

THE EFFECT OF EXCESSIVE SCREEN TIME ON EARLY CHILDHOOD EMOTION REGULATION AT PAUD AL-IRSYADAH

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Abstract

Excessive gadget use in early childhood has become a growing concern because it may reduce direct social interaction and limit children's opportunities to practice emotional control in daily situations. This study aimed to determine the effect of excessive screen time on the emotional regulation development of early childhood students at PAUD Al-Irsyadah. The novelty of this study lies in examining the predictive effect of excessive screen time on emotion regulation using a quantitative regression approach in an early childhood education setting. This research used a quantitative approach with an associative design. The population and sample consisted of 30 children selected through total sampling. Data were collected using closed questionnaires measuring excessive screen time and emotional regulation. The instruments were tested through validity and reliability analysis, while the data were analyzed using descriptive statistics, correlation tests, and simple linear regression. The results showed that excessive screen time had a significant negative effect on children's emotional regulation, with a significance value of 0.004. The regression model showed that excessive screen time explained 25.5% of the variance in emotional regulation ($R^2 = 0.255$). These findings indicate that higher screen exposure tends to be followed by lower emotional regulation skills. The findings contribute to understanding the role of digital media exposure in early childhood socio-emotional development and provide practical implications for parents and teachers in managing children's screen use through supervision, time limits, and meaningful social interactions.

Keywords: *Digital Media Exposure; Gadget Use; Emotional Self-Control; Preschool Development; Parental Guidance*

INTRODUCTION

Early childhood development occurs through interconnected processes involving physical, cognitive, language, social, and emotional domains. During this stage, children learn to recognize their feelings, delay gratification, follow instructions, and adjust their behavior to their surrounding environment. These abilities do not develop spontaneously; rather, they are shaped through parenting

practices, social interactions, play activities, and children's daily experiences. In modern family life, one experience that has become increasingly integrated into children's lives is the use of digital devices. Gadgets are frequently used for entertainment, educational purposes, or as a tool for parents to soothe children when they become fussy. However, excessive and poorly supervised use may reduce children's opportunities to engage in direct interaction, active play, and emotional learning through social experiences.

The phenomenon of excessive screen time among young children has become a growing concern because gadget use is no longer limited to school-aged children. Young children are now accustomed to accessing videos, digital games, and entertainment applications through their parents' mobile devices. According to Falensia (2025), excessive gadget use may negatively affect children's emotional development, particularly when parents fail to set time limits, provide insufficient supervision of content, and rely on gadgets as a quick solution to calm their children. This situation highlights a gap between children's ideal developmental needs and their daily experiences at home. Ideally, young children require rich stimulation through direct communication, hands-on play, social routines, and emotional guidance from adults. In reality, some children receive more stimulation from screens than from face-to-face interactions.

To better understand the developmental implications of this phenomenon, it is important to examine screen time from a theoretical perspective. Singer and Singer (2012) view media as part of the developmental environment that can influence children's attention patterns, imagination, behavior, and social experiences. In the context of this study, screen time is understood not merely as the amount of time children spend looking at screens but also as encompassing the frequency of use, the type of content accessed, parental supervision, and children's reactions when gadget use is interrupted. Excessive screen time in this study refers to screen exposure that exceeds age-appropriate recommendations and limits children's opportunities for direct social interaction, active play, and emotional learning experiences. Children who use gadgets excessively may become accustomed to receiving rapid visual and auditory stimulation. This habit may affect how they respond to everyday situations, especially when they are required to wait, share, follow rules, or accept restrictions. Singer and Singer's perspective provides a foundation for understanding media exposure as an external factor associated with developmental processes rather than merely a form of entertainment.

