The Impact of Peer Interaction and Gadget Addiction on the Subjective Wellbeing of 5–6-Year-Old Children in Java, Indonesia: A Quantitative Study

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Abstrack

The advancement of digital technology has altered children's social interactions, particularly in Indonesia, where early gadget use may limit direct peer contact and impede social-emotional development. Although positive peer relationships are essential for children's subjective well-being, studies examining the link between gadget addiction, peer interaction, and well-being in early childhood within a local cultural context are still scarce. This quantitative study surveyed 400 children aged 5–6 years in Java, Indonesia, using questionnaires on peer relationships, gadget addiction, and well-being. Multiple linear regression and path analysis revealed that peer interaction significantly influences subjective well-being ($\beta = 0.362$, $p < 0.001$), while gadget addiction was not directly significant ($\beta = 0.013$, $p = 0.165$). Gadget use, however, served as a mediating variable. These findings emphasize the importance of promoting strong peer interactions and managing screen exposure to support emotional and social development in early childhood.
Keywords: peers; children, subjective well-being, gadget addiction

Abstrak

Kemajuan teknologi digital telah mengubah interaksi sosial anak-anak, khususnya di Indonesia, di mana penggunaan gadget sejak dini dapat membatasi kontak langsung teman sebaya dan menghambat perkembangan sosial-emosional. Meskipun hubungan teman sebaya yang positif sangat penting untuk kesejahteraan subjektif anak-anak, penelitian yang meneliti hubungan antara kecanduan gadget, interaksi teman sebaya, dan kesejahteraan pada anak usia dini dalam konteks budaya lokal masih langka. Studi kuantitatif ini mensurvei 400 anak berusia 5-6 tahun di Jawa, Indonesia, menggunakan kuesioner tentang hubungan teman sebaya, kecanduan gadget, dan kesejahteraan. Regresi linier berganda dan analisis jalur mengungkapkan bahwa interaksi teman sebaya secara signifikan mempengaruhi kesejahteraan subjektif ($\beta = 0{,}362$, $p < 0{,}001$), sedangkan kecanduan gadget tidak secara langsung signifikan ($\beta = 0{,}013$, $p = 0{,}165$). Penggunaan gadget, bagaimanapun, berfungsi sebagai variabel mediasi. Temuan ini menekankan pentingnya mempromosikan interaksi teman sebaya yang kuat dan mengelola paparan layar untuk mendukung perkembangan emosional dan sosial pada anak usia dini.
Keywords*: teman sebaya, anak-anak, kesejahteraan subjektif, kecanduan gadget*

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INTRODUCTION

The emergence of digital technology has profoundly altered children's daily experiences, especially in their social interactions. Research in OECD nations indicates that children utilize electronic devices for an average of 2–4 hours daily (Econ et al., 2023). Bandura's Social Learning Theory (1977) posits that infants develop emotional regulation and social skills by seeing and imitating the behaviours of others, especially through direct interactions with peers. The augmented duration of screen time may diminish opportunities for in-person social interactions, potentially hindering children's ability to exhibit suitable emotional responses and social behaviours. As screen-based activities supplant real-life interactions, the fundamental mechanisms by which children develop social competence, namely, imitation, feedback, and reinforcement, may be compromised.

Research in Indonesia has shown that children often encounter various challenges during their early schooling years, particularly related to their social and emotional well-being (Borualogo, 2022). While school-based psychological interventions have been introduced to address these concerns, they are generally more effective when implemented as universal, school-wide programs targeting all students (Saroinsong et al., 2025). Despite these efforts, reports such as UNICEF Innocenti (2021) indicate that the overall well-being of Indonesian children remains low, and there is still a lack of comparative research examining the effectiveness of such programs in promoting students' well-being.

In this context, the school environment, including peer relationships and patterns of digital media use, plays a critical role in shaping children's subjective well-being. The study "Choosing Peers or Gadgets Towards Children's Subjective Well-Being" addresses this gap by exploring how peer interaction and gadget use influence the emotional states of young children. Similar to findings in Indonesia, where school-based well-being programs face obstacles such as time limitations and limited teacher readiness, this study emphasizes the importance of understanding key variables that affect children's well-being in the classroom (Sumari et al., 2025). By identifying peer support and gadget use as influential factors, this research contributes to efforts aimed at designing feasible, teacher-delivered interventions to promote student well-being in universal school settings (Borualogo & Casas, 2021).

