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# The Influence of Children's Gadget Use Intensity on Their Social Skills

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ABSTRACT: Social skills play an important role in preventing negative behavior and can be developed every day. It depends on temperament, social cognitive abilities, and interactions. This research aims to determine the effect of the intensity of gadget use by young children on their social skills. Apart from that, the aim is to determine the influence of gadget use by young children on gadget use which is mediated by parents' social skills. This research uses a quantitative method design through observation techniques and questionnaires. The research results showed a significant influence on the intensity of gadget use of ECE students in Patikraja area on social skills (P = 0.742; P > 0.05). The intensity of gadget use of ECE students in Patikraja which is mediated by parents' gadget use on social skills has a significant effect (P=0.001; P<0.05) with B values of -0.61 and -5.345. The increasing intensity of gadget use by children in Patikraja, mediated by the intensity of parents' gadget use, causes a decline in social skills of 7.6%. This shows a significant influence between the intensity of gadget use.

Keywords: early childhood, gadgets use intensity, social skills

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#### **1 INTRODUCTION**

Social behavior is one aspect that needs to be instilled in students. Hurlock (2004) states that social behavior is the physical and psychological activity of a person toward others or vice versa to fulfill themselves or others by social demands. Polite behavior is manners in the association between humans and humans so that humans have good manners, mutual respect, and love. According to research by Ekyana et al. (2021), there are changes in children's social behavior during physical distancing. A total of 58.9% of children were reported to be less independent. This was the largest decrease in social behavior reported by parents. However, only 38.7% of children were able to cope. Thus, Parents should pay attention to their children's social behavior by providing opportunities for them to interact at home while respecting medical protocols. In general, gadgets have become an inseparable part of life. Currently, the use of gadgets is excessive and affects various aspects of life, especially in the family environment. Almost more than 100 million users actively use gadgets to open social media. Broadly speaking, both social media and gadget use also have negative impacts. For example, there are mental and behavioral problems for users who have become addicted. Factors causing social media and gadget addiction in Indonesia include time, productivity, and relationships, while mindset does not affect it (Pratama et al., 2020).

Qutoshi et al. (2021) reported that 93% of parents believe that gadgets have a positive impact on children. During the COVID-19 pandemic, 92% of parents use gadgets with high intensity. However, 88% of parents believe that excessive use of gadgets can harm children. Thus, parents should give directions and limit the use of gadgets by their children. In an article, Bruno & Donaldson (2018) explained one of the applications to support online learning. Empatico (https://empatico.org/) is an online application for teachers to connect classes around the world through a combination of live videos to foster meaningful relationships between learners. Empatico encourages educators and students to discover the world via activities that foster kindness, empathy, and curiosity. Howard & Gutworth (2020) suggested that how well virtual reality training works for social skills development provides better results than other training.

In Indonesia, the use of gadgets in early age groups has an increasingly concerning negative impact on child development. Children who are too often adapted to gadgets more easily find features that have not been filtered with the age of the child. Unfiltered features can lead to psychological disorders in children. However, generally, children aged 5-6 years are more familiar with gadgets to be used for playing or learning (Widiastiti & Agustika, 2020). Excessive use of gadgets by children has a negative impact. The negative impacts include a decrease in children's level of self-control. Children tend to be emotionally affected when not given gadgets and are unable to control themselves when using gadgets (Marif, 2021). Children also tend to have less social interaction which can cause difficulties and fears when communicating with the surrounding environment. Madhava et al. (2021) found a negative impact of gadget use on children. A rise in speech, attention, and learning issues defines this. In addition, fear

and depression were also found in children. Therefore, the use of gadgets in children must be reduced to improve speech, cognitive, and social skills. Novianti & Garzia (2020) stated that as many as 40% of children throw tantrums if they are not given gadgets. This shows that children's dependence on gadgets is quite high. Parents who give gadgets to children have various goals. As many as 22% of parents hope their children will be smarter (cognitive), while 21% hope their children will not be fussy. This shows that parents giving gadgets is positive, i.e. they want their children to benefit from technology. However, this must be accompanied by clear rules to reduce the negative impact.

