

**Original Research**

**Relationship Of Pragmatic Abilities And Social Interaction With Intensity Of Using Gadgets In Kindergarten Children In Surakarta**

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**ABSTRACT**

**Background:** *The occurrence of serious problems in children's mental development, that children will become aggressive, lack of social interaction and deteriorating of communication skills, is affected by the introduction of gadgets too early and the intensity of uncontrolled use of gadgets by parents. Aim of this study is to determine the relationship between pragmatic ability and social interaction with the intensity of using gadgets in kindergarten children in Surakarta.*

**Methods:** *This research was conducted in the kindergarden TK ABA Thoyibah Surakarta, TK Sri Juwita Hanum Surakarta and TK Negeri Pembina city of Surakarta in april until august 2020. Sample conduct using total sampling technique. Amount of sample is 115 students of kindergarden. The relationship of the variables studied, both pragmatic ability and social interaction with the intensity of using gadgets, is an Odds Ratio (OR), which is exponential from b, the statistical significance of the Odds Ratio is tested with mannova.*

**Results:** The results of the analysis of the pragmatic ability variable showed that Exp B: 2,916, p: 0,420. The results of the social interaction variable analysis showed that Exp B: 2,977, p: 0.011.

**Conclusion:** Pragmatic ability and social intensity are jointly related to the intensity of using gadget in kindergarten students in Surakarta, with the results of the analysis of the variable pragmatic ability Exp B: 2,916, p: 0,420 and the results of the analysis of social interaction variables Exp B: 2,977, p: 0.011.

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**INTRODUCTION**

The introduction of gadgets too early in children can have a positive or negative impact, this is influenced by several factors such as frequency, duration, and parental supervision (Manumpil, 2015). Gadgets, when are used incorrectly or excessively without the supervision of parents, especially children as gadget users, can have negative effects on the psychological impact of children such as being introvert,

disturbing sleep patterns, liking being alone. And impacts on the development of children such as becoming obese, being exposed to radiation and eye health. , hands, brain disturbed (Prianggoro & Hasto, 2014).

Children with higher levels of smartphone addiction have less opportunity to interact with other people (Cheol & Park, 2014). Gadgets that are overused and uncontrolled can have a negative impact in terms of psychology and the children cannot smoothly socialize and or communicate with their surroundings (Santoso et al., 2013). Research conducted by Trinika (2015) shows that 42.1% of preschool aged children have high exposure to gadget use. Children under the age of 3 or 4 years are more likely to use the internet or gadgets to watch videos (Childwise, 2012 in Wendy et al, 2015).

Parents believe that the most common negative effects of gadget use on toddlers include exposure of poor content, affecting physical health (vision problems, stiffness, spinal cord injury due to constant sitting position, obesity), and even addiction. In addition, the use of gadgets can increase the likelihood of serious problems in children's mental development. The children will become aggressive, lack of social interaction (isolation from society) and their communication skills will deteriorate (Jurka and Pija, 2012). Purpose of this study is to determine the relationship between pragmatic ability and social interaction with the intensity of using gadgets in kindergarten children in Surakarta.

## MATERIALS AND METHOD

This type of research is a quantitative study with an analytic observational design through a cross sectional approach. In this study, there is no intervention or treatment of respondents, and only one observation and no follow-up. This research was conducted in the city of Surakarta with a total sampling technique of 115 students from three kindergarten schools, including TK ABA Thoyibah Surakarta, TK Sri Juwita Hanum Surakarta and TK Negeri Pembina Surakarta. The research instrument used is pragmatic abilities, social interaction, and intensity of using gadgets. The data collection technique was carried out through a research instrument in the form of a questionnaire that had been tested for validity and reliability.

Spearment test is used to determine the relationship between pragmatic ability and social interaction and the intensity of using gadgets. Multivariate analysis, the relationship of the variables studied, both pragmatic ability and social interaction with the intensity of using gadgets, has an Odds Ratio (OR), which is exponential from b, the statistical significance of the odds ratio is tested with the Mannova. The result is indicated by the p value. This research permit number is LLB.02.02 / 1.3 / 2501/2020 and It is under the supervision of the KEPK Poltekkes Ministry of Health Surakarta.

