



ARTICLE RESEARCH

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**The Role of Smartphones in Teenage Social Engagement in Borongloe Village**

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ABSTRACT

Background: The excessive use of smartphones can disrupt teenage social engagement, potentially leading to emotional instability. Objective: This study aims to examine the role of smartphones in shaping teenage social engagement in Borongloe Village and to clarify the relationship between emotional instability and social engagement. Method: A quantitative approach with a cross-sectional study design was applied. A sample of 102 respondents was selected through proportional stratified random sampling, and data were gathered using a structured questionnaire. The relationship between smartphone use, social engagement, and emotional instability was analyzed using the chi-square test with a significance level of  $<0.05$ . Results: The findings indicate that teenagers engage more in active smartphone use than passive use, with a tendency toward negative social engagement. A significant relationship exists between smartphone use, social engagement, and emotional instability among teenagers in Borongloe Village, Gowa Regency, as indicated by a p-value of 0.00 ( $p < 0.05$ ). Conclusions: The study concludes that smartphones significantly influence the social engagement and emotional stability of teenagers in Borongloe Village. It recommends that teenagers become more aware of the potential negative impacts of excessive smartphone use. At the same time, parents and educators should actively monitor smartphone use among youth to support healthier social engagement and emotional well-being.

Keywords : Adolescents; Behavior; Engagement; Smartphone

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## INTRODUCTION

The growing prevalence of smartphone use among teenagers has raised concerns regarding its impact on their social interactions. The upward trend of smartphone use in Indonesia shows a significant increase, with the number of users rising from 65.2 million in 2016 to 92 million by 2019.(1) A smartphone is a mobile device equipped with computer-like functionalities running on an operating system that serves as a platform for application developers. In Sulawesi, data from the Indonesian Internet Service Providers Association (APJII) in 2019 reveals a high number of internet users across all provinces. South Sulawesi has the largest share at 5,750,314 users. However, the widespread availability of this technology does not always yield positive outcomes, especially for teenagers who are becoming increasingly dependent on smartphones in their daily lives.(2)

The role of smartphones in teenage social engagement is crucial to examine, considering that adolescence is a formative phase in social and emotional development. Excessive smartphone use has the potential to diminish the quality of direct interactions with peers and family, which are essential for developing social skills in adolescents.(3) While smartphones indeed offer benefits in the digital age, serving as tools for communication, online learning, and entertainment, unchecked use can lead to social isolation and emotional instability.(4)

This study is relevant as it seeks to understand the influence of smartphones on teenage social engagement, allowing us to identify strategies that support more mindful smartphone use. Additionally, the study's findings are anticipated to provide insights to parents and educators about the importance of setting limits on smartphone use for teenagers to support their social and emotional well-being.(5) This research is significant because it can contribute to developing programs or interventions aimed at improving social interaction quality among teenagers amid the widespread use of smartphones.(6)

Smartphone use among teenagers has become an increasingly widespread phenomenon, with the 18-24 age group reported as the largest user segment, comprising 80% of total users, according to a 2014 Deloitte survey.(7) In Indonesia, a study by Taylor Nelson Sofres (TNS) found that 39% of smartphone users are teenagers aged 16 to 21. Another survey among junior and senior high school students in Jakarta indicated that 74% spend more than two hours daily watching television or playing games on their smartphones.(8)

High smartphone use among teenagers also influences their communication and interactions within broader social settings, including social dynamics and community interactions.(9) Smartphone use extends beyond interpersonal communication, fostering new forms of social networks, online communities, and virtually participating in social and civic activities.(10)

Observations conducted in Borongloe Village revealed that approximately 230 teenagers own personal smartphones, frequently using them during leisure time and sometimes even during school hours. (11) In school, these teenagers sit together in groups, but each is engrossed in their smartphone, often without engaging in direct conversation. (12) Based on these observations, this study aims to analyze the role of smartphones in teenage social engagement in Borongloe Village and explore the

profound impacts of smartphone use on social engagement patterns among teenagers in this community. (13)

## METHOD

This research employs a quantitative approach utilizing a cross-sectional study design conducted in Borongloe Village, Gowa Regency, from June to September 2023. This location was chosen due to its significant adolescent population, allowing for the exploration of the role of smartphones in social engagement. The sample consisted of 102 adolescents selected using proportional stratified random sampling, with strata determined based on age and gender to ensure sample representativeness. A validated questionnaire served as the primary instrument for data collection, encompassing variables related to the frequency and type of the role of smartphones (active and passive) and aspects of social engagement. Data analysis included univariate methods to describe data distribution and bivariate analysis using the chi-square statistical test at a significance level of  $\alpha < 0.05$ , following normality and homogeneity tests. Additionally, this study considers ethical considerations, obtaining ethical approval from the relevant authority while maintaining the privacy and confidentiality of the respondents' data.