One developmental aspect that may be influenced by screen exposure is emotion regulation. Emotion regulation is a crucial aspect of early childhood development because it relates to children's ability to manage feelings of anger, disappointment, sadness, fear, and happiness appropriately. Gross and Gross (2014) define emotion regulation as the process through which individuals monitor, evaluate, and modify their emotional experiences and expressions to align with the demands of a given situation. In young children, emotion regulation is reflected in simple behaviors, such as the ability to calm themselves, follow teachers' instructions, refrain from excessive crying when their desires are not

fulfilled, wait their turn, and resume playing after minor conflicts. These abilities are still developing and are highly influenced by adult guidance. When children receive instant responses more frequently through gadgets, their opportunities to learn how to cope with frustration, communicate effectively, and control impulses may be reduced. Consequently, excessive reliance on digital stimulation may limit children's practice of adaptive emotional responses and self-control in real-life social situations.

Several previous studies have shown that screen time and gadget use are associated with emotional and developmental issues in children. Setyarini et al. (2023) found that higher levels of screen time are associated with an increased risk of tantrums and developmental delays among young children. This finding is significant because tantrums may indicate difficulties in adaptive emotion regulation. Susilowati and Wahyuningsih (2026) also reported that uncontrolled gadget use negatively affects children's emotion regulation abilities, leading to behaviors such as irritability, excessive crying, and difficulty following instructions when gadget use is discontinued. Tsaqifah (2025) further noted that gadget use among preschool children is associated with emotional and behavioral problems as well as prosocial development. The impact of screen time extends beyond emotional aspects to other developmental domains. Wirahno et al. (2025) explained that high levels of screen exposure may increase the risk of delays in children's language development.

Although several studies have examined the effects of gadget use on tantrums, emotional development, socio-emotional skills, and language abilities, few studies have specifically investigated the effect of excessive screen time on emotion regulation development using a quantitative regression approach in early childhood education settings. Previous studies have primarily employed case studies, literature reviews, or addressed child development in broader terms. This study positions excessive screen time as the independent variable and emotion regulation as the dependent variable. This focus provides an opportunity to examine the extent to which screen time influences children's ability to recognize, control, express, and adapt their emotions within the context of PAUD Al-Irsyadah.

Based on the preceding discussion, this study aims to examine the effect of excessive screen time on the development of emotion regulation among young children at PAUD Al-Irsyadah. PAUD Al-Irsyadah was selected because early childhood learners are in a critical stage of socio-emotional development and are highly susceptible to environmental influences, including digital media exposure. The findings are expected to provide valuable insights for teachers and parents regarding the risks associated with uncontrolled gadget use and to serve as a basis for developing healthier digital habits for young children. The novelty of this study lies in its examination of the predictive relationship between excessive screen time and emotion regulation through a quantitative regression model in an early childhood education context, a topic that remains underexplored in previous studies. The findings may serve as an important source of evaluation for educators and families in managing children's gadget use more effectively and responsibly.

METHODS

Research Setting and Participants

The study was conducted at PAUD Al-Irsyadah, located in Ciherang Hamlet, RT 03/08, Susukan Village, Campaka District, Cianjur Regency, Indonesia. The population consisted of all children enrolled at PAUD Al-Irsyadah, totaling 30 participants. A total sampling technique was employed, meaning that the entire population was included in the study sample. Therefore, the final sample consisted of 30 respondents. The sample size was considered appropriate because all accessible members of the target population were included, allowing comprehensive representation of the study setting.

Data Collection Instruments

Data were collected using a closed-ended questionnaire. The research instrument consisted of two sections. The first section measured the excessive screen time variable, while the second section measured early childhood emotion regulation. Each variable consisted of eight statement items. The questionnaire was developed based on indicators derived from the theory of Singer and Singer (2012) for the excessive screen time variable and the theory of Gross (2014) for the emotion regulation variable. The questionnaire was completed by parents, who provided information regarding children's gadget use and emotion regulation behaviors observed in daily life. Responses were measured using a four-point Likert scale: 1 = never, 2 = rarely, 3 = often, and 4 = always.

