

Mediating Role of Phubbing in the Relationship between Fearful Attachment and Psychological Distress among Young Adults

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Abstract

Phubbing has become increasingly prevalent among young adults and has been linked with negative psychological outcomes. Current study investigated the mediating impact of phubbing behavior in the relationship between fearful attachment and psychological distress (depression, anxiety, and stress) among young adults. Data was collected from 400 participants using Generic Scale of Phubbing (Chotpitayasunondh & Douglas, 2018), Attachment Styles Questionnaire (Van Oudenhoven et al., 2003), and Depression, Anxiety and Stress Scale – 21 items (Lovibond, 1995). Results showed that fearful attachment was significantly and positively correlated with phubbing, and both variables were positively correlated with depression, anxiety, and stress. Mediation analysis revealed that phubbing fully mediated the relationship between fearful attachment and depression, as well as between fearful attachment and anxiety, while partially mediating its relationship with stress. The findings emphasize the need of addressing problematic phone use in people with insecure attachment patterns as part of an effort to enhance mental health outcomes.

Key words: *Phubbing, Fearful attachment, depression, anxiety, stress, Mediation, Young adults.*

Introduction

Smartphones have many advantages such as easier communication, fulfilling many needs by searching online for almost everything and to fulfil day-to-day activities (Pereira et al., 2020). Despite these advantages, excessive and problematic smartphone use has become a growing worry due to its relationship with a variety of psychological and behavioral issues that can affect well-being and daily functioning. Another psychological problem that has surfaced is known as "Phubbing." The phrase combines the terms "phone" and "snubbing", and is defined as a person focusing on their cell phone during a discussion rather than the person across from them (Butt & Arshad, 2021). The term gained popularity as smartphones and other digital devices became increasingly integrated into people's daily lives. Phubbing tends to be rude and inconsiderate behavior. It decreases the quality of interpersonal relationships amongst members of society. Those acting in this manner may come across as unfriendly to people around them, wanting to avoid social interaction or showing an absence of having an interest or being aware of their environment (Anshari et al., 2016).

Fearful Attachment as an Antecedent of Phubbing

According to attachment theory, people acquire an attachment style through their experiences with carers during childhood and these attachment patterns persist throughout the years (McNally et al., 2003). Four attachment styles were identified by Bartholomew and Horowitz (1991) based on people's mental pictures of self which could imply reliance or anxiety, and others representing avoidance. These four attachment styles include secure, preoccupied, fearful, and dismissing. Fearful attachment style is characterized by a combination of anxiety and avoidance in relationships. People with fearful attachment style have experienced significant early life trauma or abuse, leading to conflicting desires for closeness and avoidance of relationships (Shaver & Mikulincer, 2002). They may struggle with trust, have difficulty regulating emotions, and exhibit avoidant or ambivalent behaviours (Ainsworth et al., 2015). Individuals with fearful attachment may find it easier to connect with individuals online, where they can maintain emotional distance and control. They may develop digital relationships that feel safer than face-to-face encounters, which might contribute to addictive patterns of social media use. Sun and Miller (2023) in a study of 444 individuals, reported that individuals with attachment problems are more likely to exhibit problematic smartphone use and engage in phubbing. Another study by İmamoğlu and Keyvan (2022) found that people who experience high levels of social anxiety, avoid other people by focusing more on their cellphones.

Phubbing and Psychological Distress

Psychological distress is emotional and psychological discomfort caused by stressors, obstacles, or mental health issues. The most prevalent mental health factors that have been linked to excessive smartphone use in recent years include anxiety, depression, stress, and low self-esteem (Elhai et al., 2017). While much of the previous literature has looked at psychological distress as a possible cause of phubbing, a growing body of studies suggests that phubbing actually leads to emotional distress. Shahbaz et al. (2020), in a sample of 270 adults in Pakistan, found that phubbing significantly and positively predicted psychological distress, accounting for 18% of the variance in depression, anxiety, and stress. Similarly, those who are in a better psychological state are more inclined to show a lesser amount of phubbing (Babadi-Akashe et al., 2014). Over-reliance on technology for social interaction could prevent people from forming supportive relationships and strong emotional bonds, both of which are important for mental health (Kim, 2017). This behavior may further distance individuals from interpersonal connections and amplify feelings of loneliness and social disconnection, which may result in a recurrence of distressing symptoms.

