

Interpersonal communication anxiety as a mediator of the relationship between self-control and phubbing behavior in college students

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Abstract

Phubbing behavior has been linked to both deficits in self-regulation and heightened interpersonal communication anxiety. This study aimed to examine the mediating role of interpersonal communication anxiety in the relationship between self-control and phubbing behavior among university students. A total of 217 participants were selected using purposive sampling. Three validated instruments were employed: the Generic Scale of Phubbing (GSP; $\alpha = 0.825$), the Self-Control Scale ($\alpha = 0.856$), and the Interpersonal Communication Anxiety Scale ($\alpha = 0.813$). Data were analyzed using mediation analysis via JASP and PROCESS in SPSS. The findings revealed a significant relationship between self-control and phubbing behavior, with interpersonal communication anxiety acting as a partial mediator ($p < 0.05$). Specifically, the indirect effect (-0.007) was smaller than the direct effect (-0.056), indicating partial mediation. Increases in self-control were associated with a reduction in interpersonal communication anxiety ($\beta = -0.04$), which in turn was linked to decreased phubbing behavior ($\beta = -0.16$). Collectively, self-control and interpersonal communication anxiety accounted for 17.3% of the variance in phubbing behavior. These findings underscore the importance of enhancing self-regulation strategies among students to mitigate communication-related anxiety and reduce phubbing tendencies, thereby fostering more engaged and meaningful interpersonal interactions.

Introduction

The presence of smartphones has introduced numerous conveniences and improvements to daily human life. Nevertheless, increased reliance on such technology has also given rise to problematic behaviors, such as phubbing—a phenomenon wherein individuals prioritize smartphone use over direct social interactions with those physically present (Nazir & Bulut, 2019).

Phubbing behavior—defined as the act of ignoring someone in a social setting by focusing on one's smartphone—is becoming increasingly prevalent in everyday social contexts, such as family meals or gatherings among friends. In such situations, it is common for one or more individuals to become absorbed in their mobile devices, thereby disrupting face-to-face interaction. Empirical evidence highlights the pervasiveness of this behavior; for instance, a study by Chotpitayasunondh and Douglas (2016) reported that 17% of 261 respondents admitted to phubbing others at least four times per day, while 32% indicated being phubbed more than twice in a single day. Supporting this trend, Rainie and Zickuhr (2015) found that 90% of individuals reported using smartphones during every social interaction, and 86% of those exposed to such behavior indicated that they reciprocate it.

The use of smartphones is quite widespread in various age groups, especially among students in the emerging adulthood category. Individuals who are in emerging adulthood have the characteristics of being happy to explore and experiment (Hurlock, 1996). Through the internet, which can be accessed with a smartphone, one can easily explore their interests, experiment with new things, and expand their experience and knowledge. (Rahman, 2021; Talika, 2016). Unfortunately, students who are in the emerging adulthood period have high emotional instability in themselves. Hence, the internet or smartphones tend to be used as a means of escape from problems. (Caplan, 2002).

Young individuals are particularly susceptible to becoming rapidly engrossed in activities mediated through smartphones. As their reliance on these devices increases, smartphones become deeply embedded in their daily routines and exert a significant influence on their behavior (Gifary, 2015). The absence of a smartphone can evoke feelings of discomfort, anxiety, fear, and frustration—symptoms commonly associated with nomophobia, or “no-mobile-phone phobia” (Kaviani et al., 2020; Uysal et al., 2016). In social contexts, nomophobia may lead to social disconnection, wherein individuals become disengaged from in-person interactions and increasingly dependent on virtual engagements. Consequently, excessive smartphone use may hinder direct communication and foster interpersonal detachment (Isan & Nasir, 2023; Sofita et al., 2019).

In terms of global smartphone penetration, Indonesia ranks fourth in the world, with approximately 192.15 million users recorded in 2022 (Bayu, 2022). This figure is projected to rise, with estimates suggesting that by 2025, around 89.2% of the Indonesian population will be using smartphones (Pusparisa, 2020). Notably, the demographic with the highest smartphone usage in Indonesia comprises individuals aged 20–29 years, accounting for 75.95% of users (Finaka, 2018). This trend underscores the critical role of smartphones in the daily lives of young people in Indonesia and highlights the urgency of addressing the psychological and social implications of their pervasive use.

A survey conducted by researchers on 177 Sebelas Maret University students revealed the types of smartphone use by respondents, including accessing social media (86.4%), chatting (84.7%), opening websites/searching for information (57.1%), playing games (33.9%), online shopping/online payment (25.4%). Some use it to read online comics/novels, watch movies/dramas, edit photos, and write. In addition, 42.3% of respondents had phubbed. In addition, all respondents reported that they had received phubbing treatment from their interlocutors, and 77.2% of them felt annoyed by the phubbing situation that occurred.