## RESULTS

The relationship between pragmatic ability and the intensity of using gadgets in kindergarten students in Surakarta was obtained through bivariate analysis using the Spearman test. The results of the bivariate analysis can be seen in table 1 below:

**Table 1.** Analysis of the relationship between pragmatic ability and the intensity of using gadgets in kindergarten students in the city of Surakarta

Pragmatic Ability	Intensity of Using Gadgets								Sig
	Low		Medium		High		Total		
	N	%	n	%	n	%	n	%	
Less	4	3.48	15	13.04	0	0.00	19	16.52	0.420

Pragmatic Ability	Intensity of Using Gadgets								Sig
	Low		Medium		High		Total		
	N	%	n	%	n	%	n	%	
Enough	9	7.83	55	47.83	13	11.30	77	66.96	
Good	6	5.22	12	10.43	1	0.87	19	16.52	
<b>Amount</b>	<b>19</b>	<b>16.52</b>	<b>82</b>	<b>71.30</b>	<b>14</b>	<b>12.17</b>	<b>115</b>	<b>100</b>	

Table 1 shows that students who have less pragmatic ability and low intensity of using gadgets are 4 students or 3.48%. Students who have less pragmatic ability and moderate intensity of using gadgets are 15 students or 13.04%. Students who have less pragmatic ability do not have high intensity of using gadgets. Students who have sufficient pragmatic ability and low intensity of using gadgets are 9 students or 7.83%. Students who have sufficient pragmatic ability and moderate intensity of using gadgets are 55 students or 47.83%.

Students who have sufficient pragmatic ability and high intensity of using gadgets are 13 students or 11.30%. Students who have good pragmatic abilities and low intensity of using gadgets are 6 students or 5.22%. Students who have good pragmatic abilities and moderate intensity of using gadgets are 12 students or 10.43%. The student who has good pragmatic abilities and high intensity of using gadgets is 1 student or 0.87%. Based on the results of the analysis using the Spearman test, the p value is 0.420 ( $p > 0.05$ ).

The relationship between social interaction and the intensity of using gadgets in kindergarten students in Surakarta was obtained through bivariate analysis using the Spearman test. The results of the bivariate analysis can be seen in table 2 below:

**Table 2.** Analysis of the relationship between social interactions and the intensity of using gadgets in kindergarten students in Surakarta

Social Interactions	Intensity of Using Gadgets								Sig
	Low		Medium		High		Total		
	N	%	N	%	N	%	n	%	
Less	2	1.74	12	10.43	4	3.48	18	15.65	
Enough	10	8.70	61	53.04	9	7.83	80	69.57	0.011
Good	2	1.74	9	7.83	6	5.22	17	14.78	
<b>Amount</b>	<b>14</b>	<b>12.17</b>	<b>82</b>	<b>71.03</b>	<b>19</b>	<b>16.52</b>	<b>115</b>	<b>100</b>	

Table 2 shows that students who have less social interaction and low intensity of using gadgets are 2 students or 1.74%. Students who have less social interaction and moderate intensity of using gadgets are 12 students or 10.43%. Students who have less social interaction and high intensity of using gadgets are 4 students or 3.48%. Students who have sufficient social interaction and low intensity of using gadgets are 10 students or 8.70%. Students who have sufficient social interaction and moderate intensity of using gadgets are 61 students or 53.04%.

Students who have sufficient social interaction and high intensity of using gadgets are 9 students or 7.83%. Students who have good social interaction and low intensity of using gadgets are 2 students or 1.74%. Students who have good social interaction and moderate intensity of using gadgets are 9 students or 7.893%. Students who have good social interaction and high intensity of using gadgets are 6 students or 5.22%. Based on the results of the analysis using the Spearman test, it was obtained p value 0.011 (p

<0.05). Statistically, it shows that there is a significant relationship between social interaction and the intensity of using gadgets in kindergarten students in Surakarta.

