

## The Relationship Between Boredom Proneness and Phubbing Behavior in Adolescents

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### ABSTRACT

This study specifically aimed to investigate and determine the relationship between the variable of boredom proneness and phubbing behavior among adolescent subjects. The methodological approach applied in this study utilized a quantitative research design, involving 120 adolescent participants. In the subject selection process, the sampling technique employed was quota sampling, with inclusion criteria specifying participant ages ranging from 15 to 18 years old. Furthermore, the data analysis phase was conducted by applying a non-parametric statistical technique using the Spearman's Rho correlation test; the findings of this study indicated a positive relationship between boredom proneness and phubbing behavior in adolescents. The implications of these results indicated that the higher the level of boredom proneness experienced by adolescents, the higher the intensity of the phubbing behavior exhibited. Conversely, the lower the level of boredom proneness possessed by adolescents, the lower the tendency for phubbing behavior to occur.

**Keywords :** Boredom Proneness, Phubbing, Adolescents

### INTRODUCTION

The development of human civilization in the modern era cannot be separated from the massive acceleration in the field of information and communication technology. These technological breakthroughs have brought broad and profound implications for various aspects of life, particularly in restructuring the patterns of social interaction within society. This paradigm shift is evident in the transformation of interactive communication methods, which previously relied heavily on face-to-face meetings but have now migrated to virtual spaces. The convenience offered by online technology allows individuals to connect without spatial and temporal limitations, altering the social landscape to be more fluid yet simultaneously more physically distant (Abivian 2022).

This dynamic is further accelerated by the presence of smartphone technology, which offers high mobility and connectivity. Smartphones are no longer merely communication devices; they have evolved into multifunctional instruments that facilitate various life necessities, ranging from completing professional tasks and seeking information to fulfilling entertainment needs. The integration of smartphones into daily life makes long-distance communication and information access highly efficient, thereby creating a strong functional dependency among their users.

The demographic group most affected by this phenomenon is adolescents. During this developmental phase, adolescents tend to spend a significant portion of their daily time

interacting with smartphones. These devices are utilized as the primary mechanism for seeking entertainment to fill leisure time, as a coping strategy to overcome boredom, and as a vital means to maintain friendships and personal existence through various social media platforms (Nurwijayanti et al. 2025). This high intensity of usage is driven by a strong desire to remain connected with their digital social environment. However, excessive usage often develops into unhealthy behaviors. It is not uncommon for adolescents' attachment to gadgets to transform into addiction or compulsive obsession. This is characterized by continuous behaviors such as checking for updates, instantly responding to notifications, and endlessly consuming viral content, such as scrolling for hours on applications like TikTok, Instagram, or YouTube. This condition creates an illusion of busyness that ultimately alienates adolescents from the reality of their surrounding environment.

The persistent and intrusive behavior of smartphone usage in various social situations is known as phubbing (Franchina et al. 2018); phubbing represents a paradox in modern interactions, where the behavior of ignoring others in favor of gadgets has been normalized by many groups. This phenomenon drives individuals to divert their attention from face-to-face interactions and focus it on smartphone screens to keep up with the latest trends or activities on social media, even while in the midst of social gatherings. The impact of this phubbing behavior often escapes the awareness of the perpetrators, even though its consequences are highly significant to the quality of interpersonal relationships. Gradually, phubbing can degrade the quality of interpersonal communication, trigger apathy or indifference towards the surrounding environment, and weaken social cohesion. This occurs because individuals prioritize pseudo-interactions in the virtual world over building genuine emotional connections in the physical world (Aditia 2021).

The prevalence of this behavior among adolescents is quite alarming; based on research conducted by (Błachnio and Przepiorka 2018), it was recorded that 56.7% of adolescents were identified as frequently engaging in phubbing behavior, while the other 43.3% were more often in the position of victims who felt the negative impacts of such neglect. These empirical findings provide a strong indication that phubbing is not merely an isolated phenomenon, but has become a behavioral pattern closely related to the dynamics of peer social relationships during adolescence. To understand the root of this problem, it is necessary to trace the underlying psychological factors. The tendency of phubbers to withdraw from direct interaction and concentrate their attention on smartphones is often triggered by certain internal conditions (Saloom and Veriantari 2021).