Although phubbing may appear to be a benign behavior, a growing body of research suggests that it can significantly impact an individual's psychological well-being and social functioning. In an experimental study involving 128 participants aged 18 to 34 years, Chotpitayasunondh and Douglas (2018b) investigated the influence of phubbing on perceived social interactions. Participants were asked to watch a short animated video and

imagine themselves interacting with the character in two distinct scenarios: one involving no phubbing and the other with continuous phubbing throughout the conversation. The findings indicated that higher levels of phubbing significantly deteriorated the perceived quality of communication and interpersonal relationships.

Phubbing is also known to threaten the basic needs of individuals as humans, including the need to belong, meaningful existence, and self-esteem. When someone is phubbing, they tend to give less eye contact or physical contact to the other person, which can make the other person feel worthless and ignore their existence, so the quality of the relationship built can be disrupted (Chotpitayasunondh & Douglas, 2018b). Roberts & David (2016) conducted a study dubbed phubbing or partner phubbing, where their research subjects were 145 married couples. More than 46% of respondents reported that it triggered conflict between them and further affected marital and overall life satisfaction. In addition, phubbing has an influence on another form of interpersonal relationship, namely boss phubbing. The results revealed that employees who were intensively phubbed by their bosses had a poorer bond between the two, experienced a loss of trust, and felt that their bosses did not appreciate their work. In addition, phubbing influences another form of interpersonal relationship, namely boss phubbing (Roberts & David, 2017).

Some factors that can cause phubbing behavior can come from internal and external factors. Internal factors that influence phubbing behavior include social media addiction, lack of self-control, fear of missing out (FoMo), obsession with mobile phones, boredom, and psychological and demographic factors such as gender (Al-Saggaf & O'Donnell, 2019; Ammar et al., 2021; Saloom & Veriantari, 2021). At the same time, external factors include situational factors such as friendship environment, family environment, and technology (Ammar et al., 2021; Cholz, 2012). Low comfort levels in interpersonal communication can also cause phubbing behavior, so people prefer to use their cell phones to avoid social contact in the real world (Auter, 2007). Difficulties in communicating with others in the real world and feelings of discomfort in the environment make people prefer to use smartphones to overcome their discomfort in communicating (Devito, 2011; Hafizah et al., 2021).

Phubbing perpetrators are less able to control the urge to stimuli on smartphones such as the internet, social media, or other entertainment media, making the individual ultimately turn to the smartphone rather than interacting directly with the interlocutor. Research by (Chotpitayasunondh & Douglas, 2016) regarding the effect of self-control, fear of missing out, internet addiction, and smartphone addiction on phubbing behavior showed the results of self-control ($\beta = -0.12$, $p = 0.016$), fear of missing out ($\beta = 0.33$, $p = 0.001$), and internet addiction ($\beta = 0.41$, $p = 0.001$) significantly influence smartphone addiction, which then smartphone addiction ($\beta = 0.45$, $p = 0.001$) further predicts phubbing behavior. This shows that self-control can directly and indirectly affect phubbing behavior, so further research is needed.

The anxiety that arises during communication makes the person withdraw from society and avoid the communication atmosphere (Jalaluddin, 2004). Burgoon and Ruffner use the term (1) Unwillingness to describe non-specific fear, but it also refers to the fear of doing something in general situations. (2) Unrewarding indicates a lack of reward in communication or increased punishment in previous communication. This interpersonal communication anxiety is caused by rejection from others. (3) Uncontrol describes the individual's lack of control over the communication situation and environment (Burgoon & Ruffner, 1978). Individuals with social anxiety find face-to-face interactions with others tiring and prefer to make contact with their phones to communicate (Reid & Reid, 2007). Previous research mentioned that social anxiety has a reasonably high relationship with phubbing.

Phubbing behavior can occur due to social anxiety (Garcia et al., 2024; Venugopal & Fenn, 2021), in this case focused on communication, and one of the predictive factors of interpersonal communication is a lack of self-control (Fiani & Fikry, 2023). A person with high self-control can use their thought process to strategize and modify the impact of stressors, in this case, communication situations, to build a comfortable relationship. On the other hand, a lack of self-control in communication situations can cause anxiety. A person with low self-control has difficulty changing an event. It will create anxiety in them (Burgoon & Ruffner, 1978; Daniel, 2021; Devito, 2016). Research shows a significant relationship between self-control and interpersonal communication skills; adolescents' interpersonal communication skills will also be higher if self-control is higher (Purnama & Fauziah, 2018).

The low self-control of students causes students to be less skilled in managing themselves, including in overcoming the anxiety (Avianty et al., 2015; Fachrozic et al., 2021; Xu, 2022) they experience when communicating directly so that students are more likely to engage in phubbing behavior (Rahman et al., 2022). Added to this, it turns out that there is research showing that self-control and interpersonal communication simultaneously have a reasonably strong relationship ($R = 0.423$) with the phubbing behavior of Mulawarman University Samarinda students (Hafizah et al., 2021). Based on the explanation above, researchers are interested in further examining the relationship between self-control and phubbing behavior through interpersonal communication anxiety in college students.

