

Smartphone Use as a Driver of Social Behavior Changes in Daily Life

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Abstract

This study aims to identify the impact of smartphone use on students' social behavior. This study was driven by the phenomenon of increasing smartphone use among teenagers that affects the way they interact, both in cyberspace and in face-to-face communication. The method used in this study is a qualitative approach with a case study type. Data were collected through interview techniques, observations, and documentation from students, teachers, and school staff. Data analysis was carried out using the Miles and Huberman interactive analysis model, which includes data reduction, data presentation, and drawing conclusions. The findings show that although smartphones help students maintain long-distance relationships and expand social networks, excessive use also causes a decrease in face-to-face interactions, which impacts their social skills, such as direct communication and empathy. The limitations of this study lie in the limited scope of only one school, so the results cannot be generalized to the entire population. The contribution of this study provides insight into how smartphones change students' social communication patterns and provides recommendations for education regarding the wise use of technology. This study also opens up opportunities for further studies on the impact of smartphone use on adolescent mental health and their social development.

Keywords: Smartphones, Social Behavior, Social Communication, Use of Technology, Adolescent Development

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INTRODUCTION

Advances in information and communication technology, especially through smartphone devices, have significantly changed the way people interact. Smartphones in the digital age have become an indispensable tool in everyday life, from communication to entertainment, even in the context of work and education (Caliandro et al., 2021; Dias & Victor, 2022; Nawaila et al., 2020). Smartphone use among adolescents, in particular, shows a rapid increase, and contributes to changes in their communication patterns and social behavior (Bozzola et al., 2022; Ehrenreich et al., 2021; M. K. Rohman, 2023). What's more, with the convenience offered by various instant messaging apps and social media, social interaction now happens more through device screens than in the form of direct communication (Benvenuti et al., 2023; Bosse et al., 2020; Vaterlaus et al., 2021). This phenomenon raises questions about the long-term impact of smartphone use on the social and emotional development of individuals, especially among the younger generation who are in the phase of social identity formation.

The phenomenon found among *Madrasah Tsanawiyah* (MTsN) 7 Jember students shows that their social interactions are increasingly shifting to cyberspace, with instant messaging

applications such as WhatsApp and social media such as Instagram becoming the main choice for communication. This observation indicates that face-to-face communication is starting to decrease, and the interactions that occur are more often in the form of texts or text messages. This phenomenon occurs not only in their personal spaces, but also in school spaces, where students often seem to be more busy with their devices rather than interacting directly with peers. This raises questions about how these changes in communication patterns affect the quality of their social relationships, and whether this excessive use of smartphones has the potential to inhibit the development of social skills that should be learned in everyday life.

The use of social media reduces face-to-face interactions, which are important for building strong social relationships (Elmer & Stadtfeld, 2020; Nguyen et al., 2022; Shensa et al., 2020). AlSobeh et al. (2023) also highlight how digital communication tends to reduce adolescents' social skills in communicating directly, as they interact more often in cyberspace. Dependence on smartphones is associated with feelings of loneliness and social isolation (Al-Kandari & Al-Sejari, 2021; Faiz et al., 2023; Gritti et al., 2023; Maulidia, 2023). Smith et al. (2021) revealed that adolescents who interact more often in cyberspace tend to have more superficial social relationships and are less empathetic. Atmoko et al. (2023) confirms that although smartphones facilitate communication, excessive use can reduce the quality of direct interaction in the real world. Smartphone addiction can have an effect on teens' social skills in real life (Khasanah & Daulay, 2022; Purwanto & Wafa, 2023; Sanjani et al., 2023; Sari et al., 2023). All these findings suggest that while technology provides convenience, it also has negative consequences for adolescents' social development, particularly in terms of face-to-face communication.

Many previous studies have examined the impact of smartphone use on teens, but most have focused on short-term impacts or only looked at specific aspects, such as social media relationships or social skills. More holistic research that combines both aspects, i.e. benefits and negative impacts, in specific contexts at the secondary school level, is still very limited. In addition, although there are many findings regarding the negative influence of smartphones on social interaction, there is still a lack of research that specifically explores this phenomenon in school environments in Indonesia, such as at MTsN 7 Jember. This study seeks to fill this gap by delving deeper into how smartphone use impacts students' social behavior in a more specific local context, as well as exploring both its positive and negative sides. The novelty of this study lies in a more detailed measurement of how students adapt to technology in their daily lives, as well as its impact on their social relationships inside and outside of school.