Research Procedure

The research procedure consisted of several stages. First, the researchers developed an instrument blueprint based on the variables, indicators, and operational definitions. Second, questionnaire items were constructed according to the established indicators. Third, the instrument was reviewed and tested for validity and reliability before being administered to respondents. Fourth, the questionnaires were distributed to respondents based on the predetermined sample size. Fifth, the researchers checked the completeness of the responses. Sixth, data tabulation was conducted by calculating the total scores for each item within each variable.

Ethical Considerations

Prior to data collection, informed consent was obtained from parents or guardians of participating children. Respondent confidentiality and anonymity were maintained throughout the study, and all data were used solely for research purposes.

Data Analysis

Data analysis was conducted quantitatively using statistical software. Preliminary analysis involved descriptive statistics to determine the mean, median, standard deviation, minimum value, and maximum value. Subsequently, a normality test was performed to examine the distribution of the data and regression residuals. Pearson correlation was used for normally distributed data, whereas Spearman correlation served as a non-parametric comparison when normality assumptions were not

fully met. The analyses were conducted to assess the relationship between variables and strengthen the interpretation of the findings.

Table 1. Operational Definitions of Variables

Variable	Theoretical Basis	Operational Definition	Indicators	Instrument	Scale
Excessive Screen Time (X)	Singer and Singer (2012)	Excessive screen time refers to the level of gadget or screen media use among young children, as reflected by duration, frequency, parental supervision, and children's reactions when gadget use is restricted.	(1) Duration of gadget use; (2) Frequency of gadget use; (3) Parental supervision; (4) Dependence on gadgets	Excessive screen time questionnaire consisting of 8 items	Four-point Likert scale
Early Childhood Emotion Regulation (Y)	Gross (2014)	Emotion regulation refers to children's ability to recognize, control, express, and adapt their emotions according to situations encountered at home or in early childhood education settings.	(1) Recognizing emotions; (2) Controlling emotions; (3) Following instructions; (4) Adapting social behavior	Emotion regulation questionnaire consisting of 8 items	Four-point Likert scale

The instrument used a four-point Likert scale with the following response categories: 1 = never, 2 = rarely, 3 = often, and 4 = always. For the excessive screen time variable, higher scores indicate greater levels of gadget use. For the emotion regulation variable, higher scores indicate better emotion regulation abilities among children.

RESULTS AND DISCUSSION

RESULTS

This study involved 30 early childhood participants enrolled at PAUD Al-Irsyadah, located in Ciherang Hamlet RT 03/08, Susukan Village, Campaka District, Cianjur Regency, Indonesia. Data were collected using questionnaires measuring excessive screen time and emotion regulation among young children. The excessive screen time variable consisted of eight items, while the emotion regulation variable also consisted of eight items. Each item was rated on a four-point Likert scale ranging from 1 (never) to 4 (always).

Descriptive statistical analysis indicated that the excessive screen time variable had a mean score of 20.00 with a standard deviation of 4.08. The minimum score was 13, and the maximum score was 27. Meanwhile, the emotion regulation variable had a mean score of 23.70 with a standard deviation of 4.09. The minimum score for emotion regulation was 12, and the maximum score was 29. The descriptive statistics are presented in Table 2.

Table 2. Descriptive Statistics of the Research Variables

Variable	N	Mean	Median	SD	Min	Max
Excessive Screen Time	30	20.00	20.00	4.08	13	27
Emotion Regulation	30	23.70	24.50	4.09	12	29

Based on Table 2, the mean score for excessive screen time was 20.00. This value indicates that gadget use among children was not entirely low. Some children had already developed patterns of gadget use in terms of duration and frequency that warrant attention. Regarding emotion regulation, the mean score of 23.70 suggests that children's ability to manage emotions was relatively good, although considerable variation among respondents remained evident.

Table 3. Categories of Excessive Screen Time

Category	Frequency	Percentage
Low	8	26.7%
Moderate	17	56.7%
High	5	16.7%
Total	30	100%

The categorization of excessive screen time scores showed that 8 respondents (26.7%) were classified in the low category, 17 respondents (56.7%) in the moderate category, and 5 respondents (16.7%) in the high category. These findings indicate that most children fell within the moderate category. This result suggests that gadget use has become part of children's daily activities, although not all children demonstrated high levels of use.