Method

This research is a regression research. This quantitative research involves 3 variables: phubbing behavior as the dependent model, self-control as the independent model, and interpersonal communication anxiety as the mediator model. Phubbing behavior is individual behavior that focuses more on using smartphones than interacting with the person they are talking to (Nazir & Bulut, 2019). Self-control is the ability to control behavior and adjust it so that it becomes more positive and acceptable in society (Tangney et al., 2004). Interpersonal communication anxiety is a feeling of stress or anxiety when communicating with other people (Burgoon & Ruffner, 1978).

There are four hypotheses in this study, namely: 1) there is a relationship between self-control and phubbing behavior through interpersonal communication anxiety in students; 2) there is a relationship between self-control and phubbing behavior in students; 3) there is a significant relationship between self-control and interpersonal communication anxiety in students; 4) there is a significant relationship between interpersonal communication anxiety and phubbing behavior in students.

The population used in this study were all students of the Faculty of Medicine, University of "X" totaling 926 people. The sampling technique used purposive sampling by setting the following criteria: 1) active students; 2) aged 18-25 years; 3) have done phubbing. The sample was calculated using the Isaac and Michael formula with an error rate of 5%, so 217 respondents were obtained.

This research begins with preparing the measuring instruments first. Three measuring instruments are used in this study: the phubbing behavior scale, the self-control scale, and the interpersonal communication anxiety scale. The preparation of the phubbing behavior scale was carried out using the adaptation process of the Generic Scale of Phubbing (GSP) scale. The adaptation process is done by back translation through several stages, including translating the scale linguists from the English version to Indonesian and then translating it back into English. Meanwhile, the researcher prepared the other two scales, namely the

self-control and interpersonal communication anxiety scales. The three scales were then subjected to a validation process by expert judgment. Furthermore, the scale was tested to obtain the item's power difference and reliability values. After the scale trial, the researcher distributed the scale to obtain research data, which was then analyzed using JASP and SPSS. Data collection using three scales, namely (1) The phubbing behavior scale uses an adaptation of the Generic Scale of Phubbing (GSP) belonging to (Chotpitayasunondh & Douglas, 2018a) with aspects of nomophobia, interpersonal conflict, self-isolation, and problem acknowledgment totaling 13 items with a scale reliability value of $\alpha = 0.825$. (2) The self-control scale was prepared based on the aspects proposed by (Tangney et al., 2004), namely self-discipline, deliberate/non-impulsive, healthy habits, work ethic, and reliability, totaling 24 items ($\alpha=0.856$). (3) The interpersonal communication anxiety scale was prepared based on aspects (Burgoon & Ruffner, 1978), namely unwillingness, unrewarding, and control, totaling 20 items ($\alpha=0.813$).

The data analysis used in this study is JASP mediation analysis, which aims to test the mediating role of interpersonal communication anxiety. Furthermore, researchers also used SPSS PROCESS analysis to see the relationship dynamics between the three variables in more detail. The results of testing hypothesis 1 using JASP mediation analysis aim to see the role of indirect effects (Kesteren, 2020). In addition, an empirical review of the causal process of the mediation component is necessary to pay attention to the estimation and interpretation of direct and indirect effects (Hayes, 2022).

However, before hypothesis testing, researchers conducted a classical assumption test to see the normality and linearity of the data. Based on the classical assumption test, it is proven that the data is normally distributed ($p>0.05$), the relationship between the three variables is linear (p linearity <0.05), and no heteroscedasticity is found (the points are distributed spread above and below the Y axis).

Results and Discussion

Descriptive Analysis

Table 1 shows the results of descriptive analysis, which show that the empirical average of the phubbing behavior variable is 43, the self-control variable is 68, and the interpersonal communication anxiety variable is 45.

Tabel 1. Descriptive Statistic (source: author's analysis)

Scale	N	Hypothetic Data		M	SD	Empirical Data		M	SD
		Minimum Score	Maximum Score			Minimum Score	Maximum Score		
Phubbing	217	13	91	52	13	18	75	43	9,56
Self-control	217	24	96	60	12	52	85	68	6,19
Interpersonal Communication Anxiety	217	20	80	50	10	26	62	45	6,31

Hypothesis Test

Based on Table 3, it can be seen that when the LLCI and ULCI intervals do not

include the value of 0, the indirect effect produces a negative effect estimate of -0.007 and a significance value of 0.033 ($p < 0.05$), meaning that hypothesis 1 is accepted, so it can be said that there is a relationship between self-control and phubbing behavior through interpersonal communication anxiety in college students. In addition, Table 2 and Table 3 show the estimated effect that the indirect impact (-0.007) is smaller than the direct effect (-0.056). The mediating role is partial/incomplete, as indicated by paths a and b, which are significant. In contrast, path c' is significant with LLCI and ULCI intervals but does not include a value of 0 (Table 5).

