

ORIGINAL RESEARCH

THE RELATIONSHIP OF MOTHER'S KNOWLEDGE WITH THE SELECTION OF EDUCATIONAL GAME TOOLS AMONG PRESCHOOL AGE CHILDREN DURING THE COVID-19 PANDEMIC

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ABSTRACT

Introduction: Most parents or mothers do not understand about educational game tools, even many of them buy beautiful and interesting game tools but they do not think what to do with these game tools. In this case, if children are left in this condition, in the end this can actually be counterproductive to the purpose of education itself and interfere the growth process of preschool age children (4-6 years). The purpose of this study is to know the relationship of mother's knowledge with the selection of educational game tools among preschool age children during the COVID-19 pandemic.

Methods: The design of this study used cross-sectional analysis with a population of all mothers who have preschool children at Al Husna Tembelang Islamic Kindergarten, Jombang with a sample of 40 people using simple random sampling technique. The data was collected through a questionnaire, then to determine the relationship between the two variables, the Spearman Rank statistical test was carried out with a significance level of $= 0.05$.

Results: The results showed that most of the mothers had good knowledge of 52.6% while the selection of educational game tools was 50% according to the age of the children. Based on the results of the Spearman Rank correlation test, the value of $< 0.000 < 0.05$.

Conclusion: The conclusion of this study there is a relationship between mother's knowledge and the selection of educational game tools for preschool age children during the COVID-19 pandemic at Al Husna Tembelang Islamic Kindergarten, Jombang.

Keywords: *Knowledge, Educational Game Tools, Preschool Children*

INTRODUCTION

Most parents / mothers do not understand about educational game tools, even many of them buy beautiful and interesting game tools but they don't think what to do with these game tools. In this case, if children are left in this condition, in the end this can actually be counterproductive to the purpose of education itself and interfere with the growth process of pre-school age children (4-6 years) [1]. The development of

preschool children can be observed from several characteristics, for example, at the age of 5-6 years, children like friendship by having one or 2 special friends, centered on their own interests, easily disappointed, frustrated and recognize when they are naughty [2]. Knowledge of parents, especially mothers, about educational game tools is very important in selecting educational game tools that are appropriate for their child's age. However, the COVID-19 pandemic situation that is happening all over the world makes parents, especially mothers, feel worried and anxious if their children catch this dangerous virus while playing, so many mothers do not provide playing equipment that is appropriate for their child's age [3]. Parents only focus on protecting children and reducing their role in choosing play equipment that is suitable for their child's age, children are given makeshift play equipment that is not appropriate for the child's age. Even parents are very reluctant to bring their children to play outside the house [4]. The impact of this problem is the occurrence of developmental delays in preschool children [5].

In the initial survey, researchers conducted interviews or asked questions about the concept of playing to 10 mothers, it was found that 6 mothers (60%) understood playing on the selection of game types for children aged 4-6 years and the remaining 4 mothers did not understand or as much as 40%. WHO data on January 21, 2021 showed 97.2 million people in the world were infected with COVID-19, with 2.08 million deaths. The United States as the country that contributed to the highest number of positive cases, namely 24,967,952 people of which 40% of the cases occurred in children, followed by India, Brazil, Russia, and England [6]. While the number of cases in Indonesia is 11,703 (Ministry of Health, 2022). According to the Indonesian Pediatrician (IDAI) there were 11 thousand Indonesian children exposed to COVID-19, with a death rate of 2.3%. The total number of patients who have confirmed Omikron until January 26, 2022 is 1,988. Of that number, 765 have recovered or been treated. WHO data on February 4, 2022 globally there were 386,548,962 confirmed cases with a death rate of 5,705,754 cases, in Indonesia the addition of cases on February 4, 2022 was 32,211 so that the total cases were 4,446,694 and the total death was 144,452 cases [7].

The COVID-19 virus first entered Indonesia in March 2020, and since March 16, 2020 all learning in schools is carried out from home, including preschoolers who should study in kindergarten, they must follow the government's advice to study from home.[8]. Knowledge of parents, especially mothers, is very important in supporting the smooth learning of children while children study from home. Almost 70% of mothers feel anxious, children are prohibited from leaving the house, playing activities are greatly reduced, even mothers do not provide game tools that are appropriate for their child's age [9]. Currently, Indonesia is again faced with a surge in COVID-19 cases due to the Omicron variant. The Minister of Health of the Republic of Indonesia Budi Gunadi Sadikin asked the public to know the characteristics of the Omicron variant so that they can take precautions. Omicron triggers mild symptoms such as the common cold, cough, and fever with a fast transmission rate[10]. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) better known as the Corona virus is a new type of coronavirus that is transmitted to humans. Even if you attack more elderly, this virus can actually attack anyone, starting from baby, children, to adults, including pregnant women and breastfeeding mothers [11]. In most cases, this virus causes only mild respiratory infections, such as the flu. However, this virus can also cause severe respiratory infections, such as lung infections (pneumonia). Transmission can be through the air, when leaving the house all must wear a mask to prevent transmission. Most of the children do not like to wear masks for a long time, this makes

mothers worried and anxious to give permission for their children to play outside the house [12].