While well-being refers to subjective feelings, experiences, and living conditions, significant dimensions of subjective well-being include happiness and life satisfaction. Innocenti Report Card 16 (UNICEF Innocenti Research Centre, 2021) ranked 41 countries that belong to the Organization for Economic Co-operation and Development (OECD)1 and the European Union (EU) on child well-being outcomes. Although Indonesia was classified first in physical health, it was ranked 37th in mental well-being, including life satisfaction and suicide rates. Indonesian students tend to experience significantly more difficulties in interpersonal relationships as well as more intense feelings of powerlessness. Moreover, female Indonesian students appear to be the most vulnerable, ranking the lowest of all groups on resilience scores

Furthermore, research in Indonesia has demonstrated that 17.8% and 17.6% of first-graders suffer internalizing and externalizing problems, respectively (Tong, 2025). Thus, indicating that their difficulties start at the beginning of their schooling. Indonesian schools face an epidemic of mental health problems, which lead to high rates of nonattendance in primary and junior high schools. Despite legislative endeavours such as enacting a law to provide various opportunities for flexible learning, nonattendance

increased to 8.20% in 2020, which corresponds to approximately 2% of students. Of these, 65.7% received professional support such as counseling (Borualogo et al., 2022)

COVID-19 seems to have had a more adverse effect on Indonesian children than conditions before the pandemic. Childline Support Centre Indonesia, a free and anonymous telephone counselling service for children, reported that the suicide rate among children and adolescents increased by 49% from June to October 2020 during the second wave of COVID-19 infections. In 2020, 415 students from primary, junior, and high schools committed suicide, which is the worst recorded number. Children who are diagnosed with mental health problems tend to suffer from the disorder in adolescence, too, and develop new psychiatric symptoms subsequently. Therefore, they must receive treatment in early childhood or adolescence to ensure long-term well-being.

Schools have long been recognized as appropriate environments for promoting mental health and emotional well-being, as they provide structured settings where children spend much of their developmental years. Beyond academic instruction, schools are increasingly expected to address a wide range of social and emotional issues, including substance use, digital literacy, and character education through a population health approach. Reviews of school-based mental health programs have identified key areas of impact, such as help-seeking behaviour, emotional regulation, and psychoeducational awareness.

In Indonesia, for example, the application of Cognitive Behavioural Therapy (CBT) at a universal level has proven effective in reducing depression and anxiety among school-aged children (Manana et al., 2024). However, despite some promising outcomes, variations in effectiveness and a lack of large-scale research highlight the need for more context-sensitive and feasible approaches. It has been suggested that integrating evidence-based practices from positive psychology, effective teaching strategies, and a supportive school culture can enhance the success of interventions.

Positive education can be seen as a blend of conventional educational practices and the exploration of happiness and well-being. It has developed as a branch of positive psychology, emphasizing psychological and social dimensions, with a key focus on individuals' personal experiences rather than external factors. According to White and Murray, positive education may include evidence-based strategies and initiatives from positive psychology that aim to enhance students' overall well-being.

The seven domains of child well-being, including family and social environment, economic circumstances, healthcare, physical environment and safety, behaviour, education, and health, are essential when considering factors that influence children's subjective well-being in Indonesia. Research has shown that school-based interventions positively impact a wide range of outcomes related to well-being, including mental health, social and emotional skills, and educational achievement (Gavin et al., 2023). Similarly, longitudinal studies have demonstrated that social and emotional competencies assessed in childhood are linked to long-term health, education, and overall well-being. In the Indonesian context, this aligns with findings that show how multiple variables, such as peer relationships and digital media use, influence both current and future well-being.

Well-being at school is shaped by the balance between environmental factors and students' personal needs and expectations. A positive school culture, as a key indicator of students' well-being, reflects this harmony. In Indonesia, studies on children's well-being also highlight the importance of social relationships with peers and adults (Kaloeti et al., 2021). Research found that peers and gadget addiction significantly influence children's

subjective well-being, emphasizing the impact of social relationships and technology on children's emotional health (Saroinsong et al., 2022).