Tabel 2. Mediated Analysis (Direct Effects) (source: author's analysis)

Direct effects

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Self-control	→ Phubbing	-0.056	0.010	-5.353	< .001	-0.076	-0.035

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Tabel 3. Mediated Analysis (Indirect Effects) (source: author's analysis)

Indirect effects

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Self-control	→ Interpersonal Communication Anxiety → Phubbing	-0.007	0.003	-2.133	0.033	-0.013	-5.686×10 ⁻⁴

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Table 4. Mediated Analysis (Total Effects) (source: author's analysis)

Total effects

		Estimate	Std. Error	z-value	p	95% Confidence Interval	
						Lower	Upper
Self-control	→ Phubbing	-0.063	0.010	-6.180	< .001	-0.082	-0.043

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

The results of the hypothesis 2 test show that there is a significant relationship between self-control and phubbing behavior in college students directly indicated by a negative effect estimate of -0.056 and a significance value of $p < 0.001$ with LLCI and ULCI intervals not covering the value of 0 (Table 2).

PROCESS analysis using the SPSS program was used to see the dynamics of the relationship between self-control and phubbing behavior through interpersonal communication anxiety in college students in more detail. The indirect effect component is shown in Path A, or the effect of X on M, and in Path B, or the effect of M on Y (Hayes, 2022). Table 5 shows the analysis results of both paths.

Table 5. Path Analysis Results (source: author's analysis)

Jalur	coef	est.	p	LLCI	ULCI
Self control – Interpersonal Communication Anxiety (a)	-0,27	-0,04	<0,001	-0,065	-0,02
Interpersonal Communication Anxiety – Phubbing (b)	0,16	0,16	0,013	0,033	0,29
Self control – Phubbing (c')	-0,34	-0,06	<0,001	-0,08	-0,04

The results of hypothesis 3 testing shown by path analysis provide a negative effect estimate of -0.04, a significance value of $p < 0.001$, and the LLCI and ULCI intervals do not contain a value of 0 (Table 5), so it can be concluded that hypothesis 3 is accepted. Namely, there is a significant relationship between self-control and interpersonal communication anxiety in college students. Hypothesis 4 testing shown by path analysis b provides an optimistic effect estimate of 0.16, a significance value of 0.013 ($p < 0.05$), and the LLCI and ULCI intervals do not contain a value of 0 (Table 5), so it can be concluded that hypothesis 4 is accepted. Namely, there is a significant relationship between interpersonal communication anxiety and phubbing behavior in college students.

Table 6. Model Summary Analysis PROCESS SPSS (source: author's analysis)

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.4161	.1731	76.309	22.4020	2.0000	214.0000	.0000

In addition, PROCESS analysis using SPSS proves the relationship between self-control and phubbing behavior through interpersonal communication anxiety provides a correlation coefficient (R) of 0.416 and a coefficient of determination (R-square) of 0.173 (Table 6). The coefficient value means that there is a reasonably strong relationship between self-control and phubbing behavior through interpersonal communication anxiety in college students. The coefficient, which lies between 0.41-0.70, is included in the moderately strong category (Sugiyono, 2014). The magnitude of the influence between self-control and interpersonal communication anxiety on phubbing behavior is 17.3%, so the remaining 82.7% is influenced by other factors.

Discussion

The results of testing hypothesis 1 show that there is a relationship between self-control and phubbing behavior through interpersonal communication anxiety. In addition, path analyses a and b show significant results, which prove that there is a mediating role. Because path analysis c' is substantial, it can be concluded that the mediation role is partial/incomplete. The role of mediation is proven if paths a and b are significant, and if path c' is substantial, then variable M mediates the relationship incompletely/partially (Ngatno, 2015). This means that self-control will reduce interpersonal communication anxiety, and further decreasing interpersonal communication anxiety can reduce phubbing behavior.

Self-control is the concept of self-effort and self-regulation, where individuals who can control themselves are more skilled than others in regulating their behavioral impulses,

emotions, and attention impulses to achieve long-term goals (Duckworth, 2011). One of the factors that influence the formation of good interpersonal communication is emotional maturity. Someone with good emotional maturity can control their emotions so that it is possible to communicate in a comfortable atmosphere. Individuals with good self-control will be able to control their emotions and direct their behavior positively to be accepted by their environment. The individual will try to develop good interpersonal communication despite using a smartphone. Someone with good self-control is very concerned about behavior suitability in the right situation. They try to adjust themselves according to the demands of the social environment.

