Examining the Impact of Phubbing Behaviors on Toxic Disinhibition in Online Social Interactions

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Abstract

The study has two main objectives: firstly, to examine the relationship between phubbing and toxic disinhibition; secondly, to compare the levels of phubbing and toxic disinhibition based on gender and place of residence. This research adopts a cross-sectional design with a quantitative approach. The study employs a incidental sampling technique to collect data from 896 Indonesian college students across various provinces, including West Sumatra, Bali, Banten, Bengkulu, DKI Jakarta, DI Yogyakarta, Jambi, West Java, Central Java, East Java, South Kalimantan, West Kalimantan, Central Kalimantan, East Kalimantan, Riau Islands, Nanggroe Aceh, Papua, East Nusa Tenggara, Riau, West Sulawesi, North Sulawesi, South Sulawesi, and North Sumatra. Data analysis involves regression analysis and one-way ANOVA. The research findings reveal that 1) toxic disinhibition behavior is relatively common among Indonesian college students (59%), 2) phubbing behavior is also quite prevalent (69%), and 3) there is a significant correlation between phubbing and toxic disinhibition. 4) There is a significant difference in the level of toxic disinhibition between males and females, 5) there is a significant difference in the level of phubbing between participants residing in urban areas and those in suburban areas. The implications of this study emphasize the need to control phubbing behavior in order to reduce toxic disinhibition behavior among college students. A proactive counseling approach can be applied by counselors to address the issues of phubbing and toxic disinhibition.

Keywords: *Toxic Disinhibition, Phubbing Behavior, College students.*

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Introduction

As of 2021, the global count of internet users has surged to approximately 4.66 billion individuals, marking a notable increase of 7.3% in comparison to the previous year, as reported by The International Telecommunication Union (ITU) (2022). Moving into the early months of 2022, Indonesia has witnessed a total of 210 million internet users, signifying a significant 77.02% penetration rate among the population, according to We are Social (2022). A survey conducted by the Association of Indonesian Internet Service Providers (APJI) (2022) during the 2021-2022 period,

on June 10, 2022, underscores that the country's internet user count reached 210.03 million. Notably, the majority of initial internet users fell within the age bracket of 13 to 18 years, accounting for 99.16%, followed by those aged 19-34 years, indicating a penetration rate of 98.64%. This points towards a substantial surge in internet usage within a year.

Correspondingly, research conducted by Fitria et al (2018) highlights that adolescents display an above-average capacity in handling internet addiction instruments, implying that a significant number of teenagers are frequently or occasionally engrossed in internet activities like browsing Youtube, Instagram, Facebook, emails, and online gaming. Fitria et a1 (2018) findings indicate that smartphones are presently the predominant choice among students (85%) for social media access, with an additional (15%) using both smartphones and laptops. These data suggest a substantial prevalence of social media usage in Indonesia, highlighting the active engagement of the majority of Indonesians, particularly among students who constitute the largest user group.

Social media serves as an inclusive platform allowing open participation, contributions, feedback, comments, and rapid and unlimited information sharing (Kordyaka & Kruse, 2021; Zhong et al., 2020; Cahyono, 2016). Furthermore, the internet exerts a considerable influence on individuals, influencing their self-connections and interpersonal bonds, particularly accentuated during the ongoing pandemic, where reliance on the internet, technology, and cyberspace has become paramount (Moore, 2019). Kiesler et al. (1984) proposed that online media diminishes disparities in perceived status, thereby fostering an environment where individuals feel at ease to express their opinions openly.

In the present era, a multitude of individuals using the internet desire to retain the confidentiality of their personal information, maintain an anonymous presence on social media platforms, yet maintain an active presence and regularly share personal stories to fulfill their own gratification (Corcoran & Andover, 2020; Kim & Chang, 2017). Conversely, social media users experience a sense of openness and lack of apprehension while expressing themselves, but this unrestrained freedom often results in a loss of self-control, leading them to share unfiltered thoughts, both positive and negative (Lapidot-Lefler & Barak, 2012; Wu et al., 2017). Consequently, a pattern of

behavior emerges wherein online conduct diverges from real-life behavior (Wang et al., 2022). Online disinhibition pertains to the actions of an individual while sharing stories in the digital realm, which may diverge from their behavior in offline settings; essentially, one's online behavior deviates from their behavior in the real world (Suler, 2004).