Fearful Attachment and Psychological Distress

A large body of research supports the idea that fearful attachment is a meaningful predictor of psychological distress. Fearful attachment has been associated with depression (Marganska et al., 2013), anxiety (Weems et al., 2002) anxiety and depression (Chorot et al., 2017), and stress (Kidd et al., 2011). People with a fearful attachment style perceive themselves and others negatively, which means they desire intimacy but expect to be hurt if they seek it (Bartholomew & Horowitz, 1991). This constant push and pull leaves them without a reliable technique to settle down when they feel sad, as they neither trust others enough to seek for support nor trust themselves enough to manage their emotions alone. This notion is supported by research, which states that fearful attachment, along with other insecure styles, increases the likelihood of depression and anxiety in a sample of young adults, partly because these individuals rely on unhelpful ways of coping with stress (Ciocca et al., 2020).

The Mediating Role of Phubbing

Phubbing may be a fundamental behavioral mechanism by which fearful attachment causes psychological distress. Fearful attachment may develop as a coping mechanism in response to such adverse early experiences. As adults, individuals with fearful attachment might find it difficult to navigate relationships and emotions, possibly leading to maladaptive behaviors like phubbing as a way to cope with their inner conflicts and emotional challenges. According to Shams et al. (2019), these individuals are more inclined to avoid face-to-face contacts and instead rely on cellphones for social engagement, making them more likely to participate in phubbing. According to Ozimek et al. (2026) attachment insecurity has a positive association with phubbing and it may also influence phubbing through indirect psychological mechanisms, suggesting that phubbing may be a potential pathway linking fearful attachment with later outcomes. Recent research reveals that phubbing is associated with increased levels of psychological distress, implying that excessive smartphone use during social interactions could negatively impact mental health (Incoll & Knowles, 2025). Phubbing has already been found to indirectly affect psychological distress through loneliness (Maftei & Măirean, 2023). This suggests that phubbing may play a similar mediating role between other variables, such as fearful attachment and psychological distress. Putting everything together, these findings imply that phubbing may explain how fearful attachment influences psychological distress.

Rationale

Fearful attachment causes people to desire intimacy while also fearing it, and phubbing may provide a means to remain physically present without the emotional exposure that real connection would require. Although both fearful attachment and phubbing have been independently associated with psychological distress, limited research has been conducted to determine whether phubbing serves as the link between the two. This study fills that gap by investigating whether phubbing mediates the relationship between fearful attachment and psychological distress.

Hypothesis

1. Fearful attachment is positively correlated with depression, anxiety, and stress.
2. Fearful attachment is positively correlated with Phubbing.
3. Phubbing is positively correlated with depression, anxiety, and stress.
4. Phubbing mediates the relationship between fearful attachment and depression.
5. Phubbing mediates the relationship between fearful attachment and anxiety.
6. Phubbing mediates the relationship between fearful attachment and stress.