Conversely, people with low self-control cannot create comfortable interpersonal communication and prefer to focus on their smartphones (Hafizah et al., 2021). Furthermore, interpersonal communication anxiety is related to phubbing behavior. One form of anxiety that a person feels when having to talk to other people is often called interpersonal communication anxiety. Anxiety when communicating can also be called communication apprehension (Jalaluddin, 2004; Burgoon & Ruffner, 1978) that communication apprehension is described as a negative response in the form of anxiety when speaking in public and interpersonal communication anxiety. Interpersonal communication anxiety is often caused by the fear of communicating, which is characterized by nervousness, feelings of embarrassment, reluctance to speak, and stage fright (Jalaluddin, 2004). The fear of communicating face-to-face can cause a person to suppress these feelings by appearing busy while using a smartphone (Hafizah et al., 2021). Indifferent behavior or deliberately ignoring others when communicating can occur because the person is less interested in having a conversation, cannot be a good listener, and is less interested in responding to other people's conversations, so they prefer to focus on their gadgets (Reza, 2018). Devito explains interpersonal communication as communication between two people and a clear relationship (Devito & Maulana, 2011). People with good interpersonal communication can focus on the conversation between the two parties. In contrast to people with low interpersonal communication, they are more silent or ignorant of the interlocutor and occupy themselves with something.

The results of hypothesis 2 testing prove a significant relationship between self-control and phubbing behavior directly. This statement is indicated by the direct effect, which results in a significance value of $p < 0.001$, and the LLCI and ULCI intervals do not contain a value of 0. Someone with good self-control skills can use the internet healthily and appropriately tailored to their needs and knows how to prevent excessive smartphone use (Nurningtyas & Ayriza, 2021). Self-control is one of the factors that can influence phubbing behavior, namely because someone is aware of limiting smartphone use when interacting with interlocutors (Safitri & Rinaldi, 2022). Research on self-control, internet addiction, and well-being on phubbing behavior to 688 students in Croatia showed that self-control ($\beta = -0.12$, $p < 0.01$) negatively and significantly affects phubbing behavior (Brkljačić et al., 2018).

The dynamics of the relationship between self-control and phubbing behavior can be explained in more detail using a mediation model involving interpersonal communication anxiety. This was obtained by testing hypotheses 3 and 4.

The low self-control possessed by students can affect the increase in interpersonal communication anxiety experienced by students. This proves that hypothesis 3 is accepted, as shown by the results of path analysis, meaning that self-control is significantly related to interpersonal communication anxiety (mediator variable) ($p < 0.001$ and does not include the value of 0 in the LLCI and ULCI intervals). The relationship between the two variables resulted in a negative effect estimate of -0.04. Based on the test results, students with good self-control tend to have low interpersonal communication anxiety by 0.04.

One factor that can reduce anxiety is self-control (Fachrozie et al., 2021; Xu, 2022). Students with good self-control can control unpleasant behavior, restrain themselves, and control their behavior, such as controlling the anxiety they experience during direct interpersonal communication. The aspect of influencing decisions on self-control has a relationship with physical stress, the physical anxiety variable (Fachrozie et al., 2021).

Interpersonal communication anxiety will then affect phubbing behavior. This statement is proven by path analysis results showing that hypothesis 4 is accepted. There is a significant relationship ($p < 0.05$, without including the value of 0 in the LLCI and ULCI intervals) between interpersonal communication anxiety (mediator variable) and phubbing behavior. The estimated effect on this relationship is positive 0.16, so it can be said that students with low interpersonal communication anxiety will have 0.16 lower phubbing behavior.

The results of this analysis support the statement of the influence of interpersonal communication anxiety put forward (Lee et al., 2018) namely; social anxiety is a person's difficulty in carrying out certain activities in front of others, such as when meeting, talking to strangers or their friends. The feeling of shame and guilt that accompanies moral anxiety causes stress on a person so that he will run away from the threatening situation, in this case, the feeling of fear of establishing communication (Andri & Dewi, 2011). The use of smartphones can be a way for someone with social anxiety to hide themselves and their behavior; in addition, for people with social anxiety, this can reduce intimidation of others. Another explanation of social anxiety as subjective discomfort in performing activities in social situations comes from (Caballo et al., 2014). A person with social anxiety will tend to become addicted to smartphones because they feel comfortable with using smartphones to avoid direct contact with other people. Social anxiety is often associated with a lack of confidence in demonstrating social skills and a lack of intention to present a positive impression of others. A person with social anxiety interacting through a smartphone helps to avoid direct social contact. Smartphones with chat and media applications make communicating more accessible for individuals with social anxiety because they provide comfort to communicating rather than face-to-face (Saniatuzzulfa & Wijiyanti, 2019). Someone with social anxiety often has less confidence in communicating directly, so they prefer to use a smartphone. There is research conducted (Sapacz et al., 2016) that explains that someone with social anxiety will feel comfortable when maintaining social distance in communicating with smartphone media.