Online disinhibition refers to the tendency to feel more liberated and less concerned about the consequences of one's actions in the online context (Suler, 2004; Wright et al., 2019). The impact of online disinhibition stems from features of the digital realm, such as anonymity, invisibility, and asynchronous communication, and explains why individuals exhibit antisocial behavior online (Suler, 2004). In fact, individuals might be more inclined to engage in aggressive behavior due to the physical and temporal distance between harmful actions and their consequences, the anonymous atmosphere, and text-based communication (Runions & Bak, 2015; Suler, 2004). Empirical research has indicated that online disinhibition is a risk factor for online antisocial behavior, such as hate speech and online bullying (Wachs et al., 2019; Wang et al., 2020). There are two type of online disinhibition namely toxic disinhibition and benign disinhibition (Suler, 2004).

Toxic is defined as a substance that is harmful, while disinhibition refers to the behavior exhibited by an individual in both the virtual and real worlds that doesn't align with their real-world conduct (Suler, 2004). Toxic disinhibition represents a deviant behavior where individuals, while communicating online, disregard social norms and established rules (Moore, 2019). Benign disinhibition involves sharing highly personal information about oneself in cyberspace, such as revealing secrets, fears, and desires, as well as displaying acts of kindness and generosity (Kordyaka & Kruse, 2021). In contrast, toxic disinhibition pertains to the negative aspects of online behavior, such as hate speech, offensive language, severe criticism, threats, pornography, and other harmful behaviors (Moore, 2019; Suler, 2004).

Previous research has provided evidence that online disinhibition significantly moderates factors related to aggression and antisocial online behavior (Wang et al., 2020; Wright et al., 2019; Yang et al., 2021). For instance, online disinhibition can notably exacerbate the detrimental effects of callous-unemotional traits (Wright et al., 2019), moral disengagement (Wang et al., 2020), and peer

affiliation on online bullying. These findings support the notion of additional risk effects, indicating that one risk factor can amplify the adverse impact of another factor.

One factor that could potentially influence toxic disinhibition is phubbing. 'Phubbing' is a portmanteau of 'phone' and 'snubbing,' which can be understood as the combination of 'telephone' and 'snub,' wherein an individual experiences boredom during face-to-face communication and redirects the conversation to their smartphone (Chotpitayasunondh & Douglas, 2018; Sun & Miller, 2023; Geng et al., 2021). Phubbing behavior refers to individuals looking at their smartphones during real-life conversations with others, becoming engrossed in their smartphones, and avoiding interpersonal communication (Karada et al., 2016). This behavior can cause individuals to become indifferent toward others. The lack of personal interaction in social situations can hinder the development of good communication skills (Afdal, Alizamar, et al., 2019).

Previous studies have found that phubbing behavior contributes to various negative outcomes, including smartphone addiction, internet addiction, social media addiction, game addiction, indifference towards others, procrastination, shortened attention spans, and even feelings of depression or mental disturbance (Karadağ et al., 2016; Afdal, Alizamar, et al., 2019; Kokkinos & Antoniadou, 2019). Phubbing behavior is observed among millennials and can even lead to cyberbullying, particularly among students, due to a combination of personal and contextual factors (Karadağ et al., 2016; Afdal, Alizamar, et al., 2019; Kokkinos & Antoniadou, 2019). Moreover, previous studies have indicated a significant relationship between phubbing and smartphone addiction, internet addiction, and FoMO (Chotpitayasunondh and Douglas, 2016).