Conceptual Framework

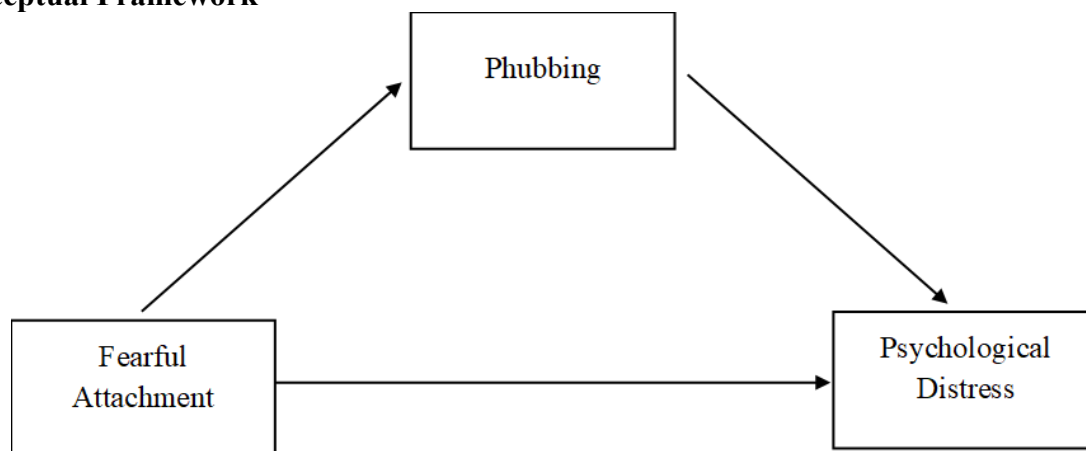


Figure 1: Mediating role of Phubbing in the relationship between Fearful Attachment and Psychological Distress.

Method

Sample

The sample consisted of 400 individuals (n=225 males; 175 females), selected through a convenient sampling method from across different universities in Islamabad and Rawalpindi.

Instruments

Demographic sheet. The demographic sheet includes information on age, gender, marital status, education, birth order and socio-economic status.

Generic Scale of Phubbing (GSP). The present study used Generic Scale of Phubbing (GSP) developed by Chotpitayasunondh and Douglas (2018) to measure phubbing behavior among participants. It is a 15-item self-report questionnaire consisting four subscales; nomophobia, interpersonal conflict, self-isolation, and problem acknowledgement. Each item of the questionnaire is scored on a 7-point Likert scale from 1 (Never) to 7 (Always). Scores are added to obtain final score which ranges from minimum 7 to maximum 105. The internal consistency of the scale was .89.

Attachment Styles Questionnaire (ASQ). The present study used Attachment Styles Questionnaire (ASQ) developed by Van Oudenhoven et al. (2003) which measures four different attachment styles. The four subscales include; Secure, Preoccupied, Fearful, and Dismissing attachment. It is a 21-item self-report questionnaire. Each item of the questionnaire is scored on a 5-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree). Mean scores are obtained for subscales. In line with the purpose of the study only fearful attachment subscale was used in the present study. Reliability coefficient for the fearful attachment subscale was .91.

Depression, Anxiety and Stress Scale – 21 Items (DASS-21). The present study also used Depression, Anxiety and Stress Scale – 21 Items (DASS-21) which was developed by Lovibond (1995) to measure psychological distress among participants. Its is a 21 item self-report questionnaire consisting of three subscales; depression, anxiety, and stress. Each item is scored on a 4-point Likert scale from 0 (Did not apply to me at all) to 3 (Applied to me very much or most of the time). Each subscale has 7 items and scores on each of the three subscales are calculated separately with a minimum score of 0 and a maximum score of 21. Reliability coefficients for depression, anxiety and stress were .76, .73, and .72 respectively.

Procedure

Participants were administered questionnaires designed to investigate the relationship between fearful attachment and psychological distress and the mediating role of phubbing. The questionnaires were accompanied by clear and comprehensive instructions. Initially, participants received general guidance before proceeding to complete the questionnaires. They were directed to respond individually and honestly, with the option to skip any question causing discomfort. Participants were reassured that the information they provided would be exclusively used for research purposes. The data analysis involved the utilization of SPSS version 26.

Ethical Considerations

Ethical approval was obtained from the Ethical Review Board, Department of Psychology at IIUI, Ethics Committee, and the institutes' heads. Additionally, an informed consent was given to the participants to ask for their voluntary participation. The participants were also ensured that their identity will be kept confidential.

Results

Correlation analysis was conducted to examine the relationships between fearful attachment, phubbing, and psychological distress (depression, anxiety, and stress). Mediation analysis was also performed to explore the mechanism through which fearful attachment style affects psychological distress by considering the role of phubbing behavior.