Based on the presentation of the results of the data analysis above, it can answer all research hypotheses. In addition, researchers also analyzed the contribution of independent variables and mediators in the study. The practical contribution of self-control with phubbing behavior involving interpersonal communication anxiety is 17.3%, so the remaining 82.7% is the influence of other variables not examined in this study.

Conclusion

This study shows that interpersonal communication anxiety acts as a mediator in the relationship between self-control and phubbing behavior in college students empirically. Interpersonal communication anxiety mediates the relationship between self-control and phubbing behavior in college students significantly and produces a reasonably strong correlation coefficient ($R = 0.416$). Increasing self-control will reduce interpersonal communication anxiety and phubbing behavior in college students. The mediating role of interpersonal communication anxiety on the relationship between self-control and phubbing behavior is partial/incomplete, and the estimated direct effect between self-control and

phubbing behavior is greater than the mediating effect of interpersonal communication anxiety ($-0.007 < -0.056$). The practical contribution of self-control to phubbing behavior by involving interpersonal communication anxiety is 17.3%, so the remaining 82.7% is the influence of other variables outside this study, such as social media addiction, fear of missing out (FOMO), obsession with mobile phones, and boredom.

Researchers advise students to reduce interpersonal communication anxiety. Lowering interpersonal communication anxiety can be done by increasing self-control in students by practicing controlling their thoughts and feelings. When students can control their thoughts and feelings, they will be able to overcome the anxiety they feel, especially anxiety in interpersonal communication, so that they will not hesitate/fear when establishing direct communication and prefer to focus and engage directly when communicating rather than occupying themselves with their smartphones (phubbing behavior). For future researchers, researchers suggest variables other than interpersonal communication anxiety be used or added in examining the relationship between self-control and phubbing behavior.

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References

- Al-Saggaf, Y., & O'Donnell, S. B. (2019). Phubbing: Perceptions, reasons behind, predictors, and impacts. *Human Behavior and Emerging Technologies*, 1(2), 132-140. <https://doi.org/10.1002/hbe2.137>
- Ammar, J. F., Hufad, A., & Wilodati, W. (2021) the driving factors of phubbing behavior in students. *Journal of Education and Human Resources*, 2(2).
- Andri, A., & Dewi, P. Y. (2011). Anxiety theory based on classic psychoanalytic and types of defense mechanism to anxiety. *Journal of the Indonesian Medical Association*, 57(07).
- Auter, P. J. (2007). Portable social groups: Willingness to communicate, interpersonal communication gratifications, and cell phone use among young adults. *International Journal of Mobile Communications*, 5(2), 139-156. <https://doi.org/10.1504/IJMC.2007.011813>
- Avianty, S. K., Al Yusainy, C., & Fitriani, A. (2015). *Pengaruh self control training terhadap kecemasan sosial pada remaja* (Doctoral dissertation, Universitas Brawijaya). Retrieved from https://www.academia.edu/download/37731771/Jurnal_Pengaruh_Self_Control_Training_Terhadap_Kecemasan_Sosial_Pada_Remaja.pdf
- Bayu, D. (2022). *8 negara dengan pengguna smartphone terbanyak di dunia*. <https://dataindonesia.id/digital/detail/pengguna-smartphone-indonesia-terbesar-keempat-dunia-pada-2022>
- Brkljačić, T., Šakić, V., & Kaliterna-Lipovčan, L. J. (2018). Phubbing among Croatian students. In *Protection and promotion of the well-being of children, youth, and families: Selected Proceedings of the 1st International Scientific Conference of the Department of Psychology at the Catholic University of Croatia* (pp. 109-126).
- Burgoon, M., & Ruffner, M. (1978). *Human communication: a revision of approaching speech, communication*. Holt Rinehart and Winston Inc.