In one of the kindergartens in Patikraja, several problems were found related to the social development of early childhood. Observations at Kindergarten Diponegoro 46 Kedungwringin show that almost all students are enthusiastic about participating in learning at school. As is common in classes of students with different family backgrounds, many social problems occur. Visible social problems include a lack of social closeness and intense communication between students, a tendency to choose friends who have similarities and avoid friends who are not the same as them. Some students are not able to work together with their friends. When teachers give group assignments, some children tend to work individually. Student friendships also show a tendency to form certain groups according to the child's comfort. The formation of these groups does not always have a negative impact. However, over a long period, there is a possibility that he will be excluded from certain groups of other friends or even bullied. Interviews with 15 parents showed that many mothers complained about their children's tendency to use gadgets excessively at home. When children are allowed to play with gadgets, they tend to be too focused and don't want to stop. There are indications for several reasons that the use of electronic devices affects children's social interaction skills. Parental mediation also plays an important role in children's use of gadgets while at home.

Based on various problems surrounding the social development of early childhood at TK 46 Diponegoro, it is necessary to identify social development in depth. In this way, solutions can be obtained to children's social problems, especially kindergarten students in Patikraja. If these social problems are resolved, students will learn actively, and optimally, and work together well, thereby supporting social development among students. The research aims to see the influence of the intensity of gadget use by children on their social skills and the intensity of children's gadget use as mediated by parents.

## 2 THEORETICAL STUDY

Social skills are defined as socially acceptable functioning. Social skills are behaviors learned through effective interaction in situations that require cooperation. The manifestation of social skills is reflected in the child's social behavior according to specific situations and contexts and leads to affirmative outcomes. Children who face difficulties in forming social relationships are reported to have limited social, emotional, cognitive, and behavioral skills (Neitola, 2018). In early childhood social development, social skills are identified as a key element. One of the key elements of the talents that underlie competence is social skill. Early social skills have been shown to have significant

long-term effects. Children, for instance, have been associated with higher mental health, employment, and education (Carson et al., 2019). Early social skill development is the cornerstone of future success in life. According to parents and educators, most kids have a mediocre level of social skills. Social skill-related risks are said to be minimal. To help young children develop their social skills, greater focus must be given to the family, teacher, and ECE characters (Maleki, Mardani, et al., 2019).

The results of a search conducted by Sahriana and Sugiyo Pranoto (2018) showed that 96.7% of children like to watch videos on YouTube. Children can watch various videos they like with quick and easy access. As many as 93.3% of children watch YouTube accompanied by parents. Older children tend to watch more clearly than younger ones. The content that is often watched includes Paw Patrol Cartoon (23.3%), Play-dough (20%), Tayo (13.2%), Robocar Poli (10%), Bibo Toys (6.7%), Lego (6.7%), Upin Ipin (6.7%), *Tendangan dari Langit* (6.7%) and others (6.7%). Sumarni et al. (2019) reported the behavior of several children aged 2-3 years who used gadgets for 30-120 minutes a day. In the physical-motor aspect, children tend to imitate the movements of the characters they watch. In the cognitive aspect, children learn from what they see and practice in their activities. However, children's social development tends to decline. Children tend to focus on what they see and do not care about their environment. Behavioral development in the emotional aspect is more likely to show an attitude of joy and anger.

Mita Widiastiti and Sastra Agustika (2020) suggests that children's gadget use has a negative impact that hinders children's development. Children who are too often adapted to gadgets will more easily find features that should not be watched so that will interfere with child development. If these features have not been filtered with the age of the child, it can lead to psychological disorders. Parental assistance is needed for children to use gadgets. Calorina et al. (2020) stated that high family income and the nuclear family structure have a direct and favorable impact on children's development. The mother's usage of gadgets has a direct and detrimental impact on the development of the child.

Danielson and Phelps (2003) in Hussein (2011) states Children's Self-report Social Skills Scale (CS4) is one of the assessment scales frequently used in the United States and is not known in Arab countries. Hussein (2011) conducted an evaluation of CS4 with IRT to be developed in Arab countries, especially Egypt. The CS4 was developed using the generalized partial credit model (GPCM). The assessment instrument is an assessment of children's self-report social skills consisting of 21 items with a focus on three subscales, namely social rules, liking, and social intelligence. Research results by Hussein (2011) showed that the level of the children's social skills might be differentiated using 21 items. The three subscales were more informative for social skill levels at the low and moderate levels, according to the information function of the items and the test. Items 6,

13, and 17 had low GPCM fit and could be eliminated to enhance the CS4 test's psychometric qualities.

