

Teacher-Parent Collaboration in Addressing Smartphone Dependency among Madrasah Ibtidaiyah Students: Academic and Socio-Emotional Implications

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Abstract

This study aims to analyze how the synergy between teachers and parents in instilling digital media discipline helps prevent smartphone addiction among elementary school students in Semarang. The study employs a qualitative approach using a case study design, in which data were collected through in-depth interviews with teachers and parents, as well as observations of classroom learning activities. The results indicate that smartphone dependency significantly impacts students' academic, social, and emotional development, characterized by reduced focus on learning, weak self-control, and diminished social interaction and empathy. To address this, three primary forms of synergy between teachers and parents emerged: intensive communication, the establishment of shared rules, and alternative educational activities. Continuous communication fosters shared perceptions and strategies for managing children's device usage. Meanwhile, consistent rules at school and home, as well as engagement in positive activities, have proven effective in fostering students' digital discipline. Theoretically, the findings of this study align with Albert Bandura's Social Cognitive Theory, particularly the concepts of self-regulation and reciprocal determinism, which explain that children's behavior is influenced by the interaction between individual, environmental, and behavioral factors. This suggests that a shift from passive supervision toward active collaboration is necessary to make smartphones a purposeful and valuable learning tool. The contribution of this study lies in the development of a practical collaboration model between teachers and parents based on digital literacy to prevent smartphone dependency among students starting from elementary school age.

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Introduction

The phenomenon of smartphone dependence in Indonesian society shows an increasingly worrying trend, especially in family life and children's education. Smartphones have become a tool that facilitates various daily activities, ranging from communication, work, to access to education, including religious education for children. Parents now tend to use digital applications such as learning videos, online lectures, and instant religious content as a means of children's education (Chaibal & Chaiyakul, 2022). However, this convenience holds the potential for danger that is not small. When religious education only relies on technology, the role of teachers as authoritative figures in transmitting Islamic values begins to shift. The authority of religious truth is slowly moving to algorithms and digital content that are not necessarily scientifically or theologically verified (Yadav & Chakraborty, 2022). This condition is unique and dangerous because children can receive religious understanding instantly, partially, and without critical assistance. If left unchecked,

this phenomenon has the potential to grow a generation that loses spiritual depth, learning discipline, and high dependence on digital devices (Park, 2020). Therefore, this issue is very important to be researched, especially in the context of religious-based basic education such as Madrasah Ibtidaiyah.

A number of recent studies have examined the impact of smartphone use on children and digital parenting patterns in families. Research by Utami (2024). It found that high intensity of smartphone use in children correlated with decreased self-control and increased learning distractions. Meanwhile, a study by Indriatie, Novitasari and Windi (2022) shows that parents tend to use technology as a "second caregiver" due to time constraints. Another study by Nehari & Kantaoui (2023) revealed that exposure to digital content without mentoring can affect children's moral development. Furthermore, research by Tariq et al (2018) emphasized the importance of parental digital literacy in controlling children's media use. The latest research by Friska et al, (2022) highlights that the use of digital religious applications has not been able to replace the role of direct interaction with teachers in the formation of religious character. However, the five studies have not specifically examined how this phenomenon occurs in Madrasah Ibtidaiyah students, especially in the context of the synergistic relationship between teachers and parents. In fact, MI students who are included in the Alpha generation have unique characteristics, such as high proximity to technology from an early age, digital multitasking skills, but are vulnerable to dependency and lack of self-regulation. This gap is an important research gap to fill.

Based on this gap, this study aims to analyze how the synergy of teachers and parents in instilling digital media discipline to prevent smartphone dependence in Madrasah Ibtidaiyah students. This goal is described in three research questions, namely: (1) what are the underlying problems for teachers and parents related to dependence on smartphone media, so that instilling digital media discipline in Madrasah Ibtidaiyah students in Semarang City is something that must be done immediately; (2) what forms of synergy have been built between teachers and parents in overcoming smartphone dependence on students; and (3) what are the challenges faced in building this synergy and how to overcome them. This research was conducted in three Ibtidaiyah Madrasahs in Semarang City which represent urban areas with a high level of technology access. The selection of this location is based on the consideration that urban environments have a higher intensity of smartphone use than rural areas, so that the dynamics of interaction between children, parents, and technology become more complex (Oberle, 1991). In addition, the heterogeneity of the socioeconomic background of urban communities also provides a rich picture of digital parenting patterns and educational practices in madrasahs.