Table 1: *Frequencies and percentages of demographic variables (N = 400)*

Variables	Category	<i>f</i>	%
Age	18-22	253	63.2
	23-28	147	36.8
Gender	Males	188	47.0
	Females	212	53.0
Marital status	Single	354	88.5
	Married	46	11.5
Education	Bachelor's	334	83.5
	Master's	66	16.5
Birth Order	1 st Born	85	21.3
	Middle Child	174	43.5
	Last Born	110	27.5
	Only Child	31	7.7
Socio-economic Status	Lower class	12	3.0
	Middle class	349	87.3
	Upper class	39	9.7

Table 1 showed frequency and percentages of all the demographics (N = 400). The majority of the participants were between 18 and 22 years of age accounting for 63.2%, while 36.8% were between 23 and 28 years. In terms of gender, 53.0% were females and 47.0% were males. Most participants were single accounting for 88.5%, whereas 11.5% were married. Regarding educational level, the majority were enrolled in bachelor's programs accounting for 83.5%, while 16.5% were pursuing master's degrees. With respect to birth order, 43.5% were middle children, 27.5% were last born, 21.3% were first born, and 7.7% were only children. In terms of socioeconomic status, 87.3% participants belonged to the middle class, followed by 9.7% belonged to upper class and 3.0% belonged to lower class.

Table 2: *Psychometric Properties of the Study Variables (N = 400)*

Variables	<i>k</i>	α	<i>M</i> (<i>SD</i>)	Range		Skewness	Kurtosis
				Actual	Potential		
Fearful attachment	5	.91	3.25(1.13)	1-5	1-5	-.17	-1.14
Phubbing	15	.89	56.47(19.39)	15-105	15-105	.19	-.16
Depression	7	.76	6.41(4.07)	0-21	0-21	.58	.24
Anxiety	7	.73	6.92(4.05)	0-20	0-21	.48	.22
Stress	7	.72	6.96(3.87)	0-20	0-21	.31	-.01

Note: M = Mean, SD = Standard Deviation

Table 2 showed descriptive statistics and psychometric properties of fearful attachment, phubbing and psychological distress variables. The reliability coefficient for the subscale of fearful attachment and phubbing scale demonstrated a very good reliability coefficient of .91 and .89 respectively. Furthermore, the internal consistency for the subscales of depression, stress, and anxiety was .77, .73, and .72 respectively, all of them falling in the acceptable range. Additionally, skewness and kurtosis values were also analyzed to assess the distribution of the data and all the values fall between +2 and -2 which indicated that the data is normally distributed (George, 2011).

Table 3: *Correlation of study variables (N=400)*

Variables	1	2	3	4	5
1. Fearful attachment	-	-	-	-	-
2. Phubbing	.38**	-	-	-	-
3. Depression	.17**	.30**	-	-	-
4. Anxiety	.12*	.24**	.69**	-	-
5. Stress	.22**	.29**	.63**	.62**	-

Note. ** $p < .01$, * $p < .05$

Table 3 showed Pearson correlation coefficients among fearful attachment, phubbing, depression, anxiety, and stress. Fearful attachment was significantly and positively correlated with phubbing indicating that individuals who display fearful attachment style in their relationships are more likely to phub others. Fearful attachment was also significantly correlated with depression, anxiety and stress. This indicates that individuals who are fearfully attached tend to suffer from psychological distress. Furthermore, phubbing was significantly and positively associated with depression, anxiety and stress suggesting that an increase in phubbing behavior tends to be accompanied by an increase in these variables. All three subscales of psychological distress, depression, anxiety, and stress, were correlated with each other. Which shows that presence of one of the symptoms of psychological distress are accompanied by symptoms of the other two.