Social support, identified as a protective mechanism, plays a critical role in supporting well-being. In the Indonesian study, social support from peers and parents, as well as the influence of gadgets, has been shown to mediate children's well-being, suggesting a complex interaction between peer relationships and technology use (Irzalinda & Latifah, 2023). These findings align with international research indicating that classroom environments and social support have a significant impact on students' emotional and social outcomes (Abdollahian et al., 2024).

In the Japanese context, Matsumoto et al. (2025) found that the classroom environment and social adjustment have a direct influence on children's well-being. Conversely, in the Indonesian context, particularly in Java, early childhood social interactions, including peer relationships and gadget usage, significantly impact their subjective well-being. This study aims to quantitatively evaluate the impact of peer interaction and gadget addiction on the subjective well-being of children aged 5 to 6 years in Java, Indonesia. This research is innovative in its examination of the relationship between social interaction and digital addiction in early childhood within the local cultural context. This area has been infrequently addressed empirically. This study posits that peer interactions directly impact children's subjective well-being, whereas gadget addiction indirectly affects it through the mediation of social connection quality.

METHOD

A cross-sectional research design, which collects data at a single point in time, was employed to assess the direct effect of classroom adjustment on well-being and the indirect effect of social support on student well-being through the mediation of classroom adjustment.

Population and Sample

The population in this study consists of early childhood-aged children, 5 to 6 years old, who live with their parents on the island of Java, totalling around 3.3 million children. In this study, the researchers narrowed the population by calculating the sample size, which was carried out using the Sölvyn technique, resulting in a sample of 400 respondents. The sample taken by the researcher used a purposive sampling technique. The criteria for this research sample are children aged 5–6 who use gadgets and who live with their parents, domiciled on the island of Java in the provinces of East Java, Central Java, and West Java. Data were collected through a questionnaire administered to 400 respondents, who were selected using a purposive sampling technique. According to the results of the Slovin formula sample calculation, parents represented the respondents who filled out the questionnaire. The respondents in this study have the following description:

Table 1.
Characteristics of Respondents

Characteristics		Frequency	Total Respondents
Age	5 Years	199	400
	6 Years	201	
Gender	Male	184	400
	Female	216	
domicile	East Java	105	400
	Central Java	148	
	West Java	147	

Based on the table above, among the 400 sample respondents in the age group, there were 201 children aged 6 years and 199 children aged 5 years, comprising 216 girls and 184 boys. Based on the type of domicile where they live, respondents from Central Java are the most dominant, with 148 children out of all the respondents. Respondents from West Java were particularly involved in this study, comprising 147 children. Meanwhile, as many as 105 children live in East Java. In this study, respondents with a duration of use of 1-2 hours represented 261 children. While using gadgets for 2-3 hours, 139 children were involved. The application often used by children when playing with gadgets is YouTube, with 212 children. Besides YouTube, 144 children also use gadgets to play games. Likewise, with the TikTok application, as many as 44 children also play the application on their devices.

Instrument

The researcher uses a questionnaire instrument (Google Form) to determine whether one variable affects other variables. There are three questionnaires: peer variable questionnaires, gadget addiction variables, and children's subjective well-being.

Peers

The measuring tool used to assess peers is based on peer interaction indicators proposed by Partowisastro, which were developed from the theory of George Herbert Mead (Gryphon et al., 2009) as a research foundation. These indicators include individual openness within groups, individual cooperation within groups, and the frequency of individual interactions in groups.

Children's Subjective Well-Being

Subjective well-being refers to an individual's perception of their life experience, encompassing both cognitive and affective evaluations. Researchers employed two measurement scales to assess mental and affective evaluations. The cognitive evaluation dimension is measured using the Children's Worlds Subjective Well-Being Scale Version 5 Statement (CW-SWBS5), which has been adapted and validated for use in Indonesia (Borualogo & Casas, 2019). Researchers also used the Children's World Positive and Negative Affect Schedule (CW-PNAS) to assess positive and negative affect, based on the affect scale developed by Barrett and Russell (1998). The Children's World Positive and Negative Affect Schedule (CW-PNAS) consists of one positive affect and one negative affect measure for groups of children aged 8 years and under.

Overall, the measurement tools used to assess subjective well-being variables are the Children's Worlds Subjective Well-Being Scale (CW-SWBS) and the Children's Worlds Positive and Negative Affect Schedule (CW-PNAS), which were developed by researchers based on adaptations from experts.