One of its main predictors is boredom proneness, which is a personality disposition where individuals possess a strong tendency to easily feel bored in various situations. This boredom can arise both when there is no activity (passive situations) and when individuals are engaged in activities that should be interesting but fail to provide the expected stimulation. From this perspective, the smartphone functions as the most accessible "antidote" to boredom. Individuals with a high level of boredom proneness possess a strong internal drive to continuously seek alternative stimulation or entertainment in order to reduce the discomfort caused by such boredom (Proboweni and Sarajar 2024). Consequently, they become vulnerable to diverting their attention to gadgets amidst social interactions.

Departing from the background of these issues, this study aimed to empirically prove the relationship between boredom proneness and phubbing behavior in adolescents, in order to provide a more comprehensive understanding of the psychological dynamics behind this phenomenon of social neglect.

## **LITERATURE REVIEW**

Historically, the terminology of phubbing was first constructed and introduced to the public sphere by an advertising agency in Australia. This term emerged as a response to describe a specific social phenomenon, namely the behavior of individuals who exhibit a more dominant preference for using smartphones compared to interacting directly with the people closest to them in their environment. This phenomenon marks a shift in the norms of politeness in modern social interactions. Viewed from an etymological aspect, the word phubbing is a portmanteau or linguistic amalgamation of two English words, namely "phone" and "snubbing" (the act of ignoring or belittling). This combination produces a literal meaning as the act of making a phone call or using a gadget accompanied by an attitude of disregarding the presence of others. This definition emphasizes the aspect of social neglect mediated by technology.

In a psychological and behavioral context, Balta and Emirtekin (2018) explained phubbing as a behavioral pattern wherein individuals interrupt face-to-face conversations by checking or using their mobile phones. This behavior reflects an individual's inability to maintain full attention on real social interactions due to being distracted by activities in the virtual world. This behavior effectively creates communication barriers and serves as a form of avoidance of direct communication. Consequently, an individual's physical presence no longer guarantees psychological presence in the interaction.

Furthermore, the emergence of phubbing behavior does not occur in a vacuum but is influenced by various determinant factors. Chotpitayasunondh and Douglas (2016) identified four main factors that act as triggers for an individual to engage in phubbing, namely: (1) Social Media Addiction, where individuals have a compulsive drive to constantly stay connected online; (2) Boredom Proneness, which triggers the search for stimulation through gadgets; (3) Conformity, which is the desire to follow the behavior of others or prevailing trends; and (4) Low self-control, which causes an inability to resist the impulse to use a smartphone.

Boredom proneness is a personality construct that describes an individual's vulnerability to the experience of boredom as a psychological regulation signal that arises due to dissatisfaction with the current situation. This condition occurs when individuals perceive that their surrounding environment fails to provide adequate stimuli or no longer offers meaningful cognitive engagement. This implies that individuals with high boredom proneness tend to have a threshold of satisfaction that is more difficult to achieve, causing them to continuously seek new stimulation to overcome the feeling of being trapped in activities perceived as monotonous.

In line with this view, Struk et al. (2017) provided a more in-depth explanation that boredom proneness emerges as a consequence of an individual's failure to maintain attentional engagement. This failure leads to the emergence of profound feelings of dissatisfaction and

the perception that the surrounding environment does not provide sufficient arousal to maintain their interest. This condition is triggered by the minimal stimulation received from the surrounding environment, causing individuals to feel uninterested, lose enthusiasm, and experience difficulties in sustaining attention on the ongoing activity. The inability of the environment to meet these internal stimulation needs drives individuals to seek an escape or distraction.

In terms of measurement and structural understanding, Struk et al. (2017) validated that boredom proneness is divided into two fundamental aspects. The first aspect is internal stimulation, which relates to the ability (or inability) of an individual to generate interest and maintain focus from within themselves. The second aspect is external stimulation, which relates to an individual's perception of the need for variety or challenges from the external environment in order to feel entertained and avoid boredom.