Table 4. Categories of Emotion Regulation in Early Childhood

Category	Frequency	Percentage
Low	1	3.3%
Moderate	14	46.7%
High	15	50.0%
Total	30	100%

For the emotion regulation variable, 1 respondent (3.3%) was classified in the low category, 14 respondents (46.7%) in the moderate category, and 15 respondents (50.0%) in the high category. This distribution indicates that half of the respondents demonstrated high levels of emotion regulation. However, the proportion of children in the moderate category remained substantial, suggesting that emotion regulation abilities were not yet evenly developed across all participants.

Instrument quality was assessed through validity and reliability testing. For the excessive screen time variable, all items (X1–X8) were considered valid because their calculated correlation coefficients exceeded the critical r value of 0.361. The item correlation coefficients ranged from 0.488 to 0.717. For the emotion regulation variable, seven items were found to be valid, whereas one item (Y5)

obtained a correlation coefficient of 0.349 with a significance value of 0.059. This item fell slightly below the critical threshold and therefore requires attention in future instrument development.

Table 5. Summary of Instrument Validity Testing

Variable	Item	Range of Calculated <i>r</i> Values	Description
Excessive Screen Time	X1–X8	0.488–0.717	All items valid
Emotion Regulation	Y1, Y2, Y3, Y4, Y6, Y7, Y8	0.526–0.774	Valid
Emotion Regulation	Y5	0.349	Requires revision

The validity results indicate that nearly all questionnaire items adequately measured the intended constructs. Although item Y5 did not meet the validity criterion, it was retained because the overall reliability of the instrument remained satisfactory. However, revision of this item is recommended for future studies.

The reliability test results showed that the excessive screen time instrument obtained a Cronbach's alpha coefficient of 0.771. The emotion regulation instrument achieved a Cronbach's alpha value of 0.804. Both values exceeded the minimum criterion of 0.70, indicating that the instruments were reliable. When item Y5 was removed, the reliability coefficient for the emotion regulation instrument increased to 0.823. This finding suggests that item Y5 should be revised or excluded in future instrument development.

Table 6. Results of Instrument Reliability Testing

Variable	Cronbach's Alpha	Number of Items	Description
Excessive Screen Time	0.771	8	Reliable
Emotion Regulation	0.804	8	Reliable
Emotion Regulation without Y5	0.823	7	Reliable

A normality test was conducted to determine the suitability of the data for regression analysis. The Shapiro–Wilk test results indicated that the excessive screen time variable had a significance value of 0.128, whereas the emotion regulation variable had a significance value of 0.030. The regression residuals yielded a significance value of 0.099. In regression analysis, residual normality is the primary concern. Since the residual significance value exceeded 0.05, the regression residuals were considered normally distributed.

Table 7. Results of the Normality Test

Tested Data	Shapiro–Wilk Sig.	Description
Excessive Screen Time	0.128	Normal
Emotion Regulation	0.030	Not Normal
Regression Residuals	0.099	Normal

Before conducting regression analysis, the relationship between excessive screen time and emotion regulation was examined using correlation tests. Pearson's correlation analysis produced a coefficient of -0.505 with a significance value of 0.004. Spearman's rho yielded a coefficient of -0.475 with a significance value of 0.008. Both results indicate a significant negative relationship. The negative direction suggests that higher levels of excessive screen time are associated with lower levels of children's emotion regulation.

Table 8. Results of Correlation Analysis

Correlation Analysis	Correlation Coefficient (<i>r</i>)	Significance (<i>p</i>)	Description
Pearson Correlation	-0.505	0.004	Significant Negative Relationship
Spearman's Rho	-0.475	0.008	Significant Negative Relationship

The primary analysis in this study employed simple linear regression. The model summary results showed an R value of 0.505 and an R² value of 0.255. This coefficient of determination indicates that excessive screen time accounted for 25.5% of the variance in children's emotion regulation. The remaining 74.5% was explained by other factors not examined in this study, such as parenting style, family interaction quality, child characteristics, play environment, sleep habits, and teacher support.