This research is very important to be carried out immediately considering the increasingly massive penetration of digital technology in the lives of elementary school-age children without being balanced with an adequate supervision and education system. Without strong synergy between teachers and parents, efforts to instill discipline in digital media will be partial and ineffective (Andrisano, Mollo, & Marra, 2024). This research is expected to make a theoretical contribution to the development of digital-based Islamic education studies, as well as a practical contribution in formulating collaborative strategies between schools and families. The structure of this article is systematically compiled to answer research problems, starting from an introduction that outlines the research background and gaps, followed by a literature review that strengthens the theoretical framework, research methods that explain data collection approaches and techniques, results and discussions that elaborate on field findings in depth, and end with conclusions and

recommendations that are relevant to the development of educational practices in Madrasah Ibtidaiyah.

Method

This study aims to analyze the synergy between teachers and parents in instilling digital media discipline to prevent smartphone dependence in Madrasah Ibtidaiyah students. To achieve this goal, this study uses a qualitative approach with a case study design. The qualitative approach was chosen because it is able to dig deep into the experiences, perceptions, and real practices carried out by teachers and parents in the context of daily life (Bennett & Elman, 2006). Meanwhile, the design of the case study is considered relevant because this research seeks to understand the phenomenon contextually and in-depth in one specific social environment, namely Madrasah Ibtidaiyah (Starman, 2013). With this approach, researchers can explore the dynamics of social interaction, the values adhered to, and the challenges faced in building digital discipline in children. In addition, case studies allow researchers to obtain a holistic picture of the synergy practices that occur, so that the results of the research are expected to be not only descriptive, but also provide a comprehensive understanding of the phenomenon being studied in a real and specific context.

The data collection technique in this study was carried out through in-depth unstructured interviews with seven parents and five teachers of Madrasah Ibtidaiyah, as well as observation (Hurrel, 2005). The interviews were conducted in three sessions on April 10-15, 2026, with a duration of each session of 135 minutes. Each informant is given about 10 to 20 minutes per session, allowing for in-depth and flexible data exploration. The interview was conducted using Javanese and Indonesian, considering that both languages are mother tongues used by informants in daily life, so it is expected to increase comfort and honesty in conveying information. All the results of the interviews were then transliterated into Indonesian to facilitate the process of reducing and presenting data (Miles, 1990). Furthermore, the data is presented in English with the consent of the informant for the purpose of scientific publication. In addition to interviews, this research was also strengthened by document analysis and participatory observation. The documents analyzed included school policies related to the use of smartphones, student discipline books, communication records between teachers and parents, and reports on learning activities (Gallagher, 2009). Meanwhile, participatory observation was carried out by directly observing student activities in using digital devices, teacher interaction in controlling smartphone use in the classroom, and parental involvement in accompanying children at home. All informants' names were kept anonymous at their request, and also in order to maintain the confidentiality of respondents' personal data.

Table 1. Informant Profiles

No	Initials	Remarks	Gender	Gas Levels
1	GM1	Teacher	Male	MI Miftahul Akhlaqiyah
2	GM2	Teacher	Women	MI Miftahul Akhlaqiyah
3	GM3	Teacher	Male	MIN Kota Semarang
4	GM4	Teacher	Male	MIN Kota Semarang
5	GM5	Teacher	Women	MIN Kota Semarang
6	OT1	Parents	Women	-
7	OT2	Parents	Male	-
8	OT3	Parents	Women	-

9	OT4	Parents	Women	-
10	OT5	Parents	Women	-
11	OT6	Parents	Male	-
12	OT7	Parents	Women	-

Data validation in this study was carried out through triangulation techniques to ensure the validity and credibility of the findings. Triangulation is carried out by comparing data obtained from various sources, namely teachers, parents, documents, and observation results, so as to reduce bias and improve data accuracy. In addition, triangulation methods are also applied by combining interviews, observations, and document analysis to obtain a more complete picture (Trullols, Ruisanchez & Rius, 2004). The validation process also involves re-checking the informant (member checking) to ensure that the researcher's interpretation is in accordance with the intention conveyed by the informant. The data analysis in this study refers to the Miles and Huberman model which includes three main stages, namely data reduction, data presentation, and conclusion drawing (Imran, A., & Yusoff, 2015). At the data reduction stage, the researcher selects, focuses, and simplifies the raw data obtained from the field. Furthermore, the data is presented in the form of a systematic descriptive narrative to facilitate understanding the patterns and relationships between categories. The final stage is the withdrawal of conclusions that are carried out continuously during the research process, while still verifying so that the conclusions produced are valid, consistent, and scientifically accountable.