This study aims to identify and analyze the impact of smartphone use on the social behavior of students at MTsN 7 Jember, focusing on changes in their communication patterns. In particular, this study aims to explore how smartphones affect students' social interactions, both in the form of direct conversations and digital communication, as well as identify the positive and negative impacts of smartphone use on their social relationships. With a focus on social interaction in the school environment, the study hopes to provide deeper insights into how students adapt to technology in their daily lives and its impact on their social and emotional well-being.

Although the use of smartphones provides many benefits, especially in maintaining long-distance relationships and facilitating communication, the long-term impact of dependence on digital media can negatively impact students' social skills and the quality of interpersonal relationships. Students who use smartphones more frequently to communicate with their peers tend to interact in-person less often, which can reduce their ability to develop important social skills, such as empathy, verbal communication, and body language. These findings will make an original contribution to designing education policies that can educate students and schools about the importance of using technology wisely, without neglecting important aspects of developing

their social skills.

RESEARCH METHOD

This study examines the impact of smartphone use on the social behavior of students at MTsN 7 Jember. The material object in the study is the social behavior of students related to the use of smartphones, especially in the context of their social communication either directly or through instant messaging applications and social media. The approach used in this study is a qualitative approach, which allows researchers to dig deeper information about social phenomena that occur among students. The qualitative approach also allows researchers to understand students' subjective perspectives regarding smartphone use and its impact on their social relationships (Mirza et al., 2023). This type of research is a case study, where the researcher focuses on one group of students at MTsN 7 Jember. This case study allows researchers to obtain a more specific and contextual picture of the changes in social interaction patterns that occur among students due to smartphone use. The focus of this research is on the social changes that occur in students' daily lives and how they interact with each other, both in-person and digitally.

Research data collection uses three main techniques, namely interviews, observations, and documentation. Interviews were conducted with students, teachers, and school staff to gain a more comprehensive understanding of the impact of smartphone use on social interaction in schools. Semi-structured interviews are used to get more in-depth information from informants about how they use smartphones in their daily lives, how it affects their social relationships, and what positive or negative impacts they feel. In addition to interviews, observation techniques are used to see firsthand how students interact with each other inside and outside the classroom. Researchers observed the social interactions that occurred between students during break hours or non-lesson activities to find out the extent to which they engaged in face-to-face conversations or preferred to use smartphones. Documentation techniques are also used to collect data related to smartphone use, such as statistics on the use of certain applications or documentation of learning activities involving digital technology. The combination of these three techniques provides rich data and allows researchers to understand students' social dynamics across the board.

The data analysis in this study used an interactive analysis model developed by Miles and Huberman (1994). The data analysis process begins with data collection through interviews, observations, and documentation which is then analyzed systematically (Truman, 2023). Miles and Huberman's analysis model involves three main stages, namely data reduction, data presentation, and conclusion drawn. The first stage, data reduction, is carried out by filtering the relevant information and organizing the data obtained during the research. Irrelevant or repetitive data will be removed to simplify the analysis process. Furthermore, the data that has been reduced is presented in a structured form, both in the form of narratives and tables, to facilitate interpretation. In the last stage, conclusions are drawn by identifying the main patterns that emerge from the data that has been presented. The researcher will then relate the findings to existing theories and provide interpretations that are relevant to the research objectives. Using this approach, researchers can identify how changes in communication patterns caused by smartphone use have an impact on students' social relationships at MTsN 7 Jember.

FINDINGS AND DISCUSSION

Shifting Social Interaction Patterns

One of the findings in the study was a decrease in the frequency of face-to-face conversations between students, which was replaced by digital conversations through applications such as WhatsApp and Instagram. With the development of communication technology, especially

smartphones, social interaction among adolescents has undergone a transformation. These changes not only affect the way they communicate, but they also affect the quality of their social relationships. As part of this study, direct observations, interviews, and surveys were conducted to students to obtain valid data on their daily social habits, focusing on the use of smartphones as the main tool in communication.

Students at MTsN 7 Jember tend to interact more often through social media and instant messaging applications than communicating directly. In observational data, where direct interaction outside the classroom is seen to decrease, while the use of smartphone devices is increasing. Documentation of the interview results also revealed that most students feel more comfortable communicating via text message because they can avoid the social awkwardness that sometimes arises in face-to-face conversations. In addition, the use of social media has also increased, with some students reporting frequent interaction through direct messages (DMs) or sharing statuses that invite comments from their friends.