According to Hambleton and Swaminathan (2013), IRT is a way of assessing the appropriateness of items by comparing the mean item performance against the group ability evidence predicted by the model. Item Characteristic Function (ICF), Item Characteristic Curve (ICC), and Latent Trait Theory (LTT) are other names for IRT. An alternate strategy for test analysis is the IRT technique. IRT employs a probabilistic model, where the likelihood that a subject will properly respond to a question depends on both the person's aptitude and the details of the question. Test takers with high ability have a higher likelihood of providing accurate answers than those with poor ability. IRT was created to do away with traditional test theory, which is dependent on the test group being administered. It implies that the test-takers' performance affects the reliability coefficient, difficulty level, and index of discriminating power. IRT creates a model that connects test takers and item properties. The development of IRT-based R packages was prompted by the need for IRT applications. R packages can be used to examine a number of sophisticated IRT models, including multidimensional, test let, mixed, treebased, hierarchical, response type, nonparametric, dichotomous, and polytomous IRT. Choi and Asilkalkan (2019) analyzed 45 IRT-based R packages. 34 out of the 45 R packages include simulation studies, including data generation, simulation R code examples, and recovery analysis.

Hambleton and Swaminathan (2013) said that IRT is predicated on three premises: parameter invariance (item characteristics do not depend on the distribution of participant ability parameters and participant characteristic parameters do not depend on item characteristics), local independence (the attitude of the ability that affects a test is constant), and one-dimensionality (each test item only measures one ability). Hori et al. (2022) have developed analytical methods and MIRT package-implemented algorithms. Different item response models, such as unidimensional and multidimensional for dichotomous and polytomous, are included in MIRT packages. Additionally, MIRT packages offer a wide range of functions, including DIF analysis, that can be used for real-world analysis in testing activities. Additionally, psychometric analysis techniques including diagnostic categorization, invariance testing, and response style analysis can be carried out using MIRT programs.

## 3 METHOD

## 3.1 Research Approach

Sugiyono (2016) that the goal of quantitative research is to test hypotheses by collecting data using research instruments, analyzing the data quantitatively or statistically, and analyzing the results. It is founded on the positivist ideology. Researchers undertake correlation study to ascertain the degree of association between two or more variables without altering, enhancing, or manipulating the data already available (Arikunto, 2016). Quantitative research was conducted using both online and paper-based

questionnaires as the instruments. Using a quotation sampling approach, the study's subjects included ECE teacher and parents in Patikraja, Banyumas. The Hussein (2011) self-report scale for measuring children's social abilities was utilized in this study. This scale is based on item response theory. The generalized partial credit model (GPCM) is used in the social skills assessment grid to refer to children's self-reports that are based on item response theory. Twenty one statements about social skills are seen in the research tool in three categories: social rules, liking, and social intelligence Hussein (2011).

## 3.2 Participant and Procedure

The subjects of this study were kindergarten/early childhood students, parents, and teachers in Patikraja, Banyumas, Indonesia. The research procedure begins with the preparation and distribution of questionnaires. As 300 questionnaires were distributed to 7 RA/TK in Patikraja sub-district. Data collection obtained 250 questionnaires that were filled out and continued examination completeness of questionnaire data. Based on the results of the data completeness check Filling out questionnaires, 237 questionnaires were obtained that met the completeness of the data and further analyzed using statistics.

## 3.3 Instruments

There are two instruments were used in this study. The instrument of gadget usage intensity was created to know the frequency and duration of gadget usage in children. The instrument of social skills used for research was developed by Hussein (2011) which refers to the assessment of children's social skills self-report scale based on grain response theory. The social skills assessment grid refers to a child's self-report based on item response theory using the generalized partial credit model (GPCM). In the research instrument, there are 21 statements about social skills seen in three aspects, namely social rules, preferences, and social intelligence (Hussein, 2011).