Results and Discussion

The Implications of Smartphone Dependency on Students' Academic, Social, and Emotional Development

The findings of this study show that the dependence of Madrasah Ibtidaiyah students on smartphones in Semarang City raises three main problems that are consistently identified by teachers and parents, so that the cultivation of digital media discipline is an urgent need. First, the study found that there was a decrease in students' focus and motivation to learn due to the excessive use of smartphones, especially to play games and access social media, which caused children to be more interested in instant entertainment than academic activities. Teachers in this study revealed that students tend to have difficulty concentrating during the learning process, while parents report that children often delay learning because they prefer to use gadgets. Second, this study also found weak self-control and time management in students, where they are not able to manage the balance between study time and smartphone use, so that digital activities become uncontrollable. This condition is reinforced by the lack of consistent supervision from parents and the absence of clear rules regarding the duration of use of the device. Third, this study identified negative impacts on students' social and emotional development, such as decreased direct interaction with peers, reduced empathy, and increased risk of exposure to age-appropriate content. Based on these findings, this study emphasizes the importance of collaboration between teachers and parents in instilling digital media discipline as a strategic step that needs to be implemented immediately.

In classroom learning practices, GM1 emphasized that "children now get bored faster when they don't have gadgets," which shows a change in students' attention patterns. The same thing was conveyed by GM2 who stated that "when learning takes place, their minds are divided by the desire to open their cellphones," so that the process of internalizing the material becomes not optimal.

GM3 also added that "motivation to learn decreases as they become accustomed to the instant entertainment of games," which reinforces the finding that students' preferences shift from academic activities to digital entertainment. From the parents' side, OT1 revealed that "my child often delays studying because he is engrossed in playing cellphones," while OT2 said "if you already have a gadget, it is very difficult to be told to stop studying." OT3 even states that "sometimes children prefer not to do tasks rather than stop playing," which indicates a fairly high level of dependence. This data confirms that smartphone use not only has an impact on momentary attention, but also shifts students' overall learning orientation. Thus, this condition reinforces the urgency of the need for systematic intervention in rebuilding student learning motivation through a digital discipline approach that is integrated between the school and family environment.

The results of class observations held on April 10, 2026 showed significant changes in students' attention patterns and learning involvement during the learning process. Most students seem to have difficulty maintaining focus over long periods of time, especially when learning takes place conventionally without engaging media support. Symptoms that appear include students being easily distracted, talking to friends outside the learning context, and showing bored expressions such as daydreaming or not paying attention to the teacher's explanation. In addition, the level of student participation in question and answer activities and discussions also tends to be low, where only some students are active while others tend to be passive and wait for instructions. In some situations, students are seen to delay working on the assigned assignment and lack the initiative to complete it independently. Observations also indicate that students' motivation to learn is not stable, especially when faced with material that requires concentration and deep understanding. This condition has an impact on the suboptimal internalization process of material delivered by teachers.

Table 2. Results of class observation

No	Key Aspects	Observational Findings	Learning Impact
1	Focus & Concentration	Students are easily distracted and have difficulty maintaining attention	Less than optimal material understanding
2	Participation	Low student engagement, only partially active	Uneven learning interaction
3	Learning Motivation	Motivation fluctuates, especially in materials that require high concentration	The learning process is less effective
4	Initiative & Independence	Students tend to be passive and wait for instructions	Low learning independence
5	Task Completion	Students delay or are less than optimal in completing assignments	Learning outcomes are not optimal

