

ORIGINAL ARTICLE:

THE RELATIONSHIP OF PHUBBING, EMOTIONAL INTELLIGENCE AND PSYCHOLOGICAL DISTRESS IN YOUTH

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ABSTRACT

OBJECTIVE

To explore the association between phubbing behavior, emotional intelligence, and psychological distress in youth and the predicting role of phubbing and emotional intelligence for determining psychological distress in youth.

STUDY DESIGN

Correlational research

PLACE AND DURATION OF STUDY

The research was done from March 2022 to February 2023 at the Department of Applied Psychology, University of Management and Technology, Lahore.

METHOD

The participants were 200 university students between the ages of 18 and 26 ($Mean=21.36$; $SD=1.94$) were selected from various public and private sector universities in Lahore using convenience sampling technique. The Phubbing Scale, Wong and Law Emotional Intelligence Scale, and the Depression, Anxiety and Stress Scale-DASS 21 along with self-designed demographic questionnaire were applied for data collection.

RESULTS

A positive relationship between phubbing and psychological distress in young adults was seen. Phubbing was an important predictor of mental distress in young adults, however emotional intelligence did not predict it. Additionally, there were no remarkable gender differences noted in phubbing, emotional intelligence, and psychological distress.

CONCLUSION

The study emphasizes the influence of phubbing as well as of emotional intelligence on the psychological distress in youth and these findings may assist in interventions to reduce phubbing and improve emotional intelligence as possible solutions to reduce psychological distress.

KEYWORDS

INTRODUCTION

In today's digital age, smartphones are a great addition to our lives as they allow us to stay in touch with our loved ones around the clock. Despite the apparent benefits of smartphones, there is a chance that they might be improperly utilized or overused, resulting in problematic internet usage and the rise of a novel problem known as "phubbing (snubbing on phones)" rather than being a tool for establishing social connections.¹ It is thought that phubbing is brand-new form of electronic addiction.² It refers to any of the following smartphone behaviors: checking the phone during a conversation, when the discussion stops,

checking the phone keeping the phone nearby even when speaking to someone one-on-one, or cutting off a real-life discussion to take a call. In fact, it is one of the most prevalent signs of mobile phone addiction.³

There are several risk factors of phubbing behavior but fear of losing out, mobile phone addiction, and a lack of control on self are the significant predictors of phubbing behaviors¹. It is suggested that, phubbing is associated with increased anxiety, a decrease in the perception of communication quality, and an absence of interpersonal confidence, all of which are anxiety-inducing factors. It decreases a person's level of life pleasure, relationship satisfaction and is linked to various mental health conditions like anxiety, depression, withdrawal, loneliness, aggressiveness, and cyberbullying.⁴ Phubbing also has a detrimental impact on people's emotional stability and leads to a loss of sense of morality, which may cause psychological distress.

According to prevailing opinion, psychological distress is the state of mental anguish which is characterized by the symptoms of depression (like loss of interest, grief, and hopelessness) and anxiety (e.g., restiveness, feeling worried) as well as stress. These signs could be related to physiological issues (e.g., sleeplessness; migraine; sluggishness).⁵ Problematic cell phone usage has been linked to poor mental states, clearly showing a positive association with psychological distress. According to the findings, phubbing not only harms the psychological state of the phubbees, but it harms the psychological state of the phubbers.⁶

However, emotional intelligence is vital for well-being and meaningful relationships in any individual. It includes self-regulation, self-awareness, empathy, and social skills, fostering effective communication and mental health.⁷ The ability to detect, comprehend, show, manage, and use emotions in order to effectively and efficiently communicate and connect with others is known as emotional intelligence. Goleman (2001)⁸ invented the phrase "emotional intelligence", and he proposed five key components of emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skills. Emotional intelligence is significant because it influences performance, physical health, mental health, relationships, and social intelligence. Enhancing emotional intelligence leads to improved mental health, better relationships, and overall success.⁹ Higher emotional intelligence relates to lower psychological distress and better coping.^{10,11}