Current study

The gap in knowledge regarding the relationship between phubbing and toxic disinhibition refers to the lack of comprehensive understanding or research on how these two concepts are interconnected and influence each other (Geng et al., 2021; Wang et al., 2023). Phubbing refers to the act of ignoring someone or diverting one's attention to a smartphone during face-to-face interactions, leading to decreased quality of communication and potentially negative social consequences (Chotpitayasunondh & Douglas, 2018; Permata, 2023). On the other hand, toxic

disinhibition involves the tendency for individuals to display more aggressive, offensive, or inappropriate behavior in online environments compared to offline interactions due to a perceived sense of anonymity and reduced accountability (Zhao et al., 2021; Suler, 2004). There is a lack of prior studies that have specifically investigated the correlation or causal relationship between phubbing and toxic disinhibition (Zhao et al., 2021; Afdal et al., 2019; Karadağ et al., 2016).

The relationship between phubbing and toxic disinhibition could be complex and multi-faceted. Both phubbing and toxic disinhibition are related to how individuals interact with others, either face-to-face or in digital spaces. Exploring how these behaviors interact and potentially exacerbate each other might require a nuanced understanding of social dynamics and psychological mechanisms (Lapidot-Lefler & Barak, 2012). The relationship between phubbing and toxic disinhibition could vary across different cultures and contexts. Factors such as cultural norms, social expectations, and technology usage patterns might impact this relationship differently in different settings (Kim & Chang, 2017; Lapidot-Lefler & Barak, 2012; Wang et al., 2022; Wu et al., 2017). It's also possible that the long-term consequences of the interplay between phubbing and toxic disinhibition are not yet fully understood. This could include effects on mental health, relationship quality, and social cohesion.

The current study utilizes the Social Identity Model of Deindividuation Effects (SIDE), as proposed by Lea and Spears (1991), to explore how anonymity and reduced self-awareness in group settings can induce changes in behavior and attitude. The SIDE theory posits that in online environments, individuals might experience diminished self-identity and personal accountability due to the anonymity provided by the medium. This anonymity can lead to a transition from individual identity to group identity, prompting individuals to adopt behaviors that align with perceived group norms, even if these behaviors are undesirable or antisocial.

The SIDE theory introduces two key effects. First, the SIDE effect suggests that individuals who feel a sense of belonging to a larger online social group tend to be more influenced by group norms and identities. This heightened influence can foster increased conformity to group behavior, which may manifest in actions like phubbing, where individuals prioritize online interactions over face-to-face

engagement in line with the perceived norms of their online communities. Secondly, the theory underscores the concept of deindividuation, which pertains to the reduced sense of individuality and accountability that can occur in group settings. In online environments, the limited visibility of individuals due to usernames or avatars can lead to a decline in self-awareness and inhibition. Consequently, this can facilitate toxic disinhibition, where individuals partake in more aggressive or negative online behaviors due to the sense of anonymity.

When applying the SIDE framework to phubbing and toxic disinhibition, one can argue that individuals who engage in excessive phone use and neglect face-to-face interactions (phubbing) might be influenced by the norms of their online communities, where constant connectivity is highly valued. Moreover, the anonymity granted by online interactions may contribute to toxic disinhibition, enabling individuals to freely express negative emotions or engage in aggressive behaviors that they might avoid in offline interactions.

In essence, the gap in knowledge underscores the need for further research to explore the connections, interactions, and potential outcomes of phubbing and toxic disinhibition. Addressing this gap can provide valuable insights into how our digital behaviors impact our social interactions and psychological well-being, both online and offline.

Method

Design

This study employs a cross-sectional design through a quantitative approach. Data were collected using a validated and reliable questionnaire. The study will examine the relationship between phubbing and toxic disinhibition, as well as compare these two variables based on participants' gender and place of residence.

Participants

The sample used comprised 896 college students from various provinces across Indonesia, including West Sumatra, Bali, Banten, Bengkulu, DKI Jakarta, DI Yogyakarta, Jambi, West Java, Central Java,

East Java, South Kalimantan, West Kalimantan, Central Kalimantan, East Kalimantan, Riau Islands, Nanggroe Aceh, Papua, East Nusa Tenggara, Riau, West Sulawesi, North Sulawesi, South Sulawesi, and North Sumatra. Accidental sampling was employed to collect the data, and informed consent was obtained from participants before their voluntary participation in the study. The research data was collected in March - April 2023.