Variable Aspect		Indicator	Questions	
Gadget	Frequency	The multiplicity of uses gadgets every day	How many times to play gadgets every day?	
Usage Intensity	Duration	Required time to use gadgets every day	How long (hours) playing gadgets every day?	
	Social Rules	Children abide by the norm prevailing in society	1, 3, 6, 9, 10, 11, 12, 14, 19, 20	
Social Skills	Likeability	Children are accepted well in the environment	2, 7, 13, 16, 18	
	Social Ingenuousness	Children can face and react to social situations well	4, 5, 8, 15, 17, 21	

Table 1	Research	Instrument
Table 1	Research	Instrument

## 3.4 Data Collection and Analysis

This study used several data collection techniques to complement several kinds of research-related needs. The technique in this study is in the form of a survey through the distribution of questionnaires to teachers (offline) and parents (online) by random sampling. Data analysis is an activity to find answers to all predetermined problem formulations, so that a conclusion is obtained from the problem being studied. The inferential analysis using a multiple linear regression test was utilized to analyze the study's data.

# 4 RESULT AND DISCUSSION

In order to find, develop, and prove a body of information that can be used to comprehend, address, and foresee problems, a sequence of scientific activities known as research must be conducted (Sugiyono, 2017). The study's findings may include the disclosure of research instrument data as well as the conclusions of data analysis performed to address relevant issues. Kindergarten kids in the Patikraja made up the 237 respondents for this study Two weeks after sending questionnaire surveys to teachers at the school (offline) and parents (online) along with instructions on the purpose and sampling period.

# 4.1 Result

The research was conducted in 7 RA/TK locations consisting of 2 RA and 5 TK. The selection of this location is based on a sample calculation adjusted to the number of students so that this research can be carried out effectively and efficiently. The results of data collection obtained as many as 237 respondents with teachers and parents as assessors. A total of 129 respondents (54.43%) were male and 108 respondents (45.57%) were female. Most (94.09%) of the respondents' fathers worked, while their mothers (74.68%) did not work (housewives). The education level of the respondents' parents also varied. A total of 2.50% had elementary school education (SD); 29.50% junior high school (SMP); 52.80% senior high school (SMA/K); 5.10% intermediate experts (D1/D3) and 12.5% undergraduate (S1). Data on the characteristics of research respondents can be seen in Table 2.

Criteria	Group	Amount	Percentage (%)	
Gender	Male	129	54,43	
	Female	108	45,57	
	Total	237	100,00	
Parental education	SD	6	2,50	
	SMP	70	29,50	
	SMA/K	125	52,80	
	D1/ D3	12	5,10	
	S1	24	10,10	
	Total	237	100,00	
Dad's activities	Work	223	94,09%	
	Not working	14	5.91%	

Table 2. Characteristic of respondents

	Total	237	100,00
Mom's activities	Work	60	25,32%
	Not working	177	74,68%
	Total	237	100,00

Furthermore, the normality test with the Kolmogorov-Smirnov test (N = 237; N > 100). The normality assumption is performed on error data as the basis for measuring the linear model. Therefore, performing the normalcy test in every research study is crucial. The normality test results show that the P value = 0.001 - 0.002 (P < 0.05) is significant and normally distributed.

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
X1	0.346	237	0.001	0.774	237	0.001
X2	0.176	237	0.001	0.888	237	0.001
Y	0.072	237	0.004	0.978	237	0.002

Lilliefors Significance Correction

A multicollinearity test was performed to confirm the relationship between the intensity of gadget use by parents and the intensity of gadget use by kids. The multicollinearity test results show that the VIF value is 1.032 with a tolerance value of 0.969. This indicates that there is no multicollinearity between the two variables.

Table 4 Multicollinearity coefficients

Model		<b>Collinearity Statistics</b>		
		Tolerance	VIF	
1	X1	0.969	1.032	
I	X2	0.969	1.032	

Judhita in Supandi (2020) With minor adjustments, the duration of gadget use can be divided into three, namely low (use of less than 120 minutes), medium (use of 121-180 minutes), and high (use of more than 180 minutes). Table 5 displays the findings of the descriptive study of the frequency of gadget use by parents and kids, both boys and girls.

	Gadget usage intensity		Percentage (%)	
Parents	0-120	86	36,30	
	121-180	41	17,30	
	181-660	110	46,40	
	Total	237	100,00	
Boys	0-120	24	18,60	
	121-180	2	1,60	
	181-960	103	79,80	
	Total	129	100,00	
Girls	0-120	19	17,60	
	121-180	1	0,90	
	181-660	88	81,50	

Table 5. Descriptive analysis of gadget usage intensity

The level of parental gadget use served as the study's control variable. A linear regression test was used to analyze statistical data. The coefficients table contains the findings of the Lin-ear regression test between the intensity of children's gadget use on social skills, both controlled and uncontrolled by the intensity of parental gadget use.

Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		-
1	(Constant)	66,314	1,982		33,462	0,001
	X1	-0,239	0,724	-0,021	0,329	0,742
2	(Constant)	78,535	2,021		38,866	0,001
	X1	-0,616	0,602	-0,055	1,023	0,307
	X2	-5,345	0,515	-0,563	-10,389	0,001

 Table 6. The Regression Coefficient of Children's Gadget Usage Intensity on Social Skills Mediated By

 Parental Gadget Usage Intensity

Table 6 shows the regression coefficients obtained by children's gadget use intensity on social skills controlled by parents' gadget use intensity. Based on Table 8, children's gadget use intensity (X1) does not affect social skills. The B value is -0.239 with a significance of 0.742. Even after controlling for the parent's (X2) level of gadget use, children's (X1) level of gadget use has no impact on social skills. The level of parental gadget use, however, has an impact on kids' social abilities, B value of -5.345 with significance P = 0.001. A regression equation can be formulated for the influence of children's gadget usage intensity on social skills controlled by parental gadget usage intensity. The regression equation is as follows:

 $y = 78,535 - 0,616x_1 - 5,345x_2 \quad (1)$ 

The regression coefficients of the intensity of gadget use in children and parents on social skills are -0.616 and -5.345, respectively. The negative regression coefficient indicates that the relationship between the two variables has an opposite effect. In this study, low intensity has a value x = 1; medium, x = 2; and high, x = 3. If gadget usage intensity of children and parents have low intensity (x = 1), social skills will experience a decrease in score by 5.961 (7.6%). The more the intensity of gadget use in children and parents increases, the more children's social skills decrease.

## 4.2 Discussion

The research's findings indicate that both parents and children use gadgets for more than 180 minutes every day. The level of intensity of gadget use is high. Parents need to be on the lookout for their children using technology. Children's device use should be monitored and limited by parents. Parents should also limit their usage of technology when their kids are around. This is a preventative measure to keep kids from becoming addicted to their gadgets, which can harm their social skills. Alexander L. & Hamzah (2018) found that kids exclusively use technology for fun things like playing games and viewing videos. More than 40% of kids do not adhere to the American Academy of Pediatrics' (AAP) guidelines when using electronics. Children should use electronics for no more than two hours a day, per AAP standards. Overuse of screens can have an impact on kids' mental health.

Srinahyanti et al. (2018) revealed that one of the signs of gadget addiction is that children have longer gadget playing activities and increase the duration every day. Addiction develops when a substance that makes kids happy causes their brains to overproduce dopamine. Dopamine overdose will interfere with the hypothalamus' ability to control emotions and mood (causing feelings of extreme happiness and overconfidence). Contrary to youngsters who use gadgets sparingly, kids who play a lot of video games on them tend to have trouble focusing. It is recommended that youngsters use devices for 5 to 30 minutes, once or twice per day, starting at a young age. If it does, the responsibility for control falls to the parents. Cahyani et al. (2021) in their research stated that most parents of Kuncup Harapan kindergarten students have implemented restrictions on gadget use. Efforts that have been made include limiting screen time, selecting child-friendly video content, and implementing rules for gadget use. The balance of physical activity and screen time must also be balanced.

In their research, Dalmacio et al. (2023) revealed the importance of giving children the right amount of time for learning and screen time with regular supervision to maintain a balanced lifestyle. Children's social relationships are formed through physical activities such as playing outside to help in gaining self-confidence. Children should be trained to act right and behave well because of the right amount of time balance between screen time and completing activities at home and school by developing guidelines and directions. Limited use of gadgets avoids incomplete work and helps in task completion.

Al Sagr and Al Sagr (2020) revealed that constructively using gadgets leads to a healthier and more efficient mind. Optimal use of gadgets in children is done through regular supervision and monitoring. It is often difficult for parents to determine the time of gadget use in children. Various mechanisms can be adjusted to avoid gadget abuse with proper monitoring and control mechanisms. To prevent the negative impacts of device addiction in children, this is being done. Inferential data analysis is used in this correlational investigation. The relationship between children's gadget uses and social skills is not particularly significant. This is consistent with studies Sujianti (2018) did on pupils at Al-Irsyad 01 Cilacap Kindergarten. In all, 62.3% of kids used devices at typical periods (around 60 minutes daily), and there was no connection between the frequency of kids' gadget use and their social development. 50.9% of kids had the best social development. However, there is a significant association between children's level of gadget use, as mediated by parents' level of gadget use, and social skills. According to Hidayati and Zaman (2021), parents' behavior in managing and supervising children through discussions and restrictions on their use of gadgets is known as their "mediation strategy." Parents also use mediation to increase the advantages and minimize the negative effects of technology use.