Table 4: *Mediating Role of Phubbing in the Relationship between Fearful Attachment and Psychological Distress (Depression, Anxiety, and Stress) (N = 400)*

Outcome	Path	B	SE	t	p	95% CI [LL, UL]
Depression	Fearful attachment → Phubbing (a)	6.54	0.80	8.22	< .001	[4.97, 8.10]
	Phubbing → Depression (b)	0.06	0.01	5.23	< .001	[0.04, 0.08]
	Total effect (c)	0.63	0.18	3.51	.001	[0.27, 0.98]
	Direct effect (c')	0.25	0.19	1.36	.175	[-0.11, 0.62]
	Indirect effect (a×b)	0.37	0.09	—	—	[0.20, 0.56]
Anxiety	Fearful attachment → Phubbing (a)	6.54	0.80	8.22	< .001	[4.97, 8.10]
	Phubbing → Anxiety (b)	0.05	0.01	4.17	< .001	[0.02, 0.07]
	Total effect (c)	0.45	0.18	2.50	.013	[0.09, 0.80]
	Direct effect (c')	0.14	0.19	0.77	.444	[-0.23, 0.52]
	Indirect effect (a×b)	0.30	0.09	—	—	[0.13, 0.50]

Stress	Fearful attachment → Phubbing (a)	6.54	0.80	8.22	< .001	[4.97, 8.10]
	Phubbing → Stress (b)	0.05	0.01	4.55	< .001	[0.03, 0.07]
	Total effect (c)	0.76	0.17	4.56	< .001	[0.43, 1.09]
	Direct effect (c')	0.46	0.18	2.58	.010	[0.11, 0.80]
	Indirect effect (a×b)	0.31	0.09	—	—	[0.15, 0.49]

Note. B = unstandardized coefficient, SE = standard error, CI = Confidence Interval, LL = lower limit, UL = upper limit.

Table 4 showed mediating role of phubbing in the relationship between fearful attachment and psychological distress variables. Fearful attachment was positively associated with phubbing (a), which in turn positively predicted depression (b). The indirect effect of fearful attachment on depression through phubbing was significant, $B = 0.37$, 95% CI [0.20, 0.56], and the direct effect became nonsignificant ($p = .175$), indicating full mediation (figure 2). Phubbing significantly mediated the relationship between fearful attachment and anxiety, $B = 0.30$, 95% CI [0.13, 0.50]. The direct effect of fearful attachment on anxiety was nonsignificant ($p = .444$) once phubbing was included, supporting full mediation (figure 3). Phubbing also significantly mediated the relationship between fearful attachment and stress, $B = 0.31$, 95% CI [0.15, 0.49]. Unlike the other two outcomes, the direct effect of fearful attachment on stress remained significant ($p = .010$), indicating partial mediation (figure 4).

