brain development, biological disposition, and cognitive function. He believes that the right environment is necessary for building language skills and emphasizes stimulating the innate ability of children; and that children are not able to learn anything as complicated as human language. They cannot learn language skills unless they already have language wiring for grammatical structures in the brain. These conditions are called the Universal Grammar. Grammatical structure activation is triggered by perceiving spoken language. He also believed that children rapidly acquire language that they commonly hear (The NSW Office of Child Care, 2006). Then Vygotsky, in Sociocultural Theory, believed that adult and peer interaction encouraged children to learn language. That young children learned beliefs, values, and customs as well as language in their cultural context while interacting with other people, especially family and caregivers. He believed that language skills were essential tools for thinking and played crucial roles in cognitive development (Levine & Munsch, 2018).

Family is the first teacher and social institution that influences behavioral development of children (Ceka, & Murati, 2016). Research shows that if a 4-year-old child is read-aloud to every day for one year, that would provide exposure to 75,000 more words than if they had not been read to (Logan et al., 2019).

¹ Faculty of Public Health, Mahidol University, Bangkok, Thailand

Children should be encouraged and supported, by caregivers, in good reading behavior while they are very young. The caring style of parents affects the development of children, including language skills (Kleemans, Peeters, Segers, & Verhoeven, 2012; Celik, 2020). Caregivers have a big role in being good reading models and giving an insight into reading to children (Wambiri & Ndani, 2015; Niklas, Cohrssen, & Tayler, 2016). The next study revealed that a good home learning environment and a good general environment were positively associated with children's numeracy abilities and supported language development (Niklas, Cohrssen, & Tayler, 2016; Celik, 2020).

Thailand has densely populated areas or slums in big cities, such as Bangkok. Many rural people come to live in these areas of the cities when they need to find work. This benefits Thailand's economy. However, it means that people in these areas are of low socio-economic status, basic amenities are of poor quality and there is a lack of adequate living space; all of which can lead to extremely poor health (Strategic division and Housing Information, 2017). So, facilities should be organized to support both children and families in order to assist development of children in these areas. Reading is essential in engaging children with new ideas, new words, and a new world as they are growing up and have good health. This research aimed to study reading behavior promotion and the factors associated with promotion of reading behavior in early childhood in a densely populated area of metropolitan Bangkok.

2. Method

This cross-sectional study consisted of 635 families with young children, aged 3-6 years old. It was carried out at the four branches of Klong Toey Early Childhood Center, in metropolitan Bangkok. The sample size was estimated using the formula of Daniel (2005) and 228 participants were considered necessary.

2.1 Research Instrument

The research instrument was divided into three parts.

1) Sociodemographic Variables

This consisted of 12 items with multiple choice and open-ended questions. The researchers developed this tool based on literature reviews. They included age, gender and birth order of children, number of children in a family, education, and household income.

2) Reading behavior promotion

This part was divided into 3 sub-parts with a total of 19 items. Part 1 (6 items) the activities of the family and children, Part 2 (5 items) the reading promotion model, and Part 3 (8 items) the reinforcing factors. Participants identified their choices on a 5-point scale from "never" (1 point) to "regularly" (5 points) total scores could range from 19 to 95. Cronbach's coefficient alpha was .86.

3) Community environment and learning sources

We developed community environment and learning sources based on literature reviews and it consisted of 10 items. Participants identified their choices on a 5-point scale from "never agree" (1 point) to "agree" (5 points) total scores could range from 10 to 50. Cronbach's coefficient alpha was .72.

The data analysis consisted of two parts, descriptive and correlations. The descriptive analysis reported by the frequency and percentage distribution of the variables, while with correlations the Chi-square test was applied to examine the potential influence of independent variables on reading behavior promotion. The significance level for the analysis was set at p-value ≤ 0.05 . This research study was approved by the IRB of Mahidol University, Bangkok.

3. Results

3.1 Demographic Characteristics

There were both male and female children (53.5% and 46.5%, respectively), 4, 5 and 6 years old (31.6 %, 27.6%, and 20.2% respectively). Most of them were the first child or the second child of the family (61.0% and 27.6%, respectively). The caregivers were mothers and fathers (54.8% and 25.4%, respectively), were 30-39 years old (41.2%) and had senior secondary education or vocational education (29.4%), or had junior secondary education (26.3%). Most of the families were nuclear families or extended families (54.4% and 45.6%, respectively). They took care of one child or two children (46.5% and 38.6% respectively). Most families spent less than 15 minutes per day doing activities with their children (43.5%), some spent 15-30 minutes per day (36.8%) while only a few spent more than 45 minutes per day (6.5%).