There are different types of parental mediation tactics for children's gadget usage, including active, restricted, and co-view mediation. The most crucial parental mediation method for kids who use technology is active mediation. Parents talk to their kids about proper content and conduct when using technology. Children's use of devices is significantly influenced by how their parents introduce them to them. The second mediation strategy is restrictive. In this mediation, parents apply rules to control gadget use in children. This strategy applies rules that must be obeyed by children, both in terms of duration and frequency of use. This strategy is the most effective and commonly used because it is more convenient for parents and there are positive results in managing gadget use. Furthermore, the co-view mediation strategy can be defined as the actions of children and parents that are carried out together using gadgets. Through co-view mediation, parents can monitor and limit children's gadget usage but do not always involve conversation in it (Hidayati & Zaman, 2021). Nuhla et al. (2018) reported that 72.9% of parents chose co-view mediation, 12.1% restrictive and 2.8% active. Some parents still need support when facing difficulties controlling gadget use in children.

Parents play a role in children's education to make the younger generation have character. Ahmadi in Sihura (2018) explains the role of parents in education. After a family is formed, each family member has their duties which are referred to as family functions. Therefore, family functions are tasks that must be performed inside or outside the family. Parents are the first and primary educators of their children. Parents are responsible for the spiritual, social, skills, and knowledge values that are passed on to their children. Parents are also required to know the values that their children get at school are related to the values taught in their household. Rizki et al. (2021) said parents play an important role in learning at home, from preparing learning needs to completing homework.

The research of Pardede et al. (2018) indicated that one of the key elements that greatly contribute to social skills is parental connection. John Bolwby (2008) in Pardede et al. (2018) claim that the relationship between children and parents builds self-confidence, preparing kids for social situations. Parental attachment is an affection-infused interpersonal link between parents and children that results in a strong emotional connection. Children's behaviors and level of physical activity at home are influenced by parents' roles. According to Carson et al. (2019), parenting practices have a significant impact on children's social abilities. According to Cáceres et al. (2021), social skills are best developed in children who experience early adversity when they are raised in families rather than orphanages, especially when the viewpoint of the primary caregiver is taken into account.

Most of the parents and kids in this survey fall into the high group for intensity of gadget use. The outcomes of the multicollinearity test reveal a lack of collinearity between the two. Neither the intensity of parental gadget usage nor the intensity of kid gadget use is influenced by parental use. Parents' use of gadgets is unaffected by how much their kids use them. Future facets of life are impacted by research on how young children learn social skills, which is of utmost importance. According to Walker and Rinaldi (2020), social skills include a child's capacity to behave in accordance with social norms, such as demonstrating empathy and concern for others, resolving conflicts amicably, and interacting within broader social norms and ideals. Children with good social skills have good care and empathy for others. In addition, they have a greater chance of success in the future. Frogner et al. (2022) indicated that consistent high social skills boost the likelihood of good school achievement in primary school whereas stable low social skills increase the probability of bad school performance. The study also looked at preschoolers' social and emotional development as well as their academic abilities. In addition to academic skills, it was shown that adaptive skills were higher in the fall and spring. Additionally, during the preschool year, the level of adaptive skills greatly rose. Given these findings, early learning programs should incorporate elements that encourage the development of early childhood adaptive skills in addition to a focus on children's academic abilities.

Maleki et al. (2019) recommended that factors associated to family and socioeconomic position, such as income, parents' educational attainment, mother's age, teacher choice for this age group, and the number of students in each class, should receive more attention to improve children's social skills. But here are the findings of the study. Environmental education can also be used to enhance the development of social skills. Ardoin and Bowers (2020) revealed that early childhood environmental education effectively encourages children to explore the environment, strengthen self-confidence, and establish social interactions, developing a cognitive framework for understanding the natural world. In addition, this environmental education fosters basic skills related to taking action to improve and protect the environment. Unlu and Ceviker (2022) are slightly contradictory. The results of the study of students who participated in recreational activities showed that age and grade variation affected children's social skills. However, gender and parental education did not affect social skills. Sheridan et al. (2022) demonstrated that flexible regulations may help to promote social skill development and curb negative behaviors. Understanding teacher-parent and studentteacher relationships is crucial in this regard, with a focus on observing interactions over time.