Gadget Addiction

The measuring instrument used to measure gadget addiction is the Smartphone Addiction Scale-Short Version (SAS-SV), which is translated into Indonesian to measure the respondent's risk of smartphone addiction. The SAS-SV was modified to use simple language and tested for content validity by child psychology experts before use. Smartphone Addiction Scale-Short Version (SAS-SV) is a shortened version of SAS, which was also developed by Kwon et al. (2013). The scale consists of 10 items and measures six dimensions of smartphone addiction: daily life disturbances, positive anticipation, withdrawal, tolerance, orienting relationships in cyberspace, and overuse of smartphones.

Research Procedure

The data collection technique used in this study was the distribution of questionnaires. Three questionnaires were distributed through Google Forms, consisting of peer questionnaires, gadget addiction questionnaires, and children's subjective well-being questionnaires. The questionnaire consists of demographic data and checklists. In the first part of the questionnaire, demographic data are provided, containing the characteristics of the children, to understand the characteristics of the research sample and gain a more comprehensive understanding of the population being studied. These characteristics include age, gender, and domicile of residence, among others. The checklist sheet consists of three questionnaires; each research questionnaire instrument uses a Likert scale. In this Likert scale, researchers use scale points from 1 to 4, with alternative answers: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). Researchers do not include alternative neutral answers because these answers do not provide much information about what is expected by researchers. Neutral answers may indicate the respondent's uncertainty or lack of knowledge, but they do not provide clear information about their opinion or views on the topic under study. Therefore, the researcher wants a more specific and informative answer.

Analysis Procedure

Analysis of the data obtained in this study used the help of the SPSS software statistical calculation program version 26. With the help of this software the analysis carried out by researchers was classical assumption tests, validity and reliability tests, and inferential tests using MACRO PROCESS Model 4 (Hayes, 2013).

Classic Assumption Test

The classic assumptions needed in this study are normality, linearity, and homogeneity. The data normality test aims to test whether the data from each research variable is normally distributed or not. The linearity test is used to determine whether the independent variable (X) and the dependent variable (Y) exhibit a linear relationship. While the homogeneity test is carried out to ensure that two or more sample data sets come from populations with the same (homogeneous) variance. The results of the test in this study can be seen in the table below:

Table 2.
Classical Assumption Test Results

Classic Assumption Test	Variable	Significance Value
Normality Test	P, GA, SWB	,200
Linearity Test	P to SWB	,743
	GA to SWB	,653
Homogeneity Test	P	,229
	GA	,085

In the normality test using the One-Sample Kolmogorov-Smirnov Test, the linearity test using Compare Means, and in the homogeneity, test using Levene's Test, to identify data that is normally distributed, and can be said to be linear and can be declared homogeneous, or the sample data comes from a population with the same variance. The result of the test must have a value greater than 0.05.

As shown in Table 2, which presents the results of data analysis, the significance values for the normality test and linearity test are greater than 0.05. It can be inferred that the results of the study on the research variables are normally distributed, and there is a significant linear relationship between the Subjective Well-being of the Child variable and the Peer variable, as well as between the Subjective Well-being of the Child and the Gadget Addiction variable. Meanwhile, the Peers and Gadget Addiction variables in the homogeneity test also have greater than 0.05. In accordance with the provisions, a significance value greater than 0.05 can mean that there is homoscedasticity, or the sample data comes from populations with the same (homogeneous) variance.

Validity and Reliability Test

The instruments in this study will be tested for validity and reliability. There are three instruments, including peers, gadget addiction, and children's subjective well-being. Before distributing the questionnaires to the sample, the researcher conducted a trial of the instruments on respondents who met the same criteria but were from different locations, specifically in the Province of DKI Jakarta, with a total of 50 respondents.

Table 3.
Validity and Reliability Test Results

VALIDITAS	VARIABLE	CRONBACH ALPHA	≈	*ROLE OF THUMB*
20 items Valid 1 item Invalid	Peers	0,846	>	0,6
8 items Valid	Subjective Well-Being	0,676	>	0,6
18 items Valid 2 item Invalid	Gadget Addiction	0,947	>	0,6

Based on the results of the questionnaire, which contained three variables, 50 respondents completed the questionnaire in this study. To determine whether the questionnaire is valid, compare the value of r count with the r table for the degree of freedom (df) = n-2. Then, calculate the amount of df data as 50-2 = 48. With df = 48 and alpha = 0, 05 obtained r table = 0.2787 (by looking at the r table at df = 48 with a two-

tailed test). Thus, the questionnaire statement can be said to be valid if the value of r count is greater than r table (0.2787). From the results of the validity calculation in the table above, r count > r table. 46 questionnaires are declared valid, and three questionnaires for which r count < r table are declared invalid.