## METHODS

**Population and Participants** The target population that became the focus of this study was defined as early adolescents residing in the city of Surabaya. In an effort to select representative participants, this study applied the quota sampling technique as the primary sampling method. The specifically established inclusion criteria targeted individuals within the adolescent age range, namely from 15 to 18 years old. The determination of the minimum sample size was conducted using the GPower 3.1 software, which set a minimum limit of 115 adolescent respondents. In the realization of data collection in the field, the total subjects collected were 123 individuals, and the data utilized for research analysis comprised 120 participants. The detailed demographic characteristics of the subjects can be observed in Table 1.

**Table 1. Demographic Characteristics of Participants**

Characteristics	Category	Frequency (n)	Percentage (%)
Age	15 - 16 years old	60	48.8%
	17 - 18 years old	63	51.2%
Gender	Female	67	54.5%
	Male	56	45.5%

1. **Research Design** This study was designed using a quantitative approach by applying a correlational research design. The selection of this correlational design was aimed at testing the strength and direction of the relationship between the investigated variables without manipulating these variables. Within the conceptual framework of this study, the independent variable (X) was identified as boredom proneness, while the dependent variable (Y) was phubbing behavior.
2. **Data Collection Instruments** The first instrument functions to measure the extent to which individuals have a tendency to easily feel bored, which is measured through two main aspects, namely internal stimulation and external stimulation. This scale initially consisted of 30 items; based on the instrument test results, 9 items were dropped, leaving 21 valid items (validity index ranging between 0.313–0.610) with a Cronbach's Alpha reliability value of 0.869. The second instrument was the Phubbing Behavior Scale; this

instrument was designed to measure an individual's level of tendency to ignore their interlocutor while using a smartphone. The development of items on this scale was based on the aspects of communication disturbance and phone obsession. The initial scale consisted of 36 items; based on the instrument test results, 12 items were dropped, leaving 24 valid items (validity index ranging between 0.277–0.603) with a Cronbach's Alpha reliability value of 0.882.

3. **Data Analysis** The data analysis phase in this study was initially planned to use a parametric correlation test technique. However, after conducting a series of prerequisite analysis tests, it was found that although the data were normally distributed, the relationship between the variables exhibited a non-linear pattern. Therefore, to maintain the validity of the analysis results, the hypothesis testing method was shifted to use a non-parametric analysis technique utilizing the Spearman's Rho correlation test with the assistance of SPSS software.

## RESULTS

After the measuring instruments were confirmed to be valid and reliable (as detailed in the instrument sub-chapter), the phase proceeded with the implementation of the prerequisite analysis tests. Based on the test results, it was found that the research data possessed a normal distribution (Kolmogorov-Smirnov significance value  $p = 0.077 > 0.05$ ). However, the linearity test results indicated that the relationship between variables possessed a non-linear pattern (Deviation from Linearity significance value  $p = 0.011 < 0.05$ ). Considering the condition of the data that did not meet the linearity assumption, the hypothesis testing procedure was conducted using a non-parametric statistical technique, namely the Spearman's Rho correlation test. The computational results of the Spearman's Rho correlation analysis yielded a correlation coefficient value (Rho) of 0.420 with a significance level ( $p$ ) of  $<0.001$ .

**Table 2. Spearman's Rho Hypothesis Test Results**

Rho	R <sup>2</sup>	p	Remarks
0.420	0.192	<0.001	There is a significant relationship

Based on the data presented in Table 2, the significance value of  $p < 0.001$  indicated that the null hypothesis was rejected, meaning there was a highly significant relationship between the variables of boredom proneness and phubbing behavior. The positive correlation coefficient value of 0.420 demonstrated a directly proportional relationship direction; this meant that an increase in the score of the boredom proneness variable would be followed by an increase in the score of phubbing behavior. The strength of the relationship between these two variables was categorized as being at a moderate level.