Efforts made by health workers so that mothers can choose appropriate educational game tools for preschool age children during the Covid 19 pandemic, namely by providing Information and Educational Counseling (IEC) to mothers, especially regarding providing stimulation or stimulation to children with play activities [9]. Parents must be good at providing and choosing good play equipment and according to the child's age. Play activities that can stimulate some children's gross motor skills so that children can grow normally and can train children to socialize with other children[13]. Based on the description above, the purpose of this study is to know what is the relationship of mother's knowledge with the selection of educational game tools among preschool age children during the covid-19 pandemic.

METHODS

The research design used cross sectional analytic. The population in this study were mothers who had preschool children at Al Husna Tembelang Islamic Kindergarten, Jombang. The sample in this study were 40 mothers who had preschool children at Al Husna Tembelang Islamic Kindergarten, Jombang. The sampling technique was simple random sampling. The independent variable in this study was mother's knowledge and the dependent variable was the selection of educational games for preschool age children. Data were collected using a questionnaire. Data processing by editing, coding, scoring, tabulating and analysis using Spearman's Rank test with an alpha of 0.05. This research ethics was done in STIKES ICME Jombang with number of ethics 080/KEPK/ICME/XI/2021.

RESULTS

Fourty participated to the research. Based on Table 1 shows that most of the 21 respondents (52.6%) have good knowledge of mothers. Table 2 shows that 20 respondents (50%) chose educational game tools according to the age of the child. Table 3 shows the results of the Spearman rank statistical test obtained a significant number or probability value (0.000), which is significantly lower than 0.05 or ($p < \alpha$), then H1 is accepted which means that there is a relationship between Mother's Knowledge and the selection of educational game tools for preschool age children during the COVID-19 Pandemic at Al Husna Tembelang Islamic Kindergarten, Jombang.

Table 1

(1) Characteristics of respondents based on Mother's Knowledge

Table 1 Frequency Distribution Based on Mother's Knowledge

No	Mother's Knowledge	Frequency	Percentage (%)
1	Good	21	52.6
2	Enough	14	36.8
3	Less	5	10.5
	Total	40	100

Based on Table 1 shows that most of the 21 respondents (52.6%) have good knowledge of mothers.

(2) Table 2

Characteristics of respondents based on the selection of educational games for preschool age children

Table 2. Frequency distribution based on the selection of educational game tools for preschool age children during the Covid 19 Pandemic

No	Educational game tools	Frequency	Percentage (%)
1	In accordance	20	50
2.	Not suitable	16	40
3.	It is not in accordance with	4	10
	Total	40	100

Table 2 shows that half of the 20 respondents (50%) chose educational game tools according to the age of the child.

(3) Analysis of the relationship between mother's knowledge and the selection of educational game tools for preschool age children during the COVID-19 pandemic

Table 3 Cross tabulation of the relationship between Mother's Knowledge and the selection of educational game tools for Preschoolers during the Covid 19 Pandemic

Mother's Knowledge	Selection of Educational Game Tools						Total	
	appropriate		Not suitable		It is not in accordance with			
	F	%	F	%	F	%	F	%
Good	9	22.5	12	30	0	0	21	52.5
Enough	11	27.5	3	7.5	0	0	14	35
Not enough	0	0	1	2.5	4	10	5	12.5
Total	20	50	16	40	4	10	40	100

$\rho = 0.000$ $\alpha = 0.05$

Based on table 3 shows the results of the Spearman rank statistical test obtained a significant number or probability value (0.000), which is significantly lower than 0.05 or ($p < \alpha$), then H1 is accepted which means that there is a relationship between Mother's Knowledge and the selection of educational game tools for preschool age children during the Covid 19 Pandemic at Al Husna Tembelang Islamic Kindergarten, Jombang.

DISCUSSION

The results showed that most of the mothers (52.6%) had good knowledge. A good mother's knowledge is shown by asking various questions that touch her curiosity and explorer's spirit by playing together and playing games that are appropriate for her child's age. Mothers must be creative and innovative in preparing the implementation of playing for their children and providing game guidance to children so that they can use the media in the process of playing guidance which will also improve the quality of the development of the children themselves [14]. Mother is the first place for a child to interact and socialize, mother and family are important factors in the development of preschool children. The role of parents in child development is to acquire language skills, introduce the environment, instill cultural values and existing norms[15].