The results of the analysis show that the pragmatic ability variable has a  $p$ -value  $> 0.05$ , this means that it statistically has no effect on the dependent variable. However, because this variable has a value of  $\text{Exp B} > 2$ , the pragmatic ability variable is still used in conducting the impact analysis together. The results of the analysis of the pragmatic ability variable showed that  $\text{Exp B}: 2.916$ ,  $p: 0.420$ ,  $p > 0.05$ . This result means that students who have low pragmatic abilities will have an intensity of using gadgets 2.916 times higher than students who have high pragmatic abilities. Conversely, students who have high pragmatic abilities will have an intensity of using gadgets 2.916 times lower than students who have low pragmatic abilities.

The results of the social interaction variable analysis showed that  $\text{Exp B}: 2.977$ ,  $p: 0.011$ ,  $p < 0.05$ . This result means that students who have low social interaction will have a lower intensity of using gadgets 2,977 times compared to students who have high pragmatic abilities. Conversely, students who have high social interaction will have an intensity of using gadgets 2,977 times higher than students who have low social interaction. From the results of the multivariate analysis above, it can be concluded that there is a joint influence of pragmatic ability and social interaction on the intensity of using gadgets in kindergarten students in Surakarta.

## DISCUSSION

The results of data analysis show that there is no relationship between pragmatic ability and the intensity of using gadgets. This is because the development of children's language pragmatics is more influenced by the stimulus given by their parents. This is in line with the opinion of Suryawan (2012) which suggests that the cause of children experiencing delays in speech and language development is 90% due to the lack of stimulation given by parents to children, such as the lack of inviting children to talk, interact and play. It is also strengthened by the results of research conducted by Suryani (2013), which shows that the better the stimulation of language development is given, the better the level of language development of the child.

The results of the data analysis show that there is a relationship between social interaction and the intensity of using gadgets. That the higher the students' social interaction skills will increase the intensity of using gadgets. This is in line with Putri Hana Pebriana's research (2017) and Novitasari's (2016) research which concluded that there is an effect of social interaction on the intensity of using gadgets. The results of this study are also supported by research by Musdalifah and NovitaIndriani (2017) which states that the use of gadgets affects social interaction.

The results show that the ability of both pragmatics and social interaction is related to the intensity of using gadgets. Based on the results of this study, the teacher must develop pragmatic skills and social interaction together to control the intensity level of students' gadget use. The results of this study are in line with research conducted by Cheol & Park (2014) which shows children with smart phone addiction show problems in mental and physical development. This is in accordance with the theory that the use of gadgets can create a family role and friends which are replaced by gadgets then, so that individuals prefer to be alone and do not make social contact (Suci A., 2014). Disturbed psychosocial children can cause children to stutter and talk late (Soetjningsih, 2008). There are many factors that can influence the development of language and speech, one of which is the environment. Social deficiency can cause

children to speak and language late (Soetjningsih, 2008). According to the results of observations made by Anggrahini (2013), it shows that since using gadgets, children become difficult to communicate with others at home. They do not care and respond less when parents ask them to talk (Santoso et al. 2013). When children use gadgets, children also do not make social contact and do not get stimulation because children only focus on the gadgets. According to Suryawan (2012), the cause of children experiencing delays in speech and language development is 90% due to the lack of stimulation given by parents to children, such as the lack of inviting children to talk, interact, and play. Gadgets that are used in excess and uncontrolled can have a negative impact in terms of psychology and the children cannot socialize or communicate well with their surroundings (Santoso et al 2013).

## CONCLUSION

There is no significant relationship between pragmatic ability and the intensity of using gadgets in kindergarten children in Surakarta with a p value of 0.420. There is a significant relationship between social interactions and the intensity of using gadgets with a p value of 0.011. There is a relationship between pragmatic ability and social interaction with the intensity of using gadgets in kindergarten children in Surakarta.

Kindergarden children who have low pragmatic abilities will have an intensity of using gadgets 2.916 times higher than kindergarden children who have high pragmatic abilities. Conversely, kindergarden children who have high pragmatic abilities will have an intensity of using gadgets 2.916 times lower than kindergarden children who have low pragmatic abilities. Kindergarden children who have low social interaction will have a lower intensity of using gadgets 2,977 times compared to kindergarden children who have high pragmatic abilities. Conversely, kindergarden children who have high social interaction will have an intensity of using gadgets 2,977 times higher than kindergarden children who have low social interaction.

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