Table 9. Summary of the Simple Linear Regression Model

Model	Correlation Coefficient (<i>R</i>)	Coefficient of Determination (<i>R</i>²)	Adjusted <i>R</i>²
1	0.505	0.255	0.228

The ANOVA results showed an F value of 9.586 with a significance level of 0.004. Since the significance value was lower than 0.05, the regression model was considered appropriate for explaining the effect of excessive screen time on emotion regulation in early childhood.

Table 10. ANOVA Results of the Regression Model

Model	<i>F</i> Value	Significance (<i>p</i>)	Significance Level	Description
Regression	9.586	0.004	0.05	Significant / Model Fit

The regression coefficient analysis showed a constant value of 33.824 and a regression coefficient for excessive screen time of -0.506. The calculated t value was -3.096 with a significance value of 0.004. The resulting regression equation was:

$$Y = 33.824 - 0.506$$

This equation indicates that each one-point increase in excessive screen time is associated with a 0.506-point decrease in children's emotion regulation scores.

Table 11. Simple Linear Regression Coefficients

Model	Regression Coefficient (B)	t Value	Significance (p)	Description
Constant	33.824	10.142	0.000	Significant
Excessive Screen Time (X)	-0.506	-3.096	0.004	Significant Negative Contribution

Based on Table 10, excessive screen time had a significant effect on emotion regulation among children at PAUD Al-Irsyadah. The direction of the effect was negative. Children with higher screen time scores tended to have lower emotion regulation scores. Reduced emotion regulation may be reflected in difficulties following instructions, excessive crying when their desires are not fulfilled, challenges in stopping ongoing activities, or requiring more time to calm down after experiencing anger.

DISCUSSION

The findings of this study indicate that excessive screen time has a significant negative effect on emotion regulation among young children. The regression results, with a significance value of 0.004, demonstrate that this effect is unlikely to have occurred by chance. The R^2 value of 0.255 indicates that excessive screen time explains 25.5% of the variance in children's emotion regulation. This proportion is meaningful within the context of early childhood development because emotion regulation is influenced by multiple factors. Children are also shaped by parenting practices, parent-child attachment, family routines, peer interactions, sleep quality, biological readiness, and learning experiences in early childhood education settings. These findings support the study objective and confirm that excessive screen time is a significant predictor of emotion regulation among young children.

These findings are consistent with the theory proposed by Dorothy G. Singer and Jerome L. Singer, which conceptualizes media as part of children's developmental environment. According to this perspective, screen media can influence children's experiences by providing rapid, repetitive, and attention-grabbing visual and auditory stimuli. In early childhood, the ability to regulate attention and delay gratification is still developing. When children are frequently exposed to instant stimulation through gadgets, they may become less accustomed to activities that require patience, turn-taking, direct communication, and frustration management. This tendency can be observed in children who struggle to stop using gadgets when asked, become irritable when gadgets are taken away, or resist adult instructions after prolonged screen exposure.

The findings can also be interpreted through James J. Gross's theory of emotion regulation. Emotion regulation involves not only the presence or absence of emotions but also the ways individuals manage emotional experiences and expressions. In early childhood, emotion regulation is reflected in children's ability to calm themselves, follow instructions, wait their turn, express feelings

appropriately, and resume interactions after minor conflicts. When screen time is excessive, children's opportunities to develop these emotional skills may be disrupted because they spend more time interacting with screens than engaging in real-life social situations. Although children may appear calm while using gadgets, this apparent calmness does not necessarily indicate independent emotion regulation skills.