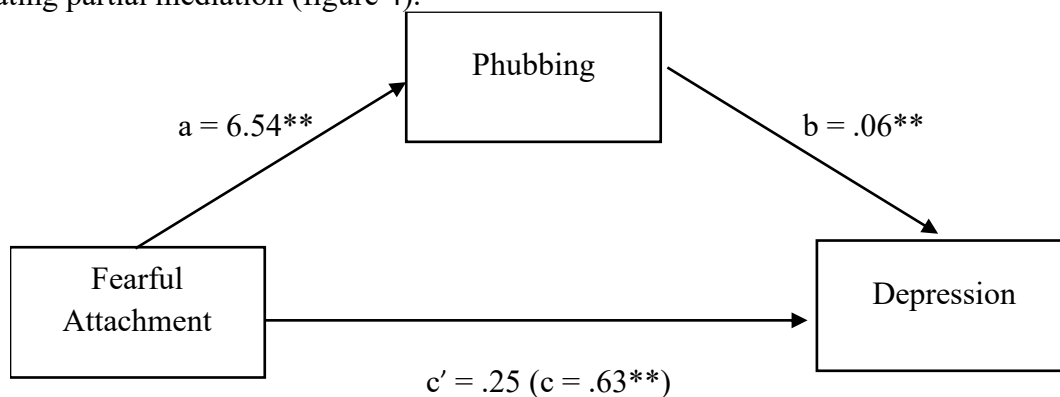


Figure 2: *Phubbing as a Mediator between Fearful Attachment and Depression.*

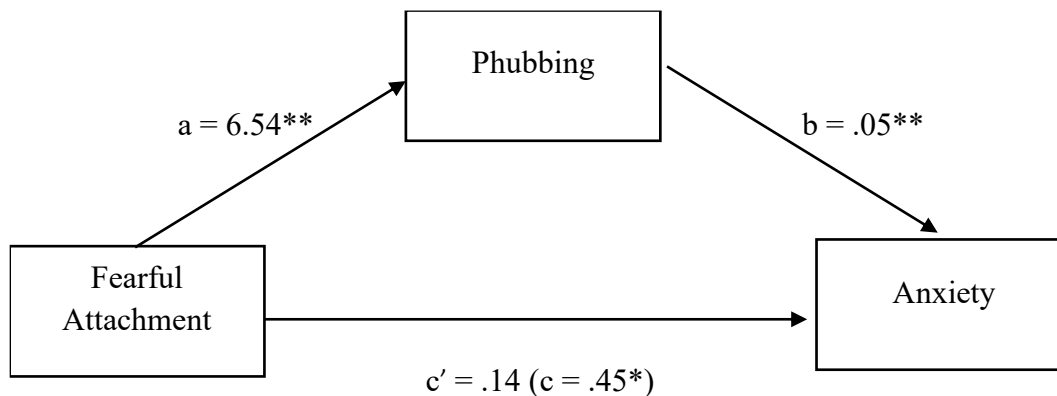


Figure 3: *Phubbing as a Mediator between Fearful Attachment and Anxiety.*

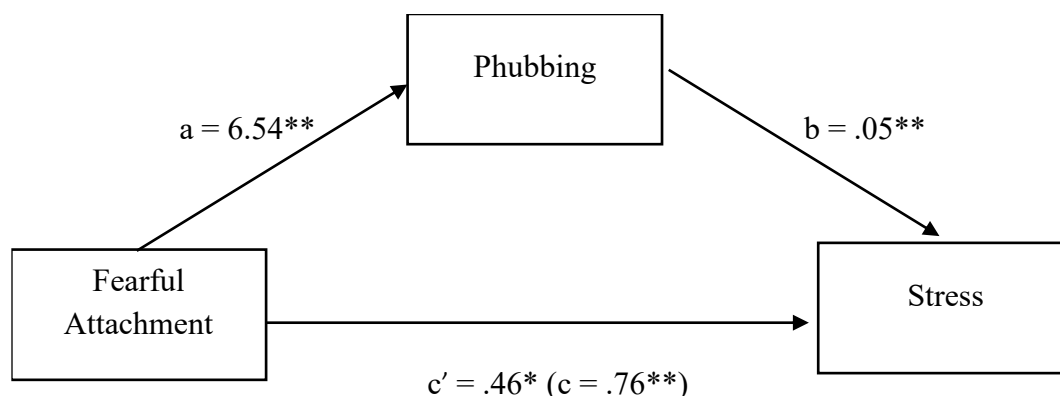


Figure 4: *Phubbing as a Mediator between Fearful Attachment and Stress.*

Discussion

The present study investigated the relationship between fearful attachment, phubbing and psychological distress (depression, anxiety, and stress) among young adults. It also examined the mediating role of phubbing in the relationship between fearful attachment and psychological distress. Results indicated that fearful attachment and psychological distress were positively associated with each other. Consistent with the previous studies, individuals with fearful attachment style hold a negative perception of both themselves and others (Bartholomew & Horowitz, 1991), which leads to a desire for intimacy while simultaneously expecting rejection. This constant push and pull makes it difficult for them to regulate emotional distress (Mikulincer & Shaver, 2007), which may explain why people with fearful attachment reports higher levels of depression, anxiety, and stress than securely attached individuals. Furthermore, phubbing fully mediated the relationship of fearful attachment with depression and anxiety. Additionally, phubbing partially mediated the relationship between fearful attachment and stress. Erzen and Tasdemir (2025) claimed that insecurely attached people may use smartphones as a coping strategy to deal with interpersonal uncertainty. As a result, higher emotional reliance on digital communication may increase the likelihood of phubbing during face-to-face conversations. Büyüksakar and Çelik (2024) observed a strong correlation between fearful attachment and phubbing among university students, although secure attachment did not. They proposed that fearfully attached people have heightened anxiety about face-to-face communication and instead rely more heavily on their phones and social media, whereas securely attached people can self-regulate and engage easily in direct communication. According to Sun and Miller (2023) people with attachment problems are more likely to build emotional attachments with their smartphones, using them as a source of security and comfort when interpersonal relationships are uncertain or threatening. According to Yelpaze (2020) individuals with insecure attachment styles, when combined with lower self-control, are more likely to engage in problematic smartphone use. These findings support the hypothesis that attachment-related issues can transfer emotional reliance from interpersonal relationships to mobile technologies, ultimately increasing problematic smartphone use and emotional distress. Stress, on the other hand, demonstrated only partial mediation, implying that fearful attachment continued to predict stress even after controlling for phubbing. This shows that the hypervigilance and concern associated with fearful attachment (Bartholomew & Horowitz, 1991) may increase stress by several pathways, of which phubbing is just one. Frequent phone use during social interactions may negatively impact the quality of real-life interactions and reduce people's sense of connection, which has been linked to poorer mental health over time (Elhai et al., 2017). The negative effects of phubbing are generally linked to worse emotional well-being, lower relationship satisfaction, and lower relationship quality (Chmielik & Błachnio, 2021). This is consistent with previous study indicating that phubbing behavior is