Based on the results in Table 3, the Cronbach's Alpha for the peer variables, subjective well-being, and gadget addiction is more than 0.6. Therefore, it can be concluded that all statement items from the three variables used in the questionnaire are reliable.

Inferential Test

Inferential statistical analysis is a research technique that tests a hypothesis and relates one variable to another. The inferential tests needed in this study are correlation, multiple linear regression and path analysis. The correlation test in this study employs the Pearson Product-Moment theory, which is based on the Pearson correlation coefficient, which measures the strength of the linear relationship between the two variables. Multiple linear regression is an extension of simple linear regression, where more than one independent variable is used.

RESULT AND DISCUSSION

The data obtained from 400 respondents were analyzed to find the relationship between the existing variables. The analysis used is Pearson Correlation analysis. In the questionnaire that has been returned, analyzed using SPSS 26, and a correlation between the independent variable (X1) and the mediating variable (X2) to the dependent variable (Y), as shown in the table below:

Table 4.
Reability Test Results

Variables	M	SD	α
Student well-being			
Positive emotional state	23.07	5.35	.82
Positive outlook	21.10	5.28	.78
Total	44.29	9.65	.87
Classroom adjustment			
Sense of comfort	12.86	2.75	.72
Sense of fulfillment	5.28	1.78	.62
Sense of acceptance and trust	6.39	1.75	.73
Total	24.56	5.30	.83
Social support			
Family	4.70	1.84	.84
Teachers	3.36	2.17	.82
Peers	4.34	1.85	.79
Others	0.87	1.59	.85
Total	13.27	4.79	.84

The table presents descriptive statistics for three main constructs: Student Well-being, Classroom Adjustment, and Social Support, including the mean (M), standard deviation (SD), and reliability coefficient (Cronbach's alpha, α) for each subscale and overall score.

Under Student Well-being, the Positive Emotional State has a mean score of 23.07 and a reliability of .82, indicating good internal consistency. The Positive Outlook subscale yields a slightly lower mean of 21.10, accompanied by a reliability of 0.78. The total score for Student Well-being is relatively high, at 44.29, with excellent reliability (α = 0.87).

For Classroom Adjustment, the Sense of Comfort shows a mean of 12.86 and a reliability of .72, suggesting moderate consistency. The Sense of Fulfilment has a lower mean of 5.28 and the lowest reliability among the subscales (α = .62). At the same time, the Sense of Acceptance and Trust records a mean of 6.39 with a reliability of .73. The total score for Classroom Adjustment is 24.56 with a reliability of .83.

In the Social Support dimension, support from Family shows the highest mean (4.70) and strong reliability (.84). Support from Teachers and Peers have lower means (3.36 and 4.34, respectively) with good reliability (.72 and .79). Support from Others shows the lowest mean (0.87) and a relatively low reliability (.55). The overall Social Support score has a mean of 13.27 and strong internal consistency (α = .84). Overall, the constructs are measured with generally acceptable to high reliability, except for the "Others" category under Social Support, which presents lower consistency.

Influence of Peers and Gadget Addiction on Subjective Well-Being

Multiple linear regression aims to explain the relationship between p variables X and variable Y. With multiple regression analysis, one can also obtain an explanation of the relative role or contribution of each variable X to variable Y.

Table 5.
Multiple Regression Test Results

Variable	Regression Coefficient (β)	t_{hitung}	Sig.
Constant	2,301	2,618	,009
X1	,362	30,522	,000
X2	,013	1,392	,165
F_{hitung}	**= 476,621**		,000
R Square	**= ,701**		

The regression equation obtained is as follows: Children's Subjective Well-being Scale = 2.301 + 0.362 (Peers) + 0.013 (Gadget Addiction). A constant of 2.301 indicates that if Peers and Gadget Addictions are present, then the Child's Subjective Well-Being Scale scores 2.301, which can be interpreted as positively affecting children's Subjective Well-Being Value. Therefore, in reality, the three variables are on an interval scale; they do not have a "zero" number as is typical of interval scale limits.