Measurement

Phubbing scale. The phubbing scale was developed based on Chotpitayasunondh & Douglas's theory (2018), consisting of 20 items that measure the level of individual phubbing behavior. The phubbing scale employs five response alternatives: always (AL), often (OF), sometimes (SO), rarely (RA), and never (NE). Positive statement scores are assigned as follows: AL (always) = score 5, OF (often) = score 4, SO (sometimes) = score 3, RA (rarely) = score 2, and NE (never) = score 1. Conversely, for negative statements: AL (always) = score 1, OF (often) = score 2, SO (sometimes) = score 3, RA (rarely) = score 4, and NE (never) = score 5. Examples of phubbing items include "*I disregard those around me when I'm using my cellphone,*" "*I am so engrossed in my cellphone that I pay less attention to the person I'm talking to,*" and "*I prefer to focus on my cellphone rather than talking to others.*" The reliability coefficient alpha for this scale is $\alpha = 0.912$.

Toxic Disinhibition Scale. The toxic inhibition scale was developed based on Suler's theory (2004) and consists of 25 items that measure individuals' levels of toxic inhibition. This scale uses five response alternatives: always (AL), often (OF), sometimes (SO), rarely (RA), and never (NE). The scoring for positive statements is AL (always) = score 5, OF (often) = score 4, SO (sometimes) = score 3, RA (rarely) = score 2, and NE (never) = score 1. For negative statements, the scoring is reversed: AL (always) = score 1, OF (often) = score 2, SO (sometimes) = score 3, RA (rarely) = score 4, and NE (never) = score 5. Examples of toxic disinhibition items include "*I like spreading fake news on the internet" "I enjoy insulting people on social media.*" "*I have a tendency to make statements to provoke anger on the internet.*" The reliability coefficient (Cronbach's alpha) of this scale is $\alpha = 0.935$.

Data Analysis

Regression analysis and ANOVA are used to analyze the research data. Assumption tests for data normality, linearity, multicollinearity, and data homogeneity are conducted prior to hypothesis testing.

Results

Figure 1 illustrates the categorization of toxic inhibition levels in the research sample. The majority of respondents tend to fall into the medium category, comprising 530 individuals or 59%. The remaining participants are categorized as having high inhibition levels, at 80%, and low inhibition levels, at 33%.

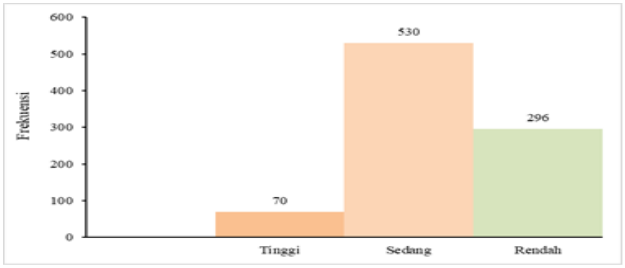

Figure 1 Histogram of Overall Student *Toxic Disinhibition Frequency Scores*

Table 1 presents an in-depth analysis of toxic disinhibition across various dimensions, drawing from a study involving 896 participants. This examination focuses on aspects such as Dissociative Anonymity, Invisibility, Ansynchronicity, Solipsistic Introjection, Dissociative Imagination, and Minimization of Status and Authority. Each dimension's characteristics are illuminated through several key metrics.

Table 1
Description Average (means) and Percentage (%) *Toxic Disinhibition* (N=896)

Aspect	Max	Min	SD	∑	Means	%	Category
Dissociative anonymity (3)	93	13	19,3	44320	49	48%	Moderate
Invisibility (6)	100	13	16,6	12511	47	50%	Low
Ansynchronicity (4)	100	20	18,3	11028	62	51%	Moderate
Solipsistic introjection (5)	100	20	16,5	12100	54	48%	Moderate
Dissociative Imagination (3)	100	20	15,2	7594	57	76%	Moderate
Minimization of status and authority (4)	100	20	18,2	9992	56	56%	Moderate

For Dissociative Anonymity, participants' scores varied from 13 to 93, yielding an average score of 49. This indicates a moderate level of feeling anonymous in online interactions, with around 48% of participants falling within this range. In contrast, Invisibility displayed scores ranging from 13 to 100, with an average of 47. This suggests a low sense of being less visible or accountable online, a sentiment shared by about half of the participants.