Developing children's social-emotional development can be done through a series of interventions. Martikainen et al. (2023) conducted research on children's social-emotional development through SAGA (shared inner storybook reading) and Pikkuli pedagogy. Children that participated in the SAGA intervention demonstrated gains in social orientation and prosocial conduct but had little problems with internalizing and externalizing issues after the session. Children who received the Pikkuli intervention made progress in their prosocial conduct and experienced fewer internalizing issues afterward. The social and emotional development of youngsters can benefit from both

approaches. Bräuninger and Röösli (2023) suggested that Psychomotor therapy's benefits promote the growth of social skills and lessen problematic conduct.

According to the statement items in the questionnaire, the social rules items (1, 3, 6, 9, 10, 11, 12, 14, 19, and 20), likeability items (2, 7, 13, 16, and 18), and social ingenuousness items (4, 5, 8, 15, 17, and 21) are all aspects of children's social skills that are assessed. The findings demonstrated that practically every youngster who responded always offered instructions. Clearly, this needs to receive more attention. Parents must always teach their kids how to be independent. Parents should instruct youngsters to complete tasks on their own if they are ones that they can perform. If a child speaks too loudly frequently, their pals may not like them as much. The child's attitude needs to be changed so that it doesn't become ingrained. Additionally, to enhance students' social skills, the involvement of teachers in the classroom must be maximized.

Inomjonovna and Erkinovna (2023) stated that activities to optimize teacher professionalism can be carried out by enriching knowledge about methods of determining the mental state in kindergarten. In addition, teachers should expand effective pedagogical methods for the prevention of emotional stress in preschool children. Preschool teachers have serious difficulties in working with aggressive children. A low psycho-logical and educational level is a characteristic of many kids whose aggressiveness has significantly increased. The goal of preventing aggressive behavior is to build self-confidence, develop a sense of empathy and social skills.

The teacher may ask the student to participate in cognitive exercises. Psych gymnastics, art therapy, music therapy, color therapy, behavioral training, dramatization games, and open-ended games with rules are some of the techniques used to comprehend the essence of personality traits and how they manifest. Raine et al. (2019) reported that providing omega-3s in conjunction with standard care (medication and parent training) had a positive effect on reducing aggressive reactions. However, the effect only generated preliminary support and was limited to reducing externalizing behaviors. According to Inomjonovna and Maxmudjon qizi (2022), the development of aesthetic views of culture, including imagination, thinking, speaking, acting, working, aesthetic taste, creativity, etc., aids in the development of visual and creative abilities. Through creativity, the child's personality and identity are expressed. Manual work is a genuine creative teaching method. The emergence of initiative and independence is stimulated by the development of the child's artistic and creative skills at all stages. Decisions, the practice of freely expressing thoughts, and confidence will all develop as a result. According to psychologists, the mind and the entire spiritual world have a role in how a person's psyche develops.

## 5 CONCLUSION

The findings indicated that there is no significant relationship between the level of gadget usage among ECE students in Patikraja and social skills, with a value of P = 0.742 (P > 0.05). The more ECE students use it, the less social skills change considerably overall in Patikraja, regardless of usage intensity. With a B score of -0.239 and a P value of 0.742, Patikraja ECE students' level of gadget use has a detrimental effect on their social skills. The level of gadget use among ECE students in Patikraja has little impact on their social skills. It is not statistically significant (P = 0.742; P > 0.05) and has a B value of -0.239 indicating the degree of gadget usage among ECE students in Patikraja has a negative impact on social skills. The amount of time ECE students in Patikraja spend on their gadgets is increasing, yet it has little impact on how well they interact with others. With B values of -0.616 (X1) and -5.345 (X2), the amount of gadget usage by ECE pupils in Patikraja, which is mediat-ed by the amount of gadget usage by parents, has a significant negative influence (P = 0.001; P 0.05). Social skills decline by 5.961 (7.6%) because of an increase in ECE children' gadget usage, which is mediated by parental gadget usage intensity.

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