In addition to a decrease in focus, the findings of this study also reveal the weakness of students' self-control in managing smartphone use. GM4 explained that "children do not yet have the awareness to limit their own cellphone use," which shows their low self-regulation ability. GM5 added that "they tend to continue using gadgets without thinking about time," so learning activities are often overlooked. GM1 also stated that "when given an assignment, some students even secretly open other applications," which indicates a lack of discipline in the use of technology. From a parent's perspective, OT4 revealed that "I often have trouble managing my child's time between studying and playing cellphone," while OT5 said "the child has not been able to divide his time well, he wants to do everything at once." OT6 also asserts that "if left unsupervised, the use of gadgets can

go for hours without a break," which shows the absence of internal control over students. These findings show that dependence on smartphones is not only influenced by external factors, but also by the lack of development of self-management skills in children. Therefore, it is important to have consistent habituation in managing the time to use gadgets and instilling responsibility values from an early age so that students are able to control their digital behavior independently and sustainably.

Furthermore, this study found that lack of parental supervision is a factor that strengthens students' dependence on smartphones. GM2 said that "without support from home, rules at school often do not continue," pointing to a gap between control at school and at home. GM3 also stated that "parents need to be more strict in regulating the use of children's gadgets," as a form of shared responsibility. GM4 adds that "when there are no rules at home, children will revert to old habits," which shows the importance of environmental consistency. From the parents' side, OT7 revealed that "sometimes I am busy myself, so I can't always supervise my children," while OT1 stated "I often give my cellphone so that children are quiet and not fussy." OT2 also acknowledged that "supervision is not optimal because of work," which shows challenges in parenting practices. This data indicates that the use of smartphones is often used as a distraction tool without considering its long-term impact. Therefore, a collective awareness is needed that supervision is not only restricting, but also guiding children in using technology wisely. Thus, collaboration between schools and families is key in creating a healthy digital ecosystem for student development.

Another impact found in this study is a decrease in the quality of students' social interaction due to the high intensity of smartphone use. GM5 states that "children are now interacting more with screens than with friends," indicating a shift in communication patterns. GM1 also revealed that "during break hours, some students prefer to play cellphones rather than play together," which indicates less direct interaction. GM2 added that "their communication skills also appear to be declining," as a result of a lack of social exercise. From the parents' side, OT3 stated that "children become less sensitive to the surrounding environment," while OT4 said "interaction with family is also reduced because they are busy with gadgets." OT5 even emphasized that "children are more likely to be silent and focus on cellphones than talking," which indicates a tendency to social isolation. These findings show that smartphone use not only has an impact on the academic aspect, but also on the social and emotional development of students. Therefore, a strategy that is able to balance the use of technology and direct social activities is needed so that students still have good interpersonal skills in daily life.

Finally, this study emphasizes the importance of collaboration between teachers and parents in instilling digital media discipline as a strategic solution. GM3 states that "without cooperation with parents, it is difficult to control students' gadget use," emphasizing the importance of synergy. GM4 also added that "schools can only supervise during study hours, the rest of the role of parents is very important," so the responsibility cannot be imposed on one party alone. GM5 stated "there needs to be a mutual agreement on the rules for the use of gadgets," as a concrete step. From the parents' side, OT6 revealed "we need direction from schools on how to regulate the use of children's cellphones," while OT7 said "if there are clear rules, we can be more consistent at home." OT2 also emphasized that "this cooperation is important so that children are not confused by different rules," which shows the need for policy alignment. This data reinforces that digital discipline is not just the responsibility of the individual, but is the result of systemic interactions between the school environment and the family. Therefore, the implementation of an integrated digital education

program is an important step in shaping a generation that is able to utilize technology wisely and responsibly.

A Collaborative Strategy for Teachers and Parents to Reduce Students' Reliance on Smartphones

The findings of the study show that there are three main forms of synergy that have been built between teachers and parents in overcoming smartphone dependence in Madrasah Ibtidaiyah students in Semarang City. First, synergy in the form of intensive and continuous communication, where teachers routinely convey the development of student behavior at school through WhatsApp groups and face-to-face meetings, while parents provide feedback related to smartphone usage habits at home. This communication pattern allows for a common perception and strategic steps in controlling the use of gadgets in children. Second, synergy in the form of drafting common rules that are consistent between the school and home environment. Teachers set a policy of restricting the use of smartphones during study hours, which was then strengthened by parents with similar rules at home, such as screen time restrictions and the prohibition of using smartphones before bed. This consistency has proven to be effective in shaping digital discipline in students. Third, synergy in the form of alternative activities that are educational and collaborative, such as literacy programs, extracurricular activities, and project-based assignments that involve direct interaction between children and parents. This activity not only distracts students from smartphones, but also strengthens emotional relationships in the family. These three forms of synergy show that structured and continuous collaboration between teachers and parents is a key factor in significantly reducing smartphone dependence on students.