There are some theories that explain and give deep understanding about the connection between phubbing, emotional intelligence and psychological distress. *Cognitive Appraisal Theory* suggests that individuals' interpretations and appraisals of phubbing situations shape their emotions. However, individuals with high level of emotional intelligence may regulate their emotions and interpret phubbing in a more positive light, resulting in more positive emotions and lower distress levels.¹² *Social Comparison Theory* proposes that individuals compare themselves to others, and if they perceive others as more interested in their phones than in interacting, they may feel inferior and experience negative emotions. However, individuals with relatively higher emotional intelligence are less likely to engage in negative social comparisons and focus on positive aspects of the situation, resulting in positive emotions and reduced psychological distress.¹³ *The Stress and Coping Model* suggests that individuals' perception of being ignored or devalued during phubbing can cause stress and negative emotions. However, those with high emotional intelligence can employ effective coping strategies, such as emotional regulation, to mitigate the impact of phubbing on psychological well-being. This resilience can lead to lower levels of psychological distress.¹⁴ Overall, these three theories offer potential explanations for how phubbing and

emotional intelligence may be related to psychological distress in youth. In writing, different observational examinations have legitimated the huge negative connection between attribute emotional intelligence and psychological distress. So, based on the earlier discussion, this study aims to identify the link between phubbing, emotional intelligence, and psychological distress in youth and to determine the impacts of phubbing and emotional intelligence on psychological wellbeing in youth. Therefore, the following hypotheses were formulated:

- Phubbing will likely to positively and emotional intelligence negatively relate to psychological distress in youth.
- It is to predict that phubbing and emotional intelligence are the potential predictors of psychological distress in youth.

METHOD

Participants

In this correlational research, we used a sample of 200 young adults age ranged 18 to 26 (21.36 ± 1.94). Participants were taken from different private and public sector universities in Lahore city through convenient sampling technique. This age group was targeted as excessive mobile usage for any purpose exists more in younger people as compared to any other age group. Those participants with any form of physical or psychological disabilities were excluded.

Instruments

The following assessment measures were used in this study.

The Phubbing Scale¹⁵

A quick and simple instrument used to assess phubbing behavior. It comprises 10 items measured on a 5-point Likert scale. The scale further divides into two subscales: communication disturbance, which examines how cellular phone use affects in-person interactions, and phone obsession, which measures dependency on phones when face-to-face contact is not possible. The scale demonstrates good internal consistency with a Cronbach's alpha coefficient of .88.

Wong and Law Emotional Intelligence Scale (WLEIS)¹⁶

This is a brief assessment tool for emotional intelligence. It includes 16 items assessed on a 7-point Likert scale. The scale consists of four subscales that focus on the ability model of emotional intelligence: self-emotions assessment, regulation of emotions, use of emotion, and others-emotion appraisal. The total score on the scale ranges from 27 to 108, with different ranges indicating levels of emotional intelligence. The scale's reliability suggests an adequate level of emotional intelligence with a score between 0.6 and 0.7, and an excellent level with a score of 0.8 or higher.

The Depression, Anxiety and Stress Scale 21 (DASS-21)¹⁷

It is a self-report measure used to assess emotional states of depression, anxiety, and stress. It consists of 21 items rated on a 4-point Likert scale. The scale comprises three subscales:

depression, anxiety, and stress, each consisting of seven items. Scoring on the scale ranges from normal to highly severe levels of depression, anxiety, and stress. A higher score indicates a more severe level, while a lower score suggests a lower level of distress. The scale demonstrates a reliability rating of 0.74 Cronbach's alpha.

Demographic Information Sheet

Information regarding age, gender, education (in years), relationship status, employment status, number of siblings, birth order, residence, family unit, information related to psychological and physical illness were taken.

Procedure

The research process began with the approval of the topic by the supervisor and the subsequent approval of the synopsis by the departmental research committee. Formal permissions were obtained from the authors of the scales used in the study. Additionally, a university permission letter was acquired from the Department of Applied Psychology at the University of Management and Technology. Formal permissions to collect data were taken from the respective authorities. Participants were approached following ethical considerations. They were provided with a consent form and were informed about the study's objectives and potential risks and benefits. Clarifications were provided when participants had questions, and any missing or incomplete responses were handled using appropriate statistical techniques. Participants had the freedom to participate or withdraw at any time, ensuring their rights were respected. Anonymity and confidentiality of participants were maintained, and