- Caballo, V. E., Salazar, I. C., Irurtia, M. J., Olivares, P., & Olivares, J. (2014). The relationship between social skills and social anxiety and personality styles/disorders. *Behavioral Psychology= Psicología Conductual*, 22(3), 401-422.
- Caplan, S. E. (2002). Problematic Internet use and psychosocial well-being: development of a theory-based cognitive-behavioral measurement instrument. *Computers in human behavior*, 18(5), 553-575. [https://doi.org/10.1016/S0747-5632\(02\)00004-3](https://doi.org/10.1016/S0747-5632(02)00004-3)
- Choliz, M. (2012). Mobile-phone addiction in adolescence: the test of mobile phone dependence (TMD). *Progress in health sciences*, 2(1), 33-44.
- Chotpitayasunondh, V., & Douglas, K. M. (2016). How “phubbing” becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in human behavior*, 63, 9-18. <https://doi.org/10.1016/j.chb.2016.05.018>
- Chotpitayasunondh, V., & Douglas, K. M. (2018a). Measuring phone snubbing behavior: Development and validation of the Generic Scale of Phubbing (GSP) and the Generic Scale of Being Phubbed (GSBP). *Computers in Human Behavior*, 88, 5–17. <https://doi.org/10.1016/j.chb.2018.06.020>
- Chotpitayasunondh, V., & Douglas, K. M. (2018b). The effects of “phubbing” on social interaction. *Journal of Applied Social Psychology*, 48(6), 304–316. <https://doi.org/10.1111/jasp.12506>
- Daniel, F. (2021). *Control yourself!: How is state self-control related to anxiety and trait self-control in students?* (Bachelor’s thesis, University of Twente).
- Devito, J. A. (2016). *The interpersonal communication book (14th Edition)*. Courier Kendallville.
- Devito, J. A. (2011). *Komunikasi antarmanusia*, terj. Agus Maulana. Karisma Publishing Group.
- Duckworth, A. L. (2011). The significance of self-control. *Proceedings of the National Academy of Sciences*, 108(7), 2639-2640.. <https://doi.org/10.1073/pnas.1019725108>
- Fachrozie, R., Sofia, L., & Ramadhani, A. (2021). Hubungan kontrol diri dengan kecemasan pada mahasiswa tingkat akhir dalam menyelesaikan skripsi. *Psikoborneo: Jurnal Ilmiah Psikologi*, 9(3), 509-518.
- Fiani, A., & Fikry, Z. (2023). Hubungan antara kontrol diri dengan komunikasi interpersonal pada remaja dalam pengguna smartphone. *Jurnal Pendidikan Tambusai*, 7(2), 3529-3538.
- Finaka, A. (2018). 66,3% masyarakat Indonesia memiliki smartphone. [https://indonesiabaik.id/infografis/663-masyarakat-indonesia-memiliki-smartphone-8#:~:text=Kemudian hasil survei lainnya menunjukkan,tinggi \(75%2C95%25\)](https://indonesiabaik.id/infografis/663-masyarakat-indonesia-memiliki-smartphone-8#:~:text=Kemudian hasil survei lainnya menunjukkan,tinggi (75%2C95%25)).
- Garcia, M. A., Lerma, M., Perez, M. G., Medina, K. S., Rodriguez-Crespo, A., & Cooper, T. V. (2024). Psychosocial and personality trait associates of phubbing and being phubbed in hispanic emerging adult college students. *Current psychology*, 43(6), 5601-5614. <https://doi.org/10.1007/s12144-023-04767-y>
- Gifary, S., & N, I. K. (2015). Intensitas penggunaan *smartphone* terhadap perilaku komunikasi. *Jurnal Siositeknologi*, 14(2). 170-178.
- Hafizah, N., Adriansyah, M. A., & Permatasari, R. F. (2021). Kontrol diri dan komunikasi interpersonal terhadap perilaku phubbing. *Psikoborneo: Jurnal Ilmiah Psikologi*, 9(3), 630-645. <https://doi.org/10.30872/psikoborneo.v9i3.6504>
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach third Edition*. Guilford publications.