This practice can be seen from how GM1 asserts that "we always keep our children informed of their child's development every week so that parents are aware of the latest conditions at school," which GM2 reinforces when it states that "open communication makes it easier for us to keep pace with parents." From a parent's perspective, OT1 said that "we felt that it helped that the teacher told the child's habits at school," while OT3 revealed that "the information from the teacher allowed us to control the use of cellphones at home." In addition, GM3 also explained that "without regular communication, it is difficult to monitor children's behavior thoroughly," and OT6 added that "this collaboration makes us feel less alone in educating children." This pattern of communication that is established in a sustainable manner not only strengthens the relationship between the school and the family, but also creates an integrated supervision system. Thus, effective communication functions as a means of coordination as well as social control that is able to significantly reduce the potential dependence of smartphones on students.

The sustainability of communication then develops into a collaborative mechanism that allows for a constructive feedback exchange between teachers and parents in supervising students' digital behavior. This can be seen from how GM4 states that "we often discuss with parents to find the best solution for their children," which is in line with GM5 which emphasizes that "every report from our parents is used as a learning evaluation material." In this context, parents also show an active role, as OT2 stated that "we can immediately ask if there is a change in the child's behavior," and OT4 stated that "this communication makes us more aware of the importance of regulating cellphone use." This dialogical relationship is further strengthened by GM1 who mentioned that "good relationships with parents make our interventions more acceptable to children," and OT7 who revealed that "we feel valued for being involved in the educational process." This intense and open

interaction reflects the parallel partnership between teachers and parents, where the two complement each other in controlling smartphone use. This condition shows that communication is not only a means of conveying information, but also an effective collaboration space in forming healthy digital behavior in students.

In addition to communication, the synergy that is built is also manifested in the form of consistent joint rules between the school and home environments, thereby creating clear standards of behavior for students. In this case, GM2 explained that "we prohibit the use of cellphones during school hours so that children can focus on learning," which was reinforced by GM3 stating that "this rule will be effective if supported by parents at home." This support can be seen from OT5's statement that "we limit cellphone use time to a maximum of two hours a day," as well as OT1 who said that "children should not bring cellphones to the room while sleeping." Further, GM4 affirmed that "consistency of rules is essential so that children are not confused," and OT6 added that "we follow school rules so that children do not have loopholes to violate." The alignment of these rules shows that the child is in an integrated control system, where there is no difference in norms between school and home. Thus, students not only understand the set limits, but also get used to carrying out the discipline in their daily lives. This consistency is key in forming targeted behavior and gradually reducing dependence on smartphones.

The consistent implementation of these rules then has an impact on the formation of positive habits in the use of technology among students, which is reflected in behavior changes that are increasingly disciplined and controlled. GM5 states that "children begin to get used to not having cellphones while learning," which is supported by GM1 who adds that "behavioral changes are seen after the rules are implemented together." From the parents' side, OT3 revealed that "children are now more disciplined because the rules apply at home and school," while OT2 states that "we see children more focused on learning without cellphone distractions." This is also reinforced by GM2 which asserts that "the same rules in two places make children have no reason to violate," and OT4 which conveys that "we find it easier to control children because there is an agreement with the teacher." This data shows that rule consistency not only functions as a control tool, but also as a process of internalizing disciplinary values in students. When children are used to the same restrictions in various environments, they will be easier to develop self-awareness in using technology wisely.

The synergy that has been built does not stop at the aspect of communication and rules, but is also strengthened through the provision of alternative activities that are educational and collaborative, so as to be able to distract students from excessive use of smartphones. In practice, GM3 states that "we create literacy programs so that children are more interested in reading than playing cellphones," while GM4 adds that "extracurricular activities help children channel energy in a positive way." From the family side, OT5 revealed that "we often invite children to study together at home," and OT7 stated that "family activities make children forget about cellphones." In addition, GM5 explained that "project-based tasks involve parents so that there is direct interaction," which is reinforced by OT1 conveying that "we feel closer to the child through shared activities." These alternative activities not only serve as a distraction from smartphone use, but also as a means to strengthen the emotional connection between children and parents. Thus, this approach suggests that reducing smartphone dependence is not enough with restrictions alone, but also needs to be balanced with the provision of meaningful activities and supporting students' social and emotional development holistically.