The selection of educational game tools shows the results of half of 20 respondents (50%) choosing educational game tools according to the age of the child. Preschool

children learn through active learning, namely asking questions to children and letting them think/ask themselves, so that the learning outcomes obtained are the child's construction [16]. Parents / mothers also need to provide various facilities needed by children in playing activities. This will motivate children to be involved in the mother's guidance process through play tools. The types of games given to children greatly affect the psychological condition of children which will affect them when they are adults, therefore it is necessary to pay attention to the types of games according to their age [17].

The 4-5 year age period is the sense of initiative phase. Kindergarten-age children are individual figures who are undergoing a very rapid development process and are very fundamental for the next life [11]. Children have their own world and characteristics that are far different from the world and characteristics of adults. Children are very active, dynamic, enthusiastic and almost always curious about what they see and hear, as if they never stop learning [10]. Educational games are games that have educational elements obtained from something that exists and is attached and becomes part of the game itself [18]. In addition, this game also provides stimulation or a positive response to the senses of the players. The senses in question include: hearing, sight, sound (speaking communication), writing, thinking power, cognitive balance, motor (balance of motion, endurance, strength, skill and dexterity), affection, and social and spiritual wealth (noble character, love, affection, ethics, honesty, manners and courtesy, healthy competition, and sacrifice) [13]. This balance of senses is planned to affect the body, reason, imagination, character and character, until the goal of self-maturation. Because a person's character determines the direction of his life [15].

Spearman rank statistical test results obtained numbers significant or probability value (0.000), lower than the standard significant 0.05 or ($p < \alpha$), then H1 is accepted which means that there is a relationship between Mother's Knowledge and the selection of educational game tools for preschool age children during the Covid 19 Pandemic at Al Husna Tembelang Islamic Kindergarten, Jombang. During the COVID-19 pandemic, some of the roles of teachers in schools were replaced by parents (mothers) to become educators at home, mothers must be able to provide good examples and role models for children in stimulating their development by playing activities according to their child's age, inviting and guiding children to always obey the rules at home, teach children to care about fellow siblings, guide children not to be easily disappointed when they fail, guide children to know when they make mistakes, teach language skills, introduce the environment and instill values, norms, culture and religion in children [19]. Parents' activities in introducing the surrounding environment to children, be it relatives, neighbors and the surrounding community will develop an understanding of social behavior, learn to resolve behavior with environmental demands [5]. The game provides pre-training opportunities to get to know the rules (before going to the community), obeying norms and prohibitions, including being honest, loyal (loyal), and so on. In the game, children will use all psychological/psychological functions with a varied atmosphere [20].

CONCLUSION

- (1) The results showed that mother's knowledge mostly good, Half of the selection of educational game tools for preschool age children is good.
- (2) There is The relationship between Mother's Knowledge and the selection of educational game tools for Preschool age children during the Covid-19 Pandemic at Al Husna Tembelang Islamic Kindergarten, Jombang.

- (3) It is hoped that health workers will be able to improve health services in monitoring the development of preschool children, providing counseling and simulations to parents regarding the selection of educational game tools for preschool age children.

References:

- [1] M. Choi, H. Tessler, and G. Kao, "Arts and crafts as an educational strategy and coping mechanism for Republic of Korea and United States parents during the COVID - 19 pandemic," *Int. Rev. Educ.*, vol. 66, no. 5, pp. 715–735, 2020, doi: 10.1007/s11159-020-09865-8.
- [2] Y. Purnama, F. A. Herman, J. Hartono, Neilsen, D. Suryani, and G. Sanjaya, "Educational Software as Assistive Technologies for Children with Autism Spectrum Disorder," *Procedia Comput. Sci.*, vol. 179, no. 2019, pp. 6–16, 2021, doi: 10.1016/j.procs.2020.12.002.
- [3] M. Shoghi, B. Shahbazi, and N. Seyedfatemi, "The effect of the Family-Centered Empowerment Model (FCEM) on the care burden of the parents of children diagnosed with cancer," *Asian Pacific J. Cancer Prev.*, vol. 20, no. 6, pp. 1757–1764, 2019, doi: 10.31557/APJCP.2019.20.6.1757.
- [4] D. Seguin, E. Kuenzel, J. B. Morton, and E. G. Duerden, "School's out: Parenting stress and screen time use in school-age children during the COVID-19 pandemic," *J. Affect. Disord. Reports*, vol. 6, p. 100217, 2021, doi: 10.1016/j.jadr.2021.100217.
- [5] C. Chen, S. Chen, P. Wen, and C. E. Snow, "Are screen devices soothing children or soothing parents? Investigating the relationships among children's exposure to different types of screen media, parental efficacy and home literacy practices," *Comput. Human Behav.*, vol. 112, p. 106462, 2020, doi: 10.1016/j.chb.2020.106462.
- [6] W. Elsayed, "Covid-19 pandemic and its impact on increasing the risks of children's addiction to electronic games from a social work perspective," *Heliyon*, vol. 7, no. 12, p. e08503, 2021, doi: 10.1016/j.heliyon.2021.e08503.
- [7] DepkesRI, *Pedoman Pelaksanaan Pelatihan Stimulasi, Deteksi dan Intervensi Dini Tumbuh Kembang Anak Di Tingkat Pelayanan Kesehatan Dasar*. Jakarta: Departemen Kesehatan Republik Indonesia, 2022.
- [8] B. K. Dhar, F. K. Ayithey, and S. M. Sarkar, "Impact of COVID-19 on Psychology among the University Students," *Glob. Challenges*, vol. 4, no. 11, p. 2000038, 2020, doi: 10.1002/gch2.202000038.
- [9] K. Tulchin-Francis *et al.*, "The impact of the coronavirus disease 2019 pandemic on physical activity in U.S. children," *J. Sport Heal. Sci.*, vol. 10, no. 3, pp. 323–332, 2021, doi: 10.1016/j.jshs.2021.02.005.
- [10] C. Katz *et al.*, "Child maltreatment in the time of the COVID-19 pandemic: A proposed global framework on research, policy and practice," *Child Abus. Negl.*, vol. 116, no. November 2020, 2021, doi: 10.1016/j.chiabu.2020.104824.
- [11] M. L. Zagalaz-Sánchez, J. Cachón-Zagalaz, V. Arufe-Giráldez, A. Sanmiguel-Rodríguez, and G. González-Valero, "Influence of the characteristics of the house and place of residence in the daily educational activities of children during the period of COVID-19' confinement," *Heliyon*, vol. 7, no. 3, 2021, doi: 10.1016/j.heliyon.2021.e06392.
- [12] A. Jáuregui, G. Argumedo, C. Medina, A. Bonvecchio-Arenas, M. Romero-Martínez, and A. D. Okely, "Factors associated with changes in movement behaviors in toddlers and preschoolers during the COVID-19 pandemic: A

- national cross-sectional study in Mexico,” *Prev. Med. Reports*, vol. 24, 2021, doi: 10.1016/j.pmedr.2021.101552.
- [13] X. Zhang, “Barriers and benefits of primary caregivers’ involvement in children’s education during COVID-19 school closures,” *Int. J. Disaster Risk Reduct.*, vol. 66, no. December 2020, p. 102570, 2021, doi: 10.1016/j.ijdr.2021.102570.
- [14] C. L. Mifsud, R. Georgieva, and N. Kucirkova, “Parent-child joint reading of digital books in bilingual families in Malta,” *Int. J. Educ. Res.*, vol. 109, no. August, p. 101844, 2021, doi: 10.1016/j.ijer.2021.101844.
- [15] K. Junge, D. Schmerse, E. M. Lankes, C. H. Carstensen, and M. Steffensky, “How the home learning environment contributes to children’s early science knowledge—Associations with parental characteristics and science-related activities,” *Early Child. Res. Q.*, vol. 56, pp. 294–305, 2021, doi: 10.1016/j.ecresq.2021.04.004.
- [16] C. Dong, S. Cao, and H. Li, “Young children’s online learning during COVID-19 pandemic: Chinese parents’ beliefs and attitudes,” *Child. Youth Serv. Rev.*, vol. 118, no. June, p. 105440, 2020, doi: 10.1016/j.childyouth.2020.105440.
- [17] S. Benavides-Varela, C. Zandonella Callegher, B. Fagiolini, I. Leo, G. Altoè, and D. Lucangeli, “Effectiveness of digital-based interventions for children with mathematical learning difficulties: A meta-analysis,” *Comput. Educ.*, vol. 157, no. June, 2020, doi: 10.1016/j.compedu.2020.103953.
- [18] D. Suryana, *Pendidikan Anak Usia Dini (Stimulasi dan Aspek Perkembangan Anak)*. Jakarta: Kencana, 2016.
- [19] A. Susanto, *Pendidikan Anak Usia Dini (Konsep dan Teori)*. Jakarta: Bumi Aksara, 2017.
- [20] Y. Yamaoka *et al.*, “Abusive and positive parenting behavior in Japan during the COVID-19 pandemic under the state of emergency,” *Child Abuse. Negl.*, vol. 120, no. January, p. 105212, 2021, doi: 10.1016/j.chiabu.2021.105212.