The results of this study support a quantitative study conducted at the Healthy Child Care Center of Universitas Padjadjaran, which found a significant relationship between screen time duration and emotion regulation among children aged 3 to 6 years ($p = 0.003$). The primary similarity lies in the direction of the relationship, indicating that increased screen time is associated with reduced ability to manage and express emotions adaptively. Differences between the studies include the research setting, sample size, and measurement instruments. The Universitas Padjadjaran study employed the Emotion Regulation Checklist, whereas the present study used a questionnaire developed based on indicators of emotion regulation in early childhood. Despite these differences, both studies consistently emphasize the importance of monitoring screen exposure in relation to children's emotional development.

The findings are also consistent with Setyarini et al. (2023), who reported that higher screen time intensity is associated with a greater risk of tantrums and developmental delays in young children. Tantrums can be understood as one manifestation of children's difficulties in regulating impulses and expressing emotions appropriately. In the present study, the negative relationship indicates a similar pattern. Children with higher levels of screen time tended to exhibit lower levels of emotion regulation. Behaviors such as excessive crying, anger when gadget use is interrupted, or difficulty accepting limits may serve as early indicators that children have not yet developed adaptive coping mechanisms for disappointment.

Susilowati and Wahyuningsih (2026) found that children with high levels of gadget use tend to become easily frustrated, cry excessively, and struggle to follow instructions when gadget use is discontinued. These findings help explain the concrete manifestations of reduced emotion regulation in early childhood. In the present study, the negative association between screen time and emotion regulation may be understood through similar behavioral patterns. Children who are accustomed to unrestricted gadget use may experience difficulties transitioning to other activities. The shift from screen-based activities to real-world experiences often requires children to follow instructions, delay gratification, and adapt to rules at home or in the classroom.

The findings are also consistent with Tsaqifah (2025), who reported that gadget use among preschool children is associated with emotional and behavioral problems as well as deficits in prosocial behavior. Emotion regulation cannot be separated from children's social relationships. Children who can effectively regulate their emotions are generally better able to play cooperatively, share, wait their turn, and resolve minor conflicts with adult guidance. Conversely, children who struggle with emotion regulation may withdraw, become easily irritated, or refuse to interact when their desires are not

fulfilled. Excessive gadget use may reduce opportunities for children to practice these social skills through direct play experiences.

Taken together, the findings of previous studies and the present research consistently indicate that excessive screen exposure is associated with poorer emotional and behavioral adjustment in early childhood. The current study extends this evidence by demonstrating the predictive effect of excessive screen time on emotion regulation using a quantitative regression model within an early childhood education setting.

Falensia (2025) emphasized that one of the primary causes of excessive gadget use is inadequate parental supervision and the tendency to use gadgets as a tool to calm children. The findings of this study reinforce this perspective because screen time is influenced not only by duration but also by patterns of use within the home environment. When gadgets are provided whenever children become upset, they may learn to associate emotional discomfort with immediate relief through screen exposure. This pattern can reduce opportunities for children to learn how to identify emotions, receive explanations, self-soothe, and seek solutions through communication with adults.

Dewi et al. (2025) reported that screen time also affects other developmental domains, particularly language development in early childhood. Although the focus of that study differed from the present research, the findings remain relevant because language and emotion regulation are closely interconnected during early childhood. Children rely on language to express feelings, seek help, and communicate their needs. When children engage in excessive gadget use and experience fewer direct interactions, opportunities to develop emotional vocabulary may decrease. As a result, children may be more likely to respond with crying or anger because they lack the language skills and social experiences necessary to communicate their discomfort effectively.

The finding that excessive screen time accounts for 25.5% of the variance in emotion regulation indicates that gadget use is an important factor but not the sole determinant of children's emotional development. This result should be interpreted proportionally. Emotion regulation develops through complex interactions among parental modeling, teacher responses, family routines, sleep quality, play experiences, and peer interactions. Therefore, excessive screen time may serve as a risk factor that weakens emotion regulation, particularly when gadget use occurs without consistent supervision and clear boundaries. The remaining 74.5% of unexplained variance suggests that future studies should examine additional developmental and environmental variables that may contribute to children's emotion regulation.