Challenges in Fostering Collaboration Between Teachers and Parents to Address Smartphone Addiction Among Students

The findings of the study revealed that there are three main forms of challenges in building synergy between teachers and parents in overcoming smartphone dependence in Madrasah Ibtidaiyah students in Semarang City. First, the challenge is in the form of low awareness and consistency of parents in implementing the rules for using smartphones at home. Some parents still provide access to gadgets without clear control due to busy work or lack of understanding of the negative impacts of excessive use. To overcome this, teachers initiate digital parenting education programs through regular meetings and the dissemination of practical guidelines that are easy to apply at home. Second, the challenge is in the form of limited effective communication between teachers and parents, especially for parents who are less active in school communication forums. This has an impact on the asynchronization of information related to student behavior. The strategy is to utilize various more flexible communication channels such as WhatsApp groups, private messages, and periodic reports that are adjusted to parents' free time, so that participation can increase. Third, challenges in the form of the influence of the social environment and peers are still high in the use of smartphones, so that the efforts made at school and home often do not run optimally. To address this, teachers and parents are working together to create engaging and constructive alternative activities, such as collaborative learning programs, religious activities, and traditional games that involve hands-on interaction. With this strategy, the synergy built becomes more adaptive and able to respond to various obstacles that arise.

This condition is reinforced by GM1's statement which confirms that "many parents actually know the impact, but have not been consistent in implementing the rules at home," so that control over children becomes weak. The same thing was conveyed by OT1 who admitted that "sometimes I give my cellphone because I am busy working, so the child is easier to control with gadgets," which shows that there are practical factors behind the decision. GM2 also stated that "without active parental involvement, the rules at school will not run optimally at home," so continuity between the two environments is needed. In addition, OT3 said that "I don't really understand the ideal usage limits for children," which indicates a lack of digital parenting literacy. GM3 reinforces by stating that "education to parents must be carried out continuously, not just one meeting," as a form of sustainable strategy. Even OT2 revealed that "the rules change often because conditions at home are not always the same every day," which points to inconsistencies as a real problem. Therefore, digital parenting education programs are a strategic solution developed by teachers to increase parental awareness and understanding gradually and systematically.

Furthermore, the findings of the study revealed that the parental busyness factor is the dominant cause of low supervision of children's smartphone use. GM4 explained that "working parents often use smartphones as a substitute for supervision," so that children have freer access without clear controls. This is reinforced by OT4 which says that "when I get home from work, the child is used to playing with cellphones so that it is difficult to stop," which describes a habit that is formed unconsciously. GM5 also stated that "there needs to be a clear agreement between teachers and parents on the rules for the use of gadgets," so that there is uniformity in the application of discipline. OT5 admits that "sometimes I feel guilty if I forbid my children because they rarely see each other," so the emotional approach also influences parenting patterns. GM1 reiterated that "a persuasive approach to parents is more effective than one-way instruction," which shows the importance of humanistic communication. Meanwhile, OT6 said that "I only realized the impact

after getting an explanation from the teacher," which indicates the importance of the role of school education. Thus, digital parenting programs that are carried out regularly are a strategic step in increasing parental awareness to be more consistent in controlling children's smartphone use at home.

In addition, the limitation of effective communication between teachers and parents is also a significant challenge in building synergy. GM2 said that "not all parents are active in school communication forums," so information about children's development is not conveyed optimally. This is reinforced by OT7 saying that "I rarely attend meetings because the timing doesn't always match," which indicates that there are time constraints. GM3 added that "the missynchronization of information makes the handling of children less than optimal," because teachers and parents do not have the same understanding. OT1 also revealed that "sometimes I don't know the latest rules from the school," which indicates an information gap. GM4 went on to state that "the use of WhatsApp is very helpful in reaching parents who find it difficult to attend in person," as an alternative communication solution. OT2 also confirmed that "I am more likely to respond if the information is sent via private message," indicating a flexible communication preference. Therefore, the strategy of utilizing various communication channels is an adaptive step to increase parental participation, so that information can be conveyed more effectively and responsive to the conditions of each family.