Ansynchronicity, reflecting the degree of asynchronous communication experienced, recorded scores from 20 to 100, with an average of 62. This signifies a moderate tendency toward asynchronous interactions, encompassing 51% of participants. Similarly, Solipsistic Introjection, capturing projection onto others online, spanned scores of 20 to 100, with an average score of 54. This moderate level of projection was shared by approximately 48% of participants.

Dissociative Imagination, evaluating imaginative online behavior, featured scores ranging from 20 to 100 and an average of 57. Remarkably, a substantial 76% of participants aligned with this moderately imaginative behavior. Lastly, Minimization of Status and Authority, gauging the downplaying of real-world status online, exhibited scores between 20 and 100, with an average of 56. Around 56% of

participants fell into this moderate category of status minimization.

From figure 2, it can be explained that out of 896 students, 91 students who have *Phubbing Behavior* are in the low classification or around (10%), 617 students have *Phubbing Behavior* are in the moderate classification or around (69%), the remaining 188 students who have *Phubbing Behavior* are in the high classification or around (21%).

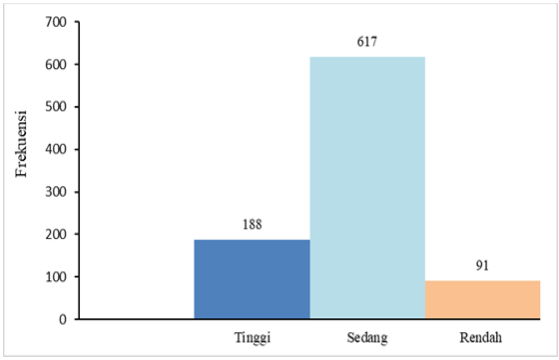

Figure 2 *Phubbing* Score Frequency Histogram Overall Student *Behavior (N=896)*

Table 2 provides a comprehensive insight into phubbing behavior, derived from a study involving 896 participants. The table delves into four distinct aspects: nomophobia, interpersonal conflict, self-isolation, and problem acknowledgement. In the aspect of nomophobia, the examination focuses on participants' fear of being without a mobile phone, with scores ranging from 20 to 100. The average (mean) score of 77 suggests a relatively low level of nomophobia. Notably, 60% of participants fall within this score range, indicating a significant presence of this fear, albeit at a manageable level.

In the aspect of interpersonal conflict, the scores spanning 20 to 100 gauge the extent to which participants experience conflict in their interpersonal relationships due to excessive phone use. The average (mean) score of 56 points toward a moderate level of interpersonal conflict stemming from phubbing behavior. Approximately 54% of participants fall within this score range, underscoring the

prevalence of this issue. The self-isolation aspect assesses the degree to which individuals isolate themselves from others due to their phone usage. With scores ranging from 20 to 100, an average (mean) score of 56 signifies a moderate level of self-isolation attributed to phubbing tendencies. Similarly, 54% of participants fall within this score range, highlighting the substantial impact on social interactions.

In the problem acknowledgement aspect, scores ranging from 20 to 100 explore participants' recognition of their phubbing-related behavior as problematic. The average (mean) score of 69 reveals a moderate level of acknowledging phubbing as a potential issue. Notably, 53% of participants fall within this range, emphasizing the importance of recognizing and addressing this behavior.