The R Square number or the Coefficient of Determination is 0.701, this means that 0.701 or 70.1% of the variation of the dependent variable, namely Children's Subjective Well-Being, can be explained by variations of the two independent variables, namely Peers and Gadget Addiction. At the same time, other causes account for the remaining 29.9% (100-70.1 = 29.9).

According to the ANOVA test or F-test, the F-value is 476,621 with a significance level of 0.000. Because the probability (significance level) is smaller than 0.05, this regression model can be used to predict the level of a child's Subjective well-being. In other words, the Peer Scale and Gadget Addiction simultaneously/jointly influence the level of Children's Subjective Well-Being.

The t-test is used to test the significance of the constants and each independent variable. The hypothesis is constructed. It can be seen that in the Sig. for this variable, Peers = 0.000 has a significance number <0.05, thus Ha is accepted and on the Gadget Addiction variable = 0.165 > 0.05 in other words Ho is accepted, only for the Peer variable it is quite significant affecting the level of Subjective Well- Being a Child, while on the Gadget Addiction variable there is no effect on the level of the Child's Subjective Well-Being. It can be concluded that simultaneously the peer variables and gadget addiction influence Children's Subjective Well-Being with a significant. 0.009, which means that Ha is accepted.

The Influence of Peers on Subjective Well-Being Through Gadget Addiction

The path analysis test (path analysis) in this study used SPSS 26, namely the causal step strategy and the product of coefficients. To see the significance of the direct effect using the causal step, while the indirect effect is addressed using the Product of Coefficient strategy.

Table 6.
Path Analysis Test Results

Variables	Effect of gender				Effect of grade level			
	β	B	SE	95%-CI	β	B	SE	95%-CI
Perceived social support	–.88	5.04	.20	(4.46, 5.44)	.04	1.00	.94	(–.83, 2.84)
Classroom adjustment	–.60	–.66	.13	(–.92, –.41)	–.09	–.43	.28	(–.97, .12)
Student well-being	–.14	–.28	.16	(–.58, .03)	–.01	–.08	.31	(–.69, .52)

p < .05. p < .01. Note. For the analysis of the effect of gender, male was entered as 0, and female was entered as 1.

Table 6 presents the effects of gender and grade level on perceived social support, classroom adjustment, and student well-being. In this analysis, gender was coded as 0 for males and 1 for females. The findings indicate that gender has a significant impact on perceived social support and classroom adjustment. Specifically, being female is associated with significantly higher perceived social support (β = –.88, p < .01) and better classroom adjustment (β = –.60, p < .05). The negative beta values indicate that females scored higher on these variables than males, as females were coded as 1 and males as 0. The confidence intervals for these two effects also do not cross zero, confirming their statistical significance. However, gender does not have a significant effect on student well-being, as the beta value (β = –.14) is not statistically significant and the 95% confidence interval includes zero.

Regarding grade level, the table shows that it has no significant effect on any of the three variables perceived social support, classroom adjustment, or student well-being,

as all p-values are above the conventional significance thresholds and the confidence intervals include zero. Overall, the results suggest that gender plays a more significant role than grade level in shaping students' perceptions of social support and their classroom adjustment.

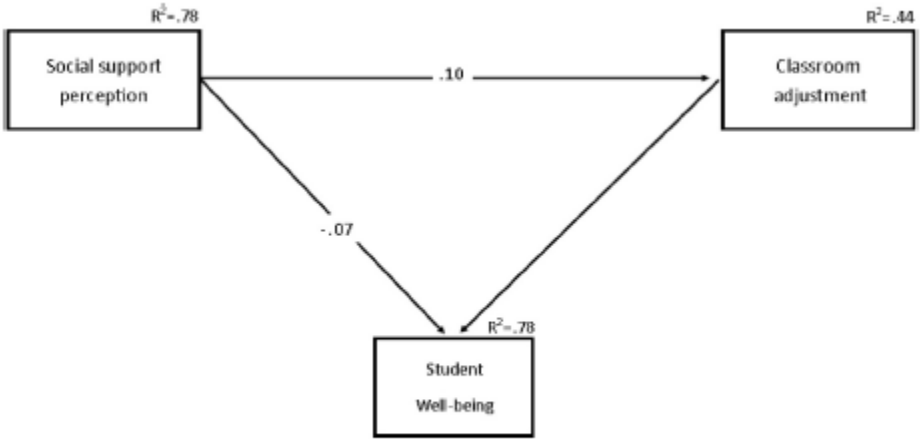

Fig. 1. The effects of classroom adjustment and perceived social support on student well-being.