On the other hand, the influence of the social environment and peers is a strong external challenge in controlling smartphone use in students. GM5 explains that "children tend to follow their friends' habits of using gadgets," so control from home and school is often insufficient. This is reinforced by OT3 stating that "my son often asks for a cellphone because his friends are also playing," which shows that there is social pressure. GM1 adds that "the environment has a big role to play in shaping children's habits," so a broader approach is needed. OT4 also revealed that "even though the home is restricted, outside the child remains exposed," indicating the limitations of parental control. GM2 then mentioned that "alternative activities must be more interesting than gadgets so that children want to switch," as an intervention strategy. OT5 also said that "children are happier if there is an activity with friends than playing alone on their cellphone," which shows an opportunity to distract children. Thus, collaboration between teachers and parents in creating alternative activities is an important solution to reduce smartphone dependence due to the influence of the social environment.

In response to these challenges, teachers and parents developed adaptive collaborative strategies through educational and interactive alternative activities. GM3 states that "collaborative learning programs are able to reduce children's time playing gadgets," as they are more involved in social activities. This is reinforced by OT6 saying that "my child is more active when he participates in activities with his friends," which shows the effectiveness of this approach. GM4 also emphasized that "religious activities can be a means of character formation while reducing dependence on gadgets," thus having a double impact. OT7 reveals that "children are easier to navigate if the activities are fun," which shows the importance of an engaging approach. GM5 added that "traditional games need to be revived as an alternative," as they are able to enhance hands-on interaction. Meanwhile, OT2 said that "I see a change when children start to rarely hold cellphones after participating in activities together," which shows the real results of the strategy. Thus, synergy between teachers and parents through a collaborative approach is not only able to overcome existing challenges, but also creates an environment that is more conducive to children's development holistically.

Discussion

The findings of this study show that smartphone dependence on Madrasah Ibtidaiyah students in Semarang City has a significant impact on academic, social, and emotional aspects, as well as demanding collaborative intervention between teachers and parents. Academically, excessive smartphone use decreases focus and motivation to learn, characterized by a tendency for students to be more interested in digital entertainment than learning activities, as well as the habit of procrastinating assignments. This condition is exacerbated by the lack of self-control and time management of students, who have not been able to balance their learning needs and the use of gadgets. From a social and emotional perspective, this dependence results in reduced direct interaction, decreased empathy, and an increased risk of exposure to age-inappropriate content. In responding to this problem, the study found that there are three synergistic strategies between teachers and parents, namely intensive and continuous communication, the preparation of consistent rules for the use of smartphones at school and home, and the provision of alternative educational and collaborative activities. However, the implementation of this synergy faces a number of challenges, such as low parental awareness and consistency, limited effective communication, and strong influence of students' social environment.

In Albert Bandura's perspective in Social Cognitive Theory, especially on the concepts of self-regulation and reciprocal determinism, it is explained that reciprocal interactions can occur between individuals, behaviors, and the environment (Bussey & Bandura, 1999). In the context of smartphone dependence on students, weak self-control and time management indicate that self-regulation skills have not been developed, where children are not able to control the impulse to use technology independently. Bandura emphasized that self-regulation is formed through the process of observation, imitation, and strengthening of the social environment. This is in line with the finding that lack of supervision and inconsistency of rules from parents weaken the formation of digital disciplined behaviors (Luszczynska & Schwarzer, 2005). In addition, the concept of reciprocal determinism explains that smartphone dependence behavior is not only influenced by individual factors, but also by social environments such as family, school, and peers. In this case, the synergy between teachers and parents through intensive communication, consistent rules, and the provision of alternative activities reflects efforts to create an environment conducive to shaping students' adaptive behavior. This theoretical indicator can be seen in the importance of modeling, reinforcement, and environmental control as the main factors in reducing addictive behavior (Bandura, 2001). This suggests that the findings of this study reinforce that controlling smartphone dependence in children cannot be done partially, but must be done through structured and collaborative social interventions to build sustainable self-regulation skills.