associated with increased depression in student and young adult populations (Ivanova et al., 2020). Ni et al. (2025) used Media Dependency Theory to further interpret phubbing, arguing that an over-reliance on smartphones to satisfy emotional and social needs leads people to prioritize digital interactions over in-person communication, which ultimately results in worse psychological and interpersonal outcomes. Overall, these results indicate that phubbing is more than just a bad habit; it is a behavior rooted in attachment difficulties, and one with substantial consequences for mental health. Additionally, interventions targeted at reducing emotional distress in fearfully attached people should benefit from directly addressing problematic phone use, as it appears to be an important pathway by which attachment problems manifest as everyday distress.

Limitations and Suggestions

This study has certain limitations that should be considered. First, the data was collected at a single point in time, therefore it is impossible to establish firmly whether fearful attachment causes phubbing or that phubbing causes psychological distress. A longitudinal study could help confirm the direction of these associations. Second, because the sample was primarily made up of young, unmarried, university-going adults, the findings may not be applicable to older adults, married people, or persons from other educational and cultural backgrounds. Third, all variables were determined using self-report questionnaires, which can be influenced by social desirability or incorrect self-perception. To eliminate this bias, future studies should incorporate observational methods or reports from partners/friends. Finally, only phubbing was examined as a mediator; other aspects such as smartphone addiction, self-esteem, or emotion control may also play a role and should be investigated in future studies.

Implications

Findings of this study are useful both theoretically and practically. Theoretically, they support the idea that insecure attachment, particularly fearful attachment, is associated with phubbing and poor mental health, adding to the current attachment and technology use literature. Practically, mental health professionals working with young adults who exhibit symptoms of depression, anxiety, or stress may benefit from evaluating their attachment style and phone usage behaviors. Given that phubbing was identified as a key pathway linking fearful attachment to psychological distress, interventions aimed specifically at reducing phone-related avoidance behavior, as well as developing healthier interpersonal trust and communication skills, may be more effective than addressing attachment issues alone. These findings can also help institutions develop awareness initiatives to promote healthy phone usage and greater face-to-face relationships.

Conclusions

Current study investigated how fearful attachment relates to psychological distress (depression, anxiety, and stress), and whether phubbing mediates this relationship. Results showed that fearful attachment was associated with higher psychological distress and greater phubbing behavior, and phubbing itself was linked to higher distress. Additionally, phubbing fully mediated the relationship between fearful attachment and both depression and anxiety, and partially mediated its association with stress. This indicates that fearfully attached people may use their phones to avoid close, face-to-face contact, and that this behavior adds to their emotional distress. These findings emphasize the need of treating phone-related avoidance behavior for improving the mental health of people with insecure attachment patterns.

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