Additionally, the analysis also generated a coefficient of determination (R<sup>2</sup>) value of 0.192. This figure provides an understanding of the magnitude of the effective contribution of the independent variable to the dependent variable. The value of 0.192 can be interpreted to mean that the boredom proneness variable was able to explain the variance or changes occurring in the phubbing behavior variable by 19.2%. Meanwhile, the remaining variance of 80.8% was influenced or explained by other factors not included or measured in this study.

**Table 3. Descriptive Analysis Results**

Variable	Minimum	Maximum	Mean	Standard Deviation
<b>Boredom Proneness</b>	25	99	62.09	12.501
<b>Phubbing</b>	27	96	56.38	12.542

The descriptive statistical analysis, as displayed in Table 3, provided a detailed overview of the participants' data distribution. For the boredom proneness variable, the lowest score obtained by the respondents was 25, while the highest score reached 99; the empirical mean value was 62.09, and the standard deviation was 12.501. Meanwhile, for the phubbing behavior variable, the data showed a minimum score of 27 and a maximum score of 96; the empirical mean value for this variable was recorded at 56.38, with a data dispersion indicated by a standard deviation value of 12.542.

**Table 4. Perbandingan Data Mean Empirik dan Mean Hipotetik**

Variable	Empirical Mean (EM)	Hypothetical Mean (HM)	Remarks
<b>Boredom Proneness</b>	62.09	25	EM > HM ; High
<b>Phubbing</b>	56.38	27	EM > HM ; High

To determine the high or low categorization of the research variables, a comparison was made between the empirical mean value and the hypothetical mean. The comparison results in Table 4 demonstrated that for the boredom proneness variable, the empirical mean value (62.09) far exceeded its hypothetical mean value (25). This significant difference (EM > HM) signified that the average level of boredom proneness among adolescents in this study was classified into the high category. A similar pattern was also found in the phubbing behavior variable, where the empirical mean of 56.38 was greater compared to the hypothetical mean of 27; these findings affirmed that the research subjects generally possessed a high tendency for boredom as well as a high intensity of social neglect (phubbing)

## DISCUSSION

Based on the series of data analysis processes that have been conducted, this study successfully proved empirically that there was a positive and significant relationship between boredom proneness and phubbing behavior in adolescents. These statistical findings confirmed the research hypothesis and indicated a strong correlation: the higher the adolescents' tendency to feel bored, the higher the intensity of phubbing behavior manifested in daily social interactions. Conversely, adolescents with a low level of boredom proneness tended to show a decrease in the frequency of the behavior of ignoring interlocutors in favor of smartphones.

The descriptive analysis provided deeper insights into the psychological condition of the research subjects. The data showed that both variables were empirically situated in the high category, surpassing their hypothetical averages. The phenomenon of these high scores

portrayed the profile of adolescents in this study as a group vulnerable to experiencing chronic boredom and simultaneously possessing a strong habit of withdrawing into the digital world when they are with other people. This reflected that phubbing behavior in this population was not merely a momentary incident, but had become a persistent behavioral pattern corresponding with their high threshold of boredom.

Conceptually, this close relationship can be explained through the mechanism of fulfilling the need for stimulation. As explained by Westgate and Wilson (2018), boredom proneness is closely related to an individual's inability to maintain attention and find meaning in a given situation, which culminates in a low level of psychological satisfaction. Individuals who are prone to boredom tend to perceive their surrounding environment as lacking optimal stimuli (under-stimulated), meaning they experience difficulties in maintaining mental engagement independently and require additional external arousal. Danckert (2024) elucidated that boredom arises from a condition of lacking adequate stimulation, wherein individuals fail to fulfill a strong desire to engage cognitively. This failure triggers dissatisfaction because individuals are unable to utilize either internal or external resources to overcome the monotonous situation.