If reviewed from five relevant previous studies, the findings of this study tend to corroborate the results of the study of Twenge, Sherman and Wells, (2017) which showed that the intensity of smartphone use correlates with a decrease in children's psychological well-being and social interaction, as well as the research of Ward et al. (2017) which found that the existence of smartphones can reduce cognitive capacity and focus on learning. In addition, these results are also in line with the research of Morales et al (2020) which affirm that digital multitasking causes academic concentration disorders, as well as the study of Frost et al (2019) which emphasize the importance of the role of parents in controlling children's digital media use. Parry's research (2024) also supports that the use of undirected technology has an impact on children's emotional balance and social relationships. However, unlike these studies that generally focus on the impact

or relationship of variables partially, this study offers a more integrative perspective by linking impacts, handling strategies, and implementation challenges simultaneously. The main difference lies in the emphasis on concrete synergy between teachers and parents through intensive communication, consistent common rules, and collaborative alternative activities as practical solutions. Thus, the novelty of this research lies in the development of a collaborative synergy model based on real practices that not only explains the impact, but also offers contextual and applicative implementive mechanisms in reducing smartphone dependence on students.

Based on the novelty of the findings of this study, teachers and parents currently need to move from passive supervision to structured active collaboration in building children's digital discipline, so that the use of smartphones is not a threat, but rather a productive means of learning. Teachers should not only prohibit, but integrate smartphones as project-based learning media, digital literacy, and contextual religious education, while parents need to implement consistent digital parenting, such as setting time limits (screen time), accompanying children when accessing content, and setting an example in the use of technology. If not controlled, smartphones can cause real dangers such as game addiction, exposure to violent or pornographic content, decreased social skills due to lack of direct interaction, and weakened learning concentration (Faurholt Jepsen et al., 2020). Therefore, strategic policies are needed from the Ministry of Religion of the Republic of Indonesia to regulate the use of smartphones in education, such as the preparation of a digital literacy curriculum based on Islamic values, the development of child-friendly religious education applications, as well as national guidelines related to ethics and restrictions on the use of gadgets in madrasah and family environments. In addition, the ministry also needs to initiate training programs for teachers and parents related to digital parenting based on religious values, so that a synergistic educational ecosystem is formed (Hartmann et al., 2020). With this step, smartphones are no longer seen as a threat, but rather as a strategic instrument in shaping a generation that is academically intelligent, emotionally mature, and strong in spiritual values.

Conclusion

Overall, this study concludes that the main key in overcoming smartphone dependence in Madrasah Ibtidaiyah students lies in the power of synergy between teachers and parents that is built consistently and sustainably. The negative impact of smartphones on academic, social, and emotional aspects is real, but the surprising findings show that students' dependency levels are actually more influenced by weak coordination and unequal digital parenting patterns between school and home than by technology factors themselves. In this context, effective synergy is not only in the form of formal communication, but includes intensive information exchange, equalization of perceptions regarding the rules of smartphone use, and consistent policy implementation in both environments. Teachers act as the directors and facilitators of healthy digital learning, while parents become the primary controllers in daily practice at home. When the two go in tandem, students tend to show improved digital discipline, better time management skills, and social engagement. On the contrary, the inconsistency of the rules actually opens up space for children to be permissive towards the use of smartphones. Therefore, this study emphasizes that the most effective solution is not unilateral restrictions, but the development of collaborations that are structured, adaptive, and based on shared awareness, so that smartphones can be directed as a tool to support learning and character development of students optimally.

This study has several limitations that need to be considered in interpreting the results in a more proportionate manner. First, this research was only conducted on Madrasah Ibtidaiyah students in Semarang City, so the findings produced could not necessarily be generalized to the context of other regions with different social, cultural, and technological access characteristics. Second, the approach used tends to focus on the perspectives of teachers and parents, so that the voice of students as the main subject has not been explored in depth, especially related to their subjective experience in using smartphones. Third, this study has not quantitatively measured the level of smartphone dependence and its impact on academic achievement, so the relationship found is still qualitatively descriptive. Fourth, the dynamics of using technology that are very fast developing are also limited in itself, because the findings of this study have the potential to change with the emergence of new digital platforms. Therefore, future research needs to expand the scope of the site by involving different regions to improve external validity, as well as integrate mixed methods approaches to be able to combine the strengths of qualitative and quantitative analysis. In addition, it is important to involve students directly as key participants in order to obtain a more comprehensive picture.

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