3.2 Reading Behavior Promotion

1) The activities of the family and children

Most families read books or fairy tales to their children a maximum of 5 times per month (40.4%). During the past two months, caregivers read only fairy tales to their children while some never did (33.3% each). Some caregivers brought their children to the public library or a book shop 1-2 times a month while some never did (33.3% each). Besides this, caregivers regularly paid attention to or gave praise to their children while they were reading (44.7%) while some never praised or gave a gift to their reading children (3.1%).

2) The reading promotion model

Some caregivers supported and encouraged their children when they bought books (27.6%). Most caregivers did not read books to their children too fast or with an unclear rhythm (59.6%). Some caregivers used the books they were reading for problem solving in the presence of their children (31.1%).

3) Reinforcing Factors

Most caregivers regularly praised their children when they were reading books or were interested in any book (46.1%); some smiled and hugged their children when they were reading books or were interested in any book (44.7%). Most caregivers did not listen to the story read by their children with boredom (53.1%). In addition, some caregivers regularly gave a gift such as a book or stationery to their children (37.7%).

3.3 Community Environment Characteristics

There were book shops or public libraries available in the community (39.5%), or there were only a few kinds of books in the public library, so they did not want to bring their children to such a library (16.2%); whereas some were uncertain that there were sufficient books in the public library for children (45.8%). The community had reading activities (30.3%); there was regular reading training provided for children in the community (17.1%), and the community school regularly informed the caregivers of the reading promotions (16.7%). However, some caregivers did not know that reading promotion activities were being organized in the community (22.4%).

3.4 Association Between Factors and Reading Behavior Promotion of Early Childhood Caregivers

The findings were that the age of young children had a significant association with reading behavior promotion (p = 0.018). The research showed that for caregivers of 4-year-old children the incidence of a poor level of reading behavior promotion was significantly greater, at 4.7 times, than that of caregivers of three-year-old children (p=0.007) (Table 1).

Table 1. Association between childhood characteristics factors and reading behavior promotion

	Reading behavior promotion		· χ ²	df.	OR. (95% Confidence Interval)	m volvo
Characteristics	Poor Level	Good Level	- χ	ui.	OK. (93% Confidence interval)	p-value
Age			0.0812	2		0.018*
3 years old**	35 (74.5)	12 (25.5)			1.0	
4	68 (93.2)	5 (6.8)			4.7 (1.5 – 14.3)	0.007*
5-6	92 (85.2)	16 (14.8)			2.0 (0.8 – 4.6)	0.115
Sex			3.0765	1		0.079
Female**	86 (81.1)	20 (18.9)			1.0	
Male	109 (89.3)	13 (10.7)			1.9(0.9-4.1)	0.082
Number of births			1.1734	2		0.556
1**	117 (84.2)	22 (15.8)			1.0	
2	54 (85.7)	9 (14.3)			1.1(0.5-2.6)	0.778
≥ 3	24 (92.3)	2 (7.7)			2.3 (0.5 – 10.2)	0.292

^{*}p<0.05, χ^2 =Chi-square, OR= Odds ratio, CI= Confidence interval

Educational level of caregivers also had a significant association with reading behavior promotion (p = 0.018). For caregivers who had primary education only, the incidence of a poor level of reading behavior promotion was significantly greater, at 5.4 times, than that of those educated to bachelor's level (p = 0.013) (Table 2).

^{**} Reference group

Family income had a significant association with reading behavior promotion (p =0.013). Caregivers who did not have enough income but were without loans had an incidence of a poor level of reading behavior promotion significantly greater, at 4.4 times, than that of caregivers who had enough income with savings (p = 0.027) (Table 2). Caregivers who did not have enough income and also had loans had an incidence of a poor level of reading behavior promotion significantly greater, at 6.8 times, than that of caregivers who had enough income with savings (p = 0.015) (Table 2).

Perception of the community environment of caregivers had a significant association with reading behavior promotion (p = 0.022). Caregivers who had a low level of community environment had an incidence of a poor of level of reading behavior promotion significantly greater, at 3.4 times, than that of caregivers who had a high level of community environment (p = 0.028) (Table 4).