## RESULTS

The table presents the demographic characteristics of the respondents in the study. Out of the 102 participants, most are female, accounting for 80% (82 individuals), while males make up 20% (20 individuals). This significant gender disparity highlights the need to consider gender-specific perspectives when analyzing the study's outcomes. In terms of age distribution, the largest group consists of 16-year-olds, representing 44% (45 individuals), followed closely by 17-year-olds at 38% (39 individuals). A smaller proportion of respondents are 18 years old (8%, 10 individuals), while 15-year-olds and 19-year-olds each make up 2% (2 individuals). The predominance of 16- and 17-year-olds in the sample underscores the importance of focusing on this age group, as they represent a critical stage of adolescent development.

Table 1. Respondent characteristics

Respondent characteristics	N	%
Gender		
Male	20	20.0
Female	82	80.0
Age		
15 Years	2	2.0
16 Years	45	44.0
17 Years	39	38.0
18 Years	10	8.0
19 Years	2	2.0
Total	102	100

These demographic insights are essential for understanding the study's context and ensuring that findings are interpreted with consideration of the sample's composition.

Table 2. The Role of Smartphones, Teenage Social Engagement

The Role of Smartphones	N	%
Active role	56	55.0
Passive role	46	45.0
Teenage Social Engagement		
Good	39	38.0
Poor	63	62.0
Total	102	100

Table 2 highlights the role of smartphones in teenage social engagement. The data reveals that 55% of teenagers (56 individuals) use smartphones in an active role, while 45% (46 individuals) engage with them in a passive role. This indicates that a slight majority of adolescents interact with their devices in a more dynamic and participatory manner. However, when examining social engagement, only 38% (39 individuals) demonstrate good social engagement, while the majority, 62% (63 individuals), exhibit poor social interaction.

This disparity suggests that active smartphone usage does not necessarily translate to stronger social engagement. Instead, the high prevalence of poor social interaction among teenagers, despite their active or passive smartphone use, raises important questions about the impact of smartphone usage on social skills and interpersonal relationships. These findings underscore the need for further research into how different types of smartphone engagement influence adolescent social development and well-being, particularly in a sample of 102 respondents that provides a broader perspective.

Table 3. The Role of Smartphones in Teenage Social Engagement in Borongloe Village, Gowa Regency

The Role of Smartphones	Teenage Social Engagement				Total	<i>p-value</i>	<i>Df</i>
	Good		Poor				
	n	%	n	%			
Active Role	15	14.7	45	44.1	60	0.000	1
Passive Role	29	28.4	13	12.7	42		
Total	44	43.1	58	56.9	102		

The data in Table 3 explores the relationship between smartphone usage patterns and teenage social engagement among 102 respondents in Borongloe Village, Gowa Regency. The analysis reveals a statistically significant association, as indicated by the *p-value* of 0.000 ( $p < 0.05$ ). Among teenagers who use smartphones actively, 14.7% demonstrate good social engagement, while a much larger proportion, 44.1%, exhibit poor social interaction. In contrast, among those who use smartphones passively, 28.4% show good social engagement, compared to only 12.7% with poor social interaction.

These findings highlight a clear trend: active smartphone usage is strongly linked to poorer social engagement, while passive usage appears to correlate with better social interaction. This suggests that

the way teenagers engage with their smartphones, whether actively or passively, plays a significant role in shaping their social behaviors.

The p-value of 0.000 indicates a statistically significant relationship between smartphone usage and social engagement, suggesting that how teenagers use smartphones whether actively or passively significantly affects their social interactions. These findings indicate that despite active smartphone use, it does not necessarily lead to improved social engagement, highlighting the complexity of technology's impact on interpersonal relationships among adolescents. In this study the degrees of freedom (df) are calculated based on the analyzed variables' categories resulting in a df value of 1 for the chi-square test as there are two categories for each variable Active Role and Passive Role for smartphone usage and Good and Poor for social engagement yielding the calculation of number of categories -1.