Within the context of adolescent development, this vulnerability becomes increasingly crucial; the adolescent phase is a period characterized by sensation seeking and a high need for novel experiences as well as activities deemed enjoyable. When face-to-face interaction situations are perceived as monotonous, slow, or lacking instant gratification, adolescents with high boredom proneness will immediately seek alternative sources of stimulation. It is in these situations that the smartphone emerges as the most effective and efficient tool for distraction. Smartphone devices offer unlimited access to entertainment and information capable of providing rapid stimulation to overcome the feeling of boredom. This diversion mechanism aligns with the findings of Proboweni and Sarajar (2024), who stated that individuals with a high level of boredom proneness possess a strong tendency to seek alternative entertainment through their gadgets. Consequently, the attention that should be given to interlocutors in the real world is fully diverted to the phone screen, triggering the occurrence of phubbing behavior.

The findings in this study are also congruent with and reinforce the results of previous studies conducted by Lv and Wang (2023), who discovered that individuals with a tendency to easily feel bored are more vulnerable to diverting their attention to smartphones when interacting with others. This highlights that boredom proneness acts as a significant internal driver in predicting problematic smartphone usage behavior in social situations. Thus, the results of this study affirmed that boredom proneness plays a vital role as a psychological predictor of the emergence of phubbing behavior in adolescents. The inability of adolescents to tolerate minimally stimulating situations pushes them to use smartphones as a coping or escapism mechanism. The higher the level of intolerance toward such boredom, the greater the likelihood of adolescents engaging in phubbing, which ultimately has the potential to genuinely degrade the quality of their social relationships.

## CONCLUSION

Based on the entire series of research conducted involving 120 participants from the adolescent age group, a primary conclusion can be drawn that there was a positive and statistically significant relationship between the variable of boredom proneness and phubbing behavior. This evidence was based on the results of the correlation analysis, which yielded a correlation coefficient value ( $r$ ) of 0.420 with a significance level ( $p$ ) of  $<0.001$ . These empirical findings provide a solid foundation to state that the working hypothesis proposed in this study is accepted and its validity is proven.

Therefore, a directly proportional pattern of relationship between the two variables can be assumed. This means that the higher the level of boredom proneness or the tendency to feel bored experienced by adolescents, the higher the intensity of the phubbing behavior demonstrated in their social interactions. Conversely, the lower the level of boredom proneness possessed by adolescents, the lower the tendency to exhibit phubbing behavior.

## LIMITATION

Penelitian This study has strived to strictly adhere to scientific procedures to the maximum extent possible; nevertheless, the researchers acknowledge several limitations that need to be considered in interpreting the findings. First, this study applied a correlational research design that specifically aimed to identify and measure the strength of the relationship between the variable of boredom proneness and phubbing behavior in adolescent subjects. The use of this design restricted the study's ability to draw definitive causal conclusions; thus, the obtained results merely illustrate the extent to which both variables co-vary without definitively explaining the mechanism of a unidirectional influence.

Second, the focus of this study was limited to a single independent variable, namely boredom proneness. In reality, human behavior is highly complex and influenced by various multidimensional factors. Therefore, it is expected that future studies can broaden the scope of the investigation by integrating other potential independent variables. Psychological variables such as self-control, emotion regulation capabilities, the quality of social interactions, self-concept formation, or peer conformity pressure are highly relevant for further investigation. Exploring these additional variables is expected to enrich the literature repertoire and provide a more holistic depiction of the determinant factors influencing phubbing behavior.

Third, a limitation also resides in the methodological approach utilized, which was quantitative. To overcome this, future researchers are encouraged to implement a diverse range of different research types, such as qualitative approaches or experimental methods. The use of qualitative methods can offer insights into the subjective experiences of participants, while experimental methods can test cause-and-effect relationships with stricter controls. This diversification of methods is crucial in order to obtain a much deeper and more comprehensive understanding regarding the psychological dynamics between boredom proneness and phubbing behavior in adolescents.

Lastly, this study had boundaries concerning demographic aspects and sample characteristics. Subsequent research is highly recommended to expand the analysis by incorporating more specific demographic variables, such as the intensity and duration of smartphone usage,

analyzing differences based on gender, and encompassing a more varied age range. Furthermore, efforts to expand the number of participants and enrich the characteristics of the research sample are also deeply necessary. This step is crucial to enhance external validity, enabling the research findings to be generalized more broadly and representatively to the adolescent population in general.

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