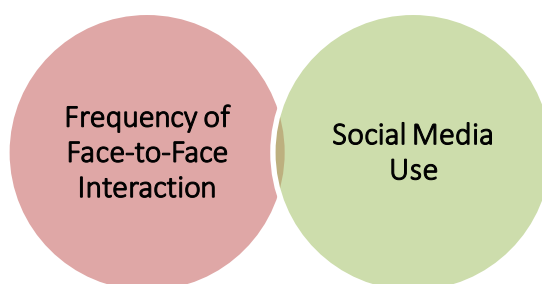


Figure 1. Shifting Student Communication

Figure 1 provides a clear picture of how the use of smartphones, especially social media and instant messaging apps, has replaced face-to-face communication. Among the apps used, WhatsApp is the most dominant, with the majority of students using it to communicate faster and more efficiently. Instagram, although used more for content sharing and indirect interactions, also shows an important role in social interaction patterns. With more and more students accessing Instagram every day, the interactions that take place on these platforms are increasingly becoming a part of their social lives. This shows that even though direct communication is still carried out, many students prefer to communicate through the app because of the convenience and convenience it offers. Additionally, social media allows students to maintain relationships with friends they can't physically meet every day.

Changes in social interaction patterns among students of MTsN 7 Jember. Face-to-face communication, which used to be the main choice, is now displaced by the use of smartphones, especially instant messaging applications such as WhatsApp and social media such as Instagram. These findings indicate that technology, in this case smartphones, has influenced the way students interact with each other. This change may be related to the convenience offered by digital communication, which allows students to interact with their friends anytime and anywhere without time or space limitations. Nonetheless, it also raises questions about whether social relationships built through digital media can replace the depth and quality of social interactions that occur in direct communication.

Impact on Social Communication

Constant use of smartphones for social communication among students at MTsN 7 Jember. One of the key findings was a decrease in face-to-face interactions between students caused by their reliance on instant messaging apps and social media. Although students spend a lot of time

interacting through apps like WhatsApp and Instagram, in-person interactions, especially outside of the classroom, are becoming less frequent. This phenomenon shows that communication through smartphones has replaced direct communication in students' daily lives. This decline also affects the quality of their social relationships, which are often deeper and more meaningful when done in person. Therefore, this study focuses on how excessive smartphone use can impact students' ability to interact directly in their social context.

The results of interviews with MTsN 7 Jember students revealed that most of them prefer to communicate through instant messaging rather than having face-to-face conversations. Some students revealed that they feel more comfortable talking via text message because it can avoid the social awkwardness that often comes up in direct communication. In addition, they also consider that communicating through smartphones is more efficient, as it allows them to talk to their friends anytime and anywhere. Most students also feel that face-to-face conversations become less important, especially when they have a lot of friends outside of school to reach through social media. These findings suggest that students prefer the convenience and ease of communicating digitally, although this may reduce in-person interactions that can build stronger, more personal social bonds.

The social science teacher said, "I noticed that students use their smartphones more often when they are outside of class. They are more likely to spend time chatting via WhatsApp or Instagram, even when they are out of school with their friends." The religion teacher stated, "I am also concerned that students are missing out on the social skills necessary to interact directly. Many are more comfortable typing messages than talking in person." The education staff teacher added, "Students tend to be busier with their devices, and direct communication is becoming less frequent. They prefer to share their status on social media rather than talk to the people around them." This interview illustrates how the phenomenon of smartphone use among students is increasingly influencing the way they interact, even outside of the classroom, which can have an impact on the development of their social communication skills.

Excessive smartphone use by students does contribute to reduced face-to-face interaction. The teachers observed that even though students were in a social environment, they preferred to communicate through social media or instant messaging apps rather than interacting in person. This indicates that communication that occurs through smartphones not only replaces face-to-face communication but also has the potential to reduce the quality of students' social relationships. This reliance on digital devices seems to reduce students' opportunities to learn the social skills necessary to interact in person, such as reading body language, empathy, and speaking skills in front of others.