## DISCUSSION

The research findings highlight a troubling pattern concerning smartphone usage among adolescents in Borongloe Village, with a significant percentage of teenagers actively (50%) and passively (45%) engaging with smartphones. Despite this high level of engagement, a large portion of adolescents exhibits poor social behavior (43%), indicating a disconnect between smartphone use and meaningful social interactions. This trend aligns with Sherry Turkle's theory, which argues that while technology connects people digitally, it often leads to a decline in face-to-face communication skills and emotional intimacy.(14) The addictive qualities of smartphone applications, such as social media platforms and gaming features, may exacerbate this issue by encouraging excessive usage, even during private activities like restroom visits.(15) This observation is consistent with Fitriana's findings in Lamdom Village, where adolescents' natural curiosity and unrestricted internet access drove similar behaviors.(16) Such habits suggest that adolescents are highly susceptible to the content they consume, often overlooking the potential negative impacts on their social skills and interpersonal relationships.(17)

The findings also resonate with Jean Twenge's research, which highlights a generational shift in social behavior due to increased screen time.(18) Twenge argues that adolescents who spend more time on smartphones are more likely to experience loneliness, anxiety, and reduced social competence.(19) This is further supported by Przybylski and Weinstein's study, which found that moderate smartphone use can be beneficial, but excessive use is associated with poorer mental health and social outcomes.(20) These theories collectively underscore the dual nature of smartphone usage: while it offers opportunities for connection and learning, it also poses significant risks to social development when used excessively or improperly.(21)

Additionally, the results presented in Table 3 reveal the complexity of smartphone usage and its effects on social engagement. While a significant number of passive users (45%) remain, their interactions are often centered around productive tasks, such as researching information and completing school assignments. This aligns with Livingstone and Helsper's theory of "digital differentiation," which

suggests that the impact of technology varies depending on how it is used.(22) When used judiciously, smartphones can enhance communication, support academic pursuits, and foster creativity.(23)

However, the stark disparity between the low percentage of adolescents demonstrating good social interaction (12%) and those displaying poor social behavior (43%) underscores the urgent need for targeted educational initiatives. These programs should focus on raising awareness among adolescents about the negative consequences of excessive smartphone use on their interpersonal skills while also encouraging healthier digital habits that promote face-to-face communication and foster positive social interactions.(24)

Previous studies, such as Rideout et al., have shown that adolescents who balance their screen time with offline activities tend to have better social skills and emotional well-being. Similarly, Uhls et al. found that limiting smartphone use and encouraging in-person interactions significantly improved adolescents' ability to read emotions and build relationships.(25) These findings suggest that interventions should not only address the quantity of smartphone use but also the quality of its application.(26) For instance, integrating digital literacy programs into school curricula could help adolescents develop critical thinking skills to navigate online content responsibly.

This study provides valuable insights into the role of smartphones in teenage social engagement within Borongloe Village; however, several limitations must be acknowledged to better understand the context and generalizability of the results. The sample size, though useful for initial analysis, was limited to Borongloe Village, which may not represent all adolescent populations across Indonesia. Furthermore, data collection relied on self-reported questionnaires, potentially introducing biases due to social desirability or recall inaccuracies. More objective methods, such as usage tracking apps or observational studies, could enhance the accuracy of future research.(27)

Additionally, the study focused primarily on smartphone use and social engagement, excluding other influential factors such as family environment, school activities, and mental well-being, which might also impact social interactions.(28) Acknowledging these limitations allows for a more nuanced interpretation of the findings, suggesting that further research with broader sampling and additional variables would improve understanding of smartphone influence on adolescent social engagement.

## CONCLUSIONS AND RECOMMENDATIONS

The study "The Role of Smartphones in Teenage Social Engagement in Borongloe Village" reveals that while many adolescents engage with smartphones actively and passively, a significant number exhibit poor social behaviors. This suggests that high smartphone usage does not necessarily translate into meaningful social interactions. Instead, excessive and unregulated smartphone use may contribute to a decline in interpersonal skills, emotional intimacy, and face-to-face communication abilities.

To mitigate these issues, targeted educational interventions are essential. Programs should raise awareness of the detrimental effects of excessive smartphone use on social skills and promote healthier



digital habits. Schools and parents should encourage face-to-face communication and actively monitor smartphone usage. By fostering responsible technology use, we can enhance adolescents' social skills and overall well-being, leading to stronger relationships within the community.

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