Table 2
Description Average (means) and Percentage (%) *Behavior* Based *Phubbing* (N=896)

Aspect	Max	Min	SD	∑	Means	%	Ket
Nomophobia (5)	100	20	14,9	68652	77	60%	Low
Interpersonal Conflic (5)	100	20	17,8	50444	56	54%	Moderate
Self Isolation (5)	100	20	17,1	50452	56	54%	Moderate
Problem Acknowledgement (3)	100	20	17,5	61647	69	53%	Moderate

Hypothesis test

Based on the Kolmogorov-Smirnov test, the data's normality is indicated by a p-value of 0.200, which is greater than 0.05. Moreover, the Homogeneity test results show homogenous data with a p-value of 0.150, also greater than 0.05. Then, hypothesis testing was conducted using regression analysis and anova. The results of the regression analysis indicate a highly significant positive relationship between phubbing and toxic inhibition (R = .550, R2 = .303, F = 388.7, df = 1, p =

0.000). The anova results reveal differences in the level of phubbing among participants living in suburban and urban areas (F = 3.220, df = 2, p = 0.040), where participants living in suburban areas (M = 59.38) have a higher mean value compared to those living in urban areas (M = 56.69). Moreover, anova testing for the level of toxic inhibition demonstrates a significant difference between males and females (F = 3.73, df = 1, p = 0.050), with the mean value for males (M = 67.2) being higher than the mean value for females (M = 64.9).

Discussion

The observed results from the regression analysis provide substantial evidence for a robust and positive correlation between phubbing behavior and toxic inhibition. This indicates that as the level of phubbing increases, there is a corresponding increase in toxic inhibition tendencies. The coefficient of determination (R^2 = .303) signifies that approximately 30.3% of the variability in toxic inhibition can be explained by changes in phubbing behavior. This indicates a moderate-to-strong explanatory power of phubbing in predicting the variation in toxic inhibition levels among the participants. The statistical significance is highlighted by the high F-statistic (F = 388.7) and a very low p-value (p = 0.000), suggesting that the observed relationship is highly unlikely to have occurred by chance. This strengthens the validity of the findings and implies that the relationship between phubbing and toxic inhibition is not just a random occurrence but has substantive implications.

These results align with psychological theories that suggest that technology-mediated communication, such as smartphone usage and phubbing, can contribute to changes in communication patterns and behaviors. One theoretical framework that can be relevant here is the Social Identity Model of Deindividuation Effects (SIDE), proposed by Lea and Spears (1991). This theory explains how anonymity and reduced accountability in online environments, which can be reflected in phubbing behavior, can lead to increased toxic inhibition (Postmes, Spears & Lea, 1998; Lea & Spears, 1992). The idea is that when individuals feel anonymous, they might engage in behaviors they would avoid in face-to-face interactions, leading to toxic disinhibition (Spears & Lea, 1994). Additionally, the findings are consistent with previous research by Chotpitayasunondh and Douglas (2016), who discovered correlations between phubbing behavior and related constructs

such as smartphone addiction, internet addiction, and the fear of missing out. This suggests that the results could be explained within a broader context of digital communication behaviors and their effects on psychological and social dynamics.

The ANOVA results indicate a statistically significant difference in the level of phubbing between participants residing in suburban and urban areas. The F-statistic of 3.220 with degrees of freedom (df) of 2 and a p-value of 0.040 suggest that this difference is unlikely to have occurred by chance. The mean phubbing score for participants in suburban areas (M = 59.38) is notably higher than the mean score for those in urban areas (M = 56.69).

This finding could be interpreted in the context of various factors associated with suburban and urban living. Suburban areas often have different social dynamics and lifestyle patterns compared to urban areas. It's plausible that the relatively higher mean phubbing score among participants in suburban areas could be influenced by factors such as a potentially slower pace of life, reduced population density, and different social norms (Fichman & Rathi, 2022). For instance, suburban areas might have a more community-oriented environment where face-to-face interactions are more prevalent, potentially leading to increased phubbing as individuals seek distraction from their surroundings. In contrast, urban areas often have a faster-paced lifestyle and greater exposure to technology, which could influence how individuals engage with their smartphones during interactions.