Picture 1. Improvement of Learning Motivation

Notes:
P : Peers
SWB : Subjective Well-Being
GA : Gadget Addiction

The results of this study revealed that the relationship between peers has an impact on children's subjective well-being. The study's findings indicate that youngsters have a high level of subjective well-being. This concurs with research by Diener (2006)that subjective well-being is an evaluation of one's life that includes both positive and negative aspects. Additionally, research indicates that Diener & Suh (2003) one of the four components of subjective well-being is social relationships. According to Wilson (Diener, 2009), extraverted people are more likely to experience happiness because they require attention from those around them and need companions with whom to share stories or vent. Therefore, contacts with peers generally have a favourable effect on kids' happiness.

According to Seligman (in Effendy, 2016), the positive psychology movement, which focuses on boosting individual happiness and well-being by emphasizing four critical dimensions of a positive life, excellent relationships, personal success, and meaning in life, includes subjective well-being. Therefore, a person in a healthy relationship is likely to experience high subjective well-being. According to research Ye & Ho (2025), the results suggest that a person's level of happiness can be determined by how well they know other people. As a result, whether a person's subjective well-being is high or low depends on how well they know their friends.

Along with peers, the gadget addiction variable has a connection to children's subjective well-being. Still, this connection is unfavourable because excessive use of gadgets can harm kids' physical and emotional well-being. If children use them excessively, they may experience social difficulties and isolation in forming positive relationships with others. Children who use technology excessively may experience emotional issues such as elevated tension, anxiety, and depression. Having a dependency on technology may disrupt a child's emotional equilibrium and make it difficult for them

to experience joy and satisfaction from their daily activities. In order for kids to effectively socialize, parents must be able to prevent them from playing with technology and from ignoring their chores like eating, drinking, studying, and playing with friends (Saroinsong et al., 2024).

As a result of the respondents' strong relationships with peers and their lack of inclusion in the study's study of gadget addiction, it can be said that youngsters have a high level of subjective well-being. According to Saniatuzzulfa & Wijiyanti's (2019), the relationship between subjective well-being and gadget addiction is inversely correlated. Conversely, the level of device addiction increases as subjective well-being decreases. Parents should be aware that peer interactions can significantly impact a child's subjective well-being, depending on their quantity and quality. Children's subjective well-being is more likely to be enhanced by positive, helpful, and healthy peer interactions. Therefore, parents and educators need to foster positive interactions between children and their peers, as well as encourage the development of healthy relationships within their social environment.

Additionally, the results of this study indicate that peers have a significant impact on children's subjective well-being. Peers are a form of friendship that have similarities in terms of age level, behaviour, and social similarity, where the behaviour of one child influences or improves the behaviour of other friends. According to Santrock (2007), peers are children or adolescents of the same age or level of maturity. Individuals need friends to share stories or listen to their concerns. Peers offer peace in times of trouble. It is not uncommon for shy children to become more confident thanks to their peers (Nursalim et al., 2024). So that peers play a unique role in the development of children.

In addition to having a unique role, peers contribute positively to subjective well-being. Peers help children feel included and accepted in their social environment. Through interaction with peers, children can develop social skills such as communication, cooperation, negotiation and empathy. Good social skills help children build positive relationships with others, increase self-confidence and broaden their social network (Saroinsong et al., 2023). This contributes to children's subjective well-being because they feel more capable and comfortable in interacting with others. Through this interaction, children feel accepted and understood by others who share the same interests. This can increase children's joy and satisfaction in the activities they enjoy.

Children who have high subjective well-being tend to have greater motivation and interest in learning. Peers who have high motivation and interest in learning can inspire children to feel enthusiastic about the learning process. Through interactions with peers who are interested in lessons or learning activities, children can feel motivated to follow and enjoy learning. Children with positive subjective well-being tend to have lower stress levels and are better able to manage their emotions. They feel happy and satisfied with their lives in general, including their experiences with learning. This increases a child's intrinsic motivation to seek knowledge, acquire new understandings, and develop academic skills. So that children's happiness can play an important role in influencing their learning readiness, children who have higher levels of happiness tend to have better school readiness skills Eldeleklioğlu, 2015).