Table 2. Association between family characteristics factors and reading behavior promotion

Characteristics	Reading behavior promotion		χ^2	df.	OR. (95%	p-value
Characteristics	Poor Level	Good Level	λ	uı.	Confidence Interval)	p-varue
Age (Year)			3.0337	2		0.219
20-29**	43 (79.6)	11 (20.4)			1.0	
30-49	124 (86.1)	20 (13.9)			1.6(0.7-3.6)	0.266
50-69	28 (93.3)	2 (6.7)			3.6 (0.7 – 17.4)	0.114
Educational Level			8.0218	2		0.018*
Bachelor**	38 (74.5)	13 (25.5)			1.0	
Secondary	110 (86.6)	17 (13.4)			2.2(1.0-5.0)	0.055
Primary	47 (94.0)	3 (6.0)			5.4 (1.4 – 20.2)	0.013*
Income			10.8292	3		0.013*
Enough with saving**	43 (74.1)	15 (28.9)			1.0	
Enough without saving	75 (85.2)	13 (14.8)			2.0(0.9-4.6)	0.099
Not enough but without loans	38 (92.7)	3 (7.3)			4.4 (1.2 – 16.4)	0.027*
Not enough and with loans	39 (95.1)	2 (4.9)			6.8(1.5 - 31.7)	0.015*

^{*}p<0.05, χ^2 =Chi-square, OR= Odds ratio, CI= Confidence interval

Table 3. Association between demographic of family factors and reading behavior promotion

Demographic of	Reading behavior promotion		~ ²	df.	OR. (95%	p-value
family	Poor Level	Good Level	- λ	α Confidence Interval)		
Family Type			0.1576	1		0.691
Nuclear family**	105 (84.7)	19 (15.3)			1.0	
Extended family	90 (86.5)	14 (13.5)			1.2(0.6-2.5)	0.691

^{**} Reference group

Table 4. Association between community environment factors and reading behavior promotion

Demographic of community environment	Reading behavior promotion		χ^2	df.	OR. (95% Confidence	p-value
chvironment	Poor Level	Good Level	-		Interval)	
Community environment			5.2879	1		0.022*
High level**	133 (82.1)	29 (17.9)			1.0	
Low level	62 (93.9)	4 (6.1)			3.4 (1.1 – 10.0)	0.028*

^{**} Reference group

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4. Discussion

The results of the analysis showed that the following association factors were statistically significant (p<0.05); age of children (4 years old) (Table 1); education of caregivers (primary) (Table 2); family income (not enough but without loans or not enough and with loans) (Table 2), and the community environment (Table 4). However, the factors of sex and number of children, age of caregivers, and family type were not statistically significant.

In terms of children's age, language experience in the first three years of life is critical, and differences in children's ability to segment conversational speech signals are predictors of language development (Niklas, Cohrssen, & Tayler, 2016). For young children, 2–3-year-olds, a good way is to set times for reading; such as after lunch or at bedtime and the family should make time for reading for pleasure. Reading for pleasure is not only important but it also improves reading test results as children grow up (Department for Education, 2015). Additionally, 3–4-year-olds are rapidly expanding their language, this can lead to being able to use many words, and an interest in learning to read (Armbruster, Lehr, & Osborn, 2006). So, families should be supported with reading as it provides a context for joint engagement and serves as a conduit for language and cognitive development (Logan et al., 2019).

In terms of education and family income, research shows that children of families with higher socioeconomic status are faster at comprehending words and know 60% more words, than their lower income peers. Families in the lower- and middle-income groups are different due to lack of equal economic and educational opportunities for their children (Han & Jun, 2013; Hindman, Wasik, & Snell, 2016; Niklas, Cohrssen, & Tayler, 2016).

Lastly, regarding the community environment; research has found that the home environment is associated with children's reading abilities, having more or fewer books to read, and opportunities for children to go to the library. Also, activities organized in children's libraries are effective at improving children's reading habits too (Niklas, Cohrssen, & Tayler, 2016; Celik, 2020). This study encountered several limitations. First, the study employed a small sample size; thus, our results may not be generalizable to the entire child and family population. Future studies may be conducted in densely populated communities in other cities or regions so that a comparison and overall conclusion can be made and analyzed for planning. Second, we assessed socioeconomic data, reading behavior promotion, and community environment with only a self-reported questionnaire.

Based on the findings of the study; the recommendation is that a network or organization should be set up and organized within community environments, supporting convenience, proximity, and opportunity for local families to access information on reading.

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