- Hurlock, E. B. (1996). *Psikologi perkembangan: suatu pendekatan sepanjang rentang kehidupan* (Edisi 5) (5th ed.). Erlangga.
- Isan, D., & Nasir, B. (2023). Dampak penggunaan internet terhadap perilaku remaja di Desa Long Uro Kecamatan Kayan Selatan Kabupaten Malinau. *EJournal Pembangunan Sosial*, 11(1), 470–479.
- Jalaluddin, R. (2004). *Psikologi komunikasi*. PT. Remaja Rosdakarya.
- Kaviani, F., Robards, B., Young, K. L., & Koppel, S. (2020). Nomophobia: is the fear of being without a smartphone associated with problematic use?. *International Journal of Environmental Research and Public Health*, 17(17), 6024. <https://doi.org/10.3390/ijerph17176024>
- Kesteren, E. (2020). Mediation and moderation analysis in JASP. Retrieved from JASP: <https://jasp-stats.org/2020/03/12/mediation-and-moderation-analysis-in-jasp>.
- Lee, Y. K., Chang, C. T., Cheng, Z. H., & Lin, Y. (2018). How social anxiety and reduced self-efficacy induce smartphone addiction in materialistic people. *Social Science Computer Review*, 36(1), 36-56. <https://doi.org/https://doi.org/10.1177/0894439316685540>
- Nazir, T., & Bulut, S. (2019). Phubbing and what could be its determinants: A dugout of literature. *Psychology*, 10(6), 819-829. <https://doi.org/10.4236/psych.2019.106053>
- Ngatno, N. (2015). *Analisis data variabel mediasi dan moderasi dalam riset bisnis (dengan program SPSS)*. Popupdesign.
- Nurningtyas, F., & Ayriza, Y. (2021). Pengaruh kontrol diri terhadap intensitas penggunaan smartphone pada remaja. *Acta Psychologia*, 3(1), 14-20. <https://doi.org/10.21831/ap.v3i1.40040>
- Purnama, I., & Fauziah, N. (2018). *Hubungan antara kontrol diri dengan komunikasi interpersonal pada siswa pengguna smartphone di SMA Negeri 2 Semarang* (Doctoral dissertation, Universitas Diponegoro). Retrieved from http://eprints.undip.ac.id/65984/%0Ahttp://eprints.undip.ac.id/65984/1/ABSTRAK_DAN_BAB_I_ISHMA_NAJYA_ZAFIRA_P_15010114120027_085641996386.pdf
- Pusparisa, Y. (2020). *Pengguna Smartphone diperkirakan mencapai 89% populasi pada 2025*. <https://databoks.katadata.co.id/datapublish/2020/09/15/pengguna-smartphone-diperkirakan-mencapai-89-populasi-pada-2025>
- Rahman, D. (2021). Pemanfaatan internet sebagai sumber belajar dan informasi. *Jurnal Perpustakaan dan Informatika*, 1(1), 9–14.
- Rahman, M. A., Duradoni, M., & Guazzini, A. (2022). Identification and prediction of phubbing behavior: a data-driven approach. *Neural Computing and Applications*, 34(5), 3885–3894. <https://doi.org/10.1007/s00521-021-06649-5>
- Rainie, L., & Zickuhr, K. (2015). Americans' views on mobile etiquette. *Pew Research Center*, 39. Retrieved from <http://www.pewinternet.org/2015/08/26/americans-views-on-mobile-etiquette/>
- Reid, D. J., & Reid, F. J. M. (2007). Text or talk? Social anxiety, loneliness, and divergent preferences for cell phone use. *Cyberpsychology and Behavior*, 10(3), 424–435. <https://doi.org/10.1089/cpb.2006.9936>
- Reza, I. F. (2018). Dimensions of phubbing among moslem adolescents. *Dimensions of phubbing among moslem adolescents in revolution industry 4.0: Perspective mental health*.

- Roberts, J. A., & David, M. E. (2016). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. *Computers in Human Behavior*, 54, 134–141. <https://doi.org/10.1016/j.chb.2015.07.058>
- Roberts, J. A., & David, M. E. (2017). Put down your phone and listen to me: How boss phubbing undermines the psychological conditions necessary for employee engagement. *Computers in Human Behavior*, 75, 206–217.
- Sofita, Y. R., Sartika, S., Audya, M., & Ibrahim, A. (2019). Pengaruh internet terhadap interaksi sosial pada mahasiswa Universitas Sriwijaya. *POSITIF: Jurnal Sistem dan Teknologi Informasi*, 5(1), 39-45.
- Safitri, N., & Rinaldi, R. (2022). Hubungan kontrol diri dengan perilaku phubbing pada siswa SMAN 2 Kota Bukittinggi. *Jurnal RAP (Riset Aktual Psikologi Universitas Negeri Padang)*, 13(2), 197-210.
- Saloom, G., & Veriantari, G. (2021). Faktor-faktor psikologis perilaku phubbing. *Jurnal Studia Insania*, 9(2), 152-167. <https://doi.org/10.18592/jsi.v9i2.4517>
- Saniatuzzulfa, R., & Wijiyanti, A. N. (2019). Smartphone addiction ditinjau dari subjective well being, kecemasan sosial, dan materialisme pada mahasiswa di universitas "Y". *Psycho Idea*, 17(2), 145-153. <https://doi.org/10.30595/psychoidea.v17i2.4029>
- Sapacz, M., Rockman, G., & Clark, J. (2016). Are we addicted to our cell phones?. *Computers in Human Behavior*, 57, 153-159. <https://doi.org/10.1016/j.chb.2015.12.004>
- Sugiyono. (2014). *Metode penelitian kuantitatif, kualitatif, dan R & D*. Alfabeta.
- Talika, F. T. (2016). Manfaat internet sebagai media komunikasi bagi remaja di Desa Air Mangga Kecamatan Laiwui Kabupaten Halmahera Selatan. *Acta Diurna Komunikasi*, 5(1).
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control. *Journal of Personality*, 72(2), 271–324.
- Uysal, Ş., Özen, H., & Madenoğlu, C. (2016). Social phobia in higher education: The influence of nomophobia on social phobia. *The Global e-learning Journal*, 5(2), 1-8.
- Venugopal, A., & Fenn, J. (2021). Social anxiety, coping and phubbing among young adults. *The International Journal of Indian Psychology*, 9(3), 2349–3429. <https://doi.org/10.25215/0903.206>
- Xu, L. (2022). The impact of self-control on graduation anxiety among university students in Nanjing during the Covid-19. In *SHS Web of Conferences* (Vol. 148, p. 01020). EDP Sciences. <https://doi.org/10.1051/shsconf/202214801020>

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