Excessive use of gadgets can disrupt a child's emotional, social and physical balance. Gadget addiction can isolate children socially, interfere with adequate sleep, hinder physical activity, and affect academic performance (Huizi et al., 2024). This can lead to increased stress, feelings of loneliness, anxiety, and decreased life satisfaction. It is essential to recognise that the quality and pattern of gadget use can also impact its effect

on children's subjective well-being. If gadgets are used wisely and in moderation, and children continue to have healthy social interactions with their peers, the negative effects of gadget addiction can be mitigated. In addition, the support of parents and educators in teaching healthy gadget use and facilitating positive social interactions can help minimize the negative impact of gadget addiction on children's subjective well-being.

In conclusion, peer relationships generally have a positive influence on children's subjective well-being, while gadget addiction can have a negative impact on their subjective well-being. So that simultaneously peer variables and gadget addiction influence Children's Subjective Well-Being. Parents and educators need to create a healthy balance between social interactions with peers and the use of gadgets so that children can develop optimal well-being

Children exhibit a high level of Subjective Well-Being, as evidenced by the influence of peers on their subjective well-being. This influence can affect directly or indirectly through gadget addiction, where the use of gadgets is assumed to be an intervening variable. However, if the gadget addiction variable stands alone, this variable does not affect the child's subjective well-being. However, the gadget addiction variable has a relationship to children's subjective well-being, but this relationship is negatively related.

Peers can have a complex influence on children's subjective well-being through gadget addiction. Peers can influence the pattern of children's gadget use. If peers tend to spend excessive time with gadgets, children may feel compelled to do the same. This can exacerbate gadget addiction and have a negative impact on a child's well-being. Gadget addiction can distract children from other activities that are essential for their well-being, such as physical play, social engagement, or exploring their interests and talents (Wulandari et al., 2021).

Based on the research above, the researchers concluded that peers can influence the subjective well-being of children in Java. The results of the analysis prove that peers contribute directly or indirectly through gadget addiction, where the use of gadgets is assumed as an intervening variable. The influence of the peer variable has a p-value of 0.000 (<0.05), indicating significance, and thus there is a direct influence from peers on the level of a child's Subjective Well-being. However, there is an influence from the Gadget Addiction variable on Children's Subjective Well Being with a Sig value of 0.000 (<0.05), so that the Peer variable has a direct effect, coupled with the presence of an intervening variable, namely Gadget Addiction, also has a significant impact, which means Ha is accepted. Data relies on parental reports, which may lack objectivity. Future studies could use direct observation or digitalised gadget use data.

The quality and number of peer relationships can also influence their influence on children's subjective well-being. Positive, mutually supportive, and healthy relationships with peers tend to make a greater contribution to children's subjective well-being. High subjective well-being has a positive impact on children's readiness for learning. Prioritizing a child's subjective well-being can create a strong foundation for an effective and sustainable learning process. Therefore, parents and educators need to recognise and support children's subjective well-being, enabling them to develop optimal learning readiness.

CONCLUSION

The research findings indicate that children's interactions with peers have a more substantial and positive impact on their subjective well-being compared to interactions with gadgets. While digital devices may offer temporary enjoyment and distraction, they do not provide the emotional connection, companionship, and social development that peer relationships offer. These findings align with existing literature emphasizing the critical role of social interaction in children's psychological and emotional growth.

The findings suggest that to effectively promote children's subjective well-being, parents and educators should provide opportunities that encourage healthy peer interaction, such as playtime, group learning, and cooperative activities. Supportive peer relationships contribute to a sense of belonging, joy, and emotional regulation, which are essential components of subjective well-being.

We can deduce that to enhance children's well-being, it is essential to foster meaningful peer relationships and limit excessive gadget use. Furthermore, when social interaction is limited or unavailable, alternative forms of emotional and social support should be provided to maintain children's well-being. Schools should provide group activities to facilitate peer interaction, while parents should implement 'screen-free time' at home. Future research could explore the role of teachers in moderating this relationship or use a longitudinal design.

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