Students who communicate more often through smartphones tend to feel more comfortable with this form of digital communication and feel less encouraged to have direct conversations. This can be due to the social discomfort that arises in face-to-face communication, or the reliance on the convenience of communicating without physical barriers. While interaction through smartphones allows students to stay connected with their peers, it's important to remember that direct communication plays a very important role in building strong and deep social connections. If students continue to rely on smartphones for communication, they may miss out on the opportunity to develop the social skills needed for healthier and more meaningful social interactions.

Positive and Negative Effects

The study identified both positive and negative impacts resulting from smartphone use among MTsN 7 Jember students. As the use of these smart devices becomes more intense, the

findings show significant benefits in terms of maintaining long-distance relationships and staying connected to social networks. On the other hand, the study also found significant negative effects, including increased social isolation and an increasing reliance on digital communication. With the convenience offered by smartphones, students can easily maintain contact with friends and family who are far away, and even expand their social networks through social media. However, it also contributes to reduced face-to-face social interaction and makes them more dependent on digital media, which can lead to a tendency to withdraw from direct interactions and risk mental health. This research aims to explore both positive and negative aspects of smartphone use in students' environments to provide a deeper understanding of the influence of technology on their social behavior.

Many students use smartphones for a variety of purposes, from communicating with friends and family, accessing information, to developing their social relationships through digital platforms. The use of apps like WhatsApp and Instagram allows students to stay connected with the people they deem important despite being separated by distance. This provides comfort and convenience for them to maintain relationships and expand their social networks. However, on the other hand, observations also show that many students tend to prefer to communicate through smartphones rather than talking directly to their friends at school. Some students revealed that they feel more comfortable communicating through text messages because they can avoid uncomfortable social situations. This creates a tendency to reduce face-to-face conversations, which can lead to feelings of loneliness and isolation. Students also spend considerable time with their devices, sometimes ignoring direct social interactions in the real world.

Table 1. Summary of Observations of Findings

Aspects	Positive	Negative
Long Distance Relationships	Allows students to stay connected with friends and family outside of the city or abroad.	Reduce the opportunity to interact directly with friends around them.
Connection with Social Networks	Expand students' social networks by making new friends through digital platforms.	Limitations in building deep and authentic relationships due to digital-only interactions.
Social Skills	Facilitate communication in situations that require a quick and efficient response.	Reduce the face-to-face communication skills required in daily social life.
Learning Activities	Easy access to educational information and online learning resources.	Dependence on gadgets can distract students from in-person learning activities.
Mental Health	Providing a platform for social support and experience sharing.	Increased feelings of loneliness and depression due to a lack of face-to-face interaction.
Leisure	Entertain students with useful digital content.	Make students become more passive and spend hours on their devices.

Table 1 summarizes the main findings of the study regarding the positive and negative impacts of smartphone use among students at MTsN 7 Jember. The use of smartphones provides many advantages, especially in maintaining long-distance relationships, expanding social networks, and facilitating access to information useful for learning activities. Students can also engage in social conversations that support their well-being through social media. However, on the other hand, smartphone use also has a number of negative impacts, such as reduced direct interaction that is important for the development of social skills, as well as increased social isolation. Students tend to rely on their smartphones for daily communication, which can lead to dependency and reduce the quality of face-to-face relationships. This negative impact is also reflected in the mental health of students who are increasingly depressed due to the lack of in-depth social interaction.

Smartphones provide many conveniences and benefits, excessive use can have negative impacts. One of the most prominent positive impacts is the ability to maintain long-distance

relationships, which has become especially important for students who have friends or family out of town or even abroad. With social media, they can stay connected without time and distance constraints. However, the negative impact that arises is the reduced quality of direct communication, which is very important for the development of social skills. This reliance on digital devices has led many students to prefer to interact via text messages, avoiding more emotional and authentic face-to-face interactions. This creates an imbalance in their social relationships and can potentially lead to feelings of loneliness and isolation.

Discussion

Social interaction in cyberspace affects the way teenagers communicate in real life. They found that social media use often makes face-to-face communication less important, especially for teens who interact more on online platforms. Social media and instant messaging apps like WhatsApp have changed the way people interact, with more people choosing to communicate digitally rather than meet in person (Laksana & Fadhilah, 2021; A. Rohman & Pitaloka, 2020). The study is in line with findings at MTsN 7 Jember, where students prefer to use smartphones to communicate rather than meet their friends in person. Both of these findings underscore the importance of understanding the long-term impact of these changes on adolescent social and emotional development.