The negative relationship identified in this study carries important implications for early childhood education institutions and families. Limiting screen time should not rely solely on restricting gadget use. Children need alternative activities that are concrete, social, and enjoyable. Teachers can strengthen role-playing activities, storytelling, group games, motor activities, and turn-taking exercises.

Parents can establish simple household rules regarding gadget use, including time limits, screen-free schedules, content supervision, and avoiding the use of gadgets as rewards or primary calming tools.

A practical implication of this study is the need for collaboration between early childhood education centers and parents in fostering healthy digital habits. Teachers can regularly communicate their observations of children's behavior to parents, while parents can share information about gadget use at home. This two-way communication is essential because children's emotional behavior at school is often related to habits developed within the family environment. When rules regarding gadget use are consistent across home and school settings, children have greater opportunities to develop emotion regulation skills through real-life interactions.

This study contributes theoretically by supporting Singer and Singer's media environment perspective and Gross's emotion regulation theory within the context of digital media use in early childhood. Practically, the findings provide evidence for educators and parents regarding the importance of monitoring children's screen exposure and promoting balanced daily activities.

This study also contributes to instrument development and future research. The validity results indicated that one item in the emotion regulation scale requires revision. This item should be reformulated using more concrete language that better reflects observable behaviors in early childhood. Future studies may include additional variables, such as parenting style, parental supervision, sleep quality, content type, and social interaction intensity. Incorporating these variables may provide a more comprehensive understanding of the factors influencing emotion regulation among young children in the context of family digital life.

Several limitations should be acknowledged. First, the study involved a relatively small sample from a single early childhood education institution, which may limit the generalizability of the findings. Second, data were collected through questionnaires, which may be influenced by respondent subjectivity. Despite these limitations, the study provides valuable empirical evidence regarding the relationship between excessive screen time and emotion regulation among young children.

CONCLUSION

This study aimed to examine the effect of excessive screen time on the development of emotion regulation among young children at PAUD Al-Irsyadah. This study demonstrates that excessive screen time has a significant effect on the development of emotion regulation among young children at PAUD Al-Irsyadah. The results of the simple linear regression analysis revealed a significance value of 0.004 with a negative direction of effect. This finding indicates that the higher the level of children's gadget or screen media use, the lower their ability to regulate emotions. Excessive screen time accounted for 25.5% of the variance in children's emotion regulation, while the remaining 74.5% was influenced by other factors beyond the scope of this study, such as parenting style, parental supervision, the quality of family interactions, the play environment, and children's daily routines.

The essence of these findings suggests that gadgets are not solely associated with the duration of use but also with the ways children develop emotional habits in their everyday lives. Children who are frequently exposed to instant stimulation through screens may experience difficulties when required to wait, follow instructions, stop engaging in preferred activities, or adapt to social rules. Emotion regulation in early childhood should be fostered through direct interaction, communication with adults, social play, and opportunities to experience and manage disappointment in healthy and developmentally appropriate ways.

These findings provide evidence that limiting screen time should be implemented consistently by parents and supported by teachers in early childhood education settings. Such efforts should extend beyond simply restricting gadget use and include content supervision, clear time limits, engaging hands-on play activities, and the promotion of emotional communication. The study contributes to the growing body of evidence on the relationship between digital media exposure and socio-emotional development by providing empirical findings through a quantitative regression approach in an early childhood education context. This study contributes to the understanding of early childhood education providers and families regarding the importance of managing children's gadget use as part of a broader strategy to support the development of emotion regulation in early childhood.

The novelty of this study lies in its examination of the predictive effect of excessive screen time on emotion regulation among young children using a quantitative regression model in a PAUD setting. Future studies are recommended to include additional variables, such as parenting style, parental supervision, sleep quality, and family interaction patterns, to provide a more comprehensive understanding of the factors influencing emotion regulation in early childhood.

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