The finding from the ANOVA testing regarding the level of toxic inhibition highlights a statistically significant difference between males and females. The F-statistic of 3.73 indicates that the variation in toxic inhibition levels between the genders is beyond what would be expected due to random chance. This finding holds implications for understanding potential gender-based disparities in toxic inhibition tendencies. The mean value for males (M = 67.2) being higher than the mean value for females (M = 64.9) suggests that, on average, males tend to exhibit slightly higher levels of toxic inhibition compared to females within the study sample. This difference could be interpreted within the context of social and psychological theories that explore gender differences in communication styles and behavior (Bonow et al., 2023; Lee, 2023; Charaschanya, 2018) Research in this area

suggests that males and females may have varying approaches to communication, conflict resolution, and emotional expression, which could contribute to differences in toxic inhibition tendencies (Ling et al., 2020; Nor, 2019; Orchard, 2014; Spears, 2017). For instance, males might be more prone to certain types of aggressive or unfiltered online communication, leading to higher levels of toxic inhibition (Lee, 2023; Charaschanya, 2018).

This study delves into examining the relationship between phubbing and toxic disinhibition, shedding light on an intriguing area of online behavior among Indonesian students. However, several limitations warrant consideration. Firstly, the study's cross-sectional design restricts our ability to establish causal relationships between phubbing and toxic disinhibition. Future studies could employ longitudinal designs to provide insights into how these behaviors evolve over time and whether one behavior precedes the other.

The reliance on self-reported data introduces potential self-report bias, as participants might not provide accurate information due to social desirability concerns or memory inaccuracies. Using mixed-method approaches, such as combining self-reports with observational data, could enhance the validity of the findings. Additionally, the sample's representativeness of the wider population of Indonesian students is pivotal. Further research with more diverse and comprehensive sampling strategies would enhance the generalizability of the study's outcomes.

Cultural factors might also play a significant role in shaping phubbing and toxic disinhibition behaviors. Future studies could incorporate qualitative methods to explore cultural norms and societal pressures that contribute to these behaviors, providing a deeper contextual understanding. To address limitations related to measurement tools, researchers should ensure the utilization of validated instruments that accurately capture the constructs of interest. Adaptation and validation of tools to the specific cultural context of Indonesian students are paramount to ensure accurate measurement.

Moreover, examining potential third variables, such as personality traits or mental health factors, is essential for a comprehensive understanding of the relationship. Conducting analyses that control

for these variables could provide a clearer picture of the association between phubbing and toxic disinhibition. Lastly, while this study offers insights into the relationship, future investigations could explore the long-term consequences of these behaviors on individuals' psychological well-being, relationships, and academic performance. This would provide valuable insights for intervention strategies aimed at mitigating the negative impacts of phubbing and toxic disinhibition among students.

In summary, while this study contributes valuable insights into the relationship between phubbing and toxic disinhibition among Indonesian students, its limitations underscore the need for future research endeavors that employ robust research designs, culturally adapted measurement tools, and comprehensive sampling strategies. Addressing these limitations will enhance the reliability, validity, and applicability of findings in both academic and practical contexts.

Conclusion

This study discovered a highly significant positive relationship between phubbing and toxic disinhibition among Indonesian students. This means that as phubbing behavior increases, so does toxic disinhibition. Moreover, variations in the level of phubbing were observed based on residential location. Individuals residing in suburban areas demonstrated higher levels of phubbing compared to those living in urban areas. The research also highlighted disparities in toxic disinhibition between males and females, indicating that males exhibited higher scores in toxic disinhibition behavior.

Toxic disinhibition among Indonesian students falls within the moderate category. This suggests the persistence of a notable presence of toxic disinhibition behaviors among these students. Many students in Indonesia may not fully grasp that toxic disinhibition behavior is considered deviant in terms of internet usage. This encompasses instances where students engage in hate speech anonymously on social media, potentially causing harm to both themselves and others due to their actions.

Phubbing behavior among Indonesian students falls within the high category. This signifies that a significant number of students still display phubbing behavior while using the internet and mobile phones. Such behavior entails not according proper attention to the person they are interacting with, instead excessively focusing on their cell phones. One crucial element of effective communication is respecting the presence of others. When this aspect is compromised, it can give rise to interpersonal issues and even impact students' academic performance. It is vital for students to position themselves as educated individuals capable of managing their internet and social media usage. This underscores the importance of directing social media usage towards more constructive and responsible purposes.

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