Communication through social media can affect interpersonal communication patterns by reducing physical interaction, which has implications for the quality of social relationships (Kolhar et al., 2021; Li et al., 2022). These findings are consistent with the results of a study at MTsN 7 Jember, which showed a decrease in face-to-face interaction. Affouneh et al. (2021) also shows that excessive use of social media can reduce adolescents' social skills in communicating directly. These results are in line with findings in MTsN 7 Jember that suggest that smartphone use has changed the way students interact with their peers. The reliance on instant messaging apps can degrade the quality of conversations due to the lack of emotional engagement that occurs in face-to-face interactions (Chaker et al., 2022; Winstone et al., 2021). The findings from other studies provide additional perspectives that strengthen the analysis of how smartphone use changes patterns of social interaction among adolescents.

Students who use social media and instant messaging apps more often experience a decline in their skills in interacting directly with their peers. Reliance on digital devices, such as smartphones, can lead to reduced face-to-face communication and adverse influences on adolescents' social skills. Vaterlaus et al. (2021) highlights that social interaction in cyberspace can reduce direct communication skills and have an impact on the quality of social relationships formed. That excessive smartphone use, while providing benefits in terms of communication convenience and accessibility, can negatively impact the development of social skills, especially in the context of face-to-face interactions.

Communication through social media is changing the way teens interact in the real world (Caliandro et al., 2021; Ehrenreich et al., 2021). They point out that social media use often reduces direct communication, which impacts adolescents' ability to build strong and empathetic social relationships. AlSobeh et al. (2023) also revealed that adolescents who use digital applications more often tend to have difficulties in communicating directly, as they are used to communication without physical barriers. Research by Gritti et al. (2023) also shows how excessive smartphone use can affect the quality of social relationships, which are supposed to be built through face-to-face interactions. The more people rely on social media and instant messaging apps, the less face-to-face interactions occur in the real world. The overall findings provide insight that while smartphones provide a lot of convenience, their overuse can negatively impact social

skills and interpersonal relationships among adolescents.

The use of social media can reduce the face-to-face communication needed to build deep social relationships. The more people interact in cyberspace, the less face-to-face interactions occur in the real world. These findings are also supported by research by Elmer and Stadtfeld (2020), which revealed that dependence on smartphones and social media leads to increased feelings of loneliness and social isolation among adolescents. While smartphones provide great benefits in maintaining social connections, overuse can lead to a reduction in the direct communication skills needed in daily social life (Benvenuti et al., 2023; Vaterlaus et al., 2021). Both studies underline that technology, while it has a positive side, can also bring negative impacts that should be considered for the social well-being of individuals.

Gritti et al. (2023) found that the use of social media changes the way people interact in real life, with fewer face-to-face conversations. Social media can reduce adolescents' social skills in communicating directly (Lee et al., 2022; Quach et al., 2022). Excessive smartphone use can reduce the quality of adolescents' social interactions. Research by Chaudhari and Awesh Bhornya (2022) confirms that excessive digital communication can increase social isolation and reduce more authentic relationships. These overall findings reinforce the conclusion that while smartphones have certain benefits in maintaining long-distance relationships, their uncontrolled use can affect users' communication skills and mental health, especially among adolescents.

This study provides important implications for the development of understanding of the impact of smartphone use on social communication among adolescents. The findings of this study suggest that while smartphones offer benefits in maintaining long-distance relationships and expanding social networks, over-reliance on digital devices can reduce face-to-face interactions that are crucial in building deep social skills. The contribution of this research also opens up opportunities to design policies or interventions that can educate students about the importance of balance in the use of technology, as well as encourage the development of direct communication skills that can strengthen their social relationships and mental well-being.

CONCLUSION

The increasing use of smartphones among students of MTsN 7 Jember has brought about significant changes in their social interaction patterns. Although smartphones facilitate long-distance communication and expand social networks, findings show that they also lead to a decrease in face-to-face interactions, which affects the quality of students' social relationships. Reliance on instant messaging applications and social media reduces important social skills, such as direct communication and empathy. The limitations of this study lie in its focus on only one school in Jember, so the results cannot be generalized to the entire student population in Indonesia. This study focuses more on the social effects of smartphone use and has not explored further impacts on other aspects such as mental health. Based on these findings, it is recommended that schools provide education on the wise use of technology and encourage students to interact more directly to maintain the development of their social skills. Further research can be done by expanding the scope to other schools or by examining the psychological impact of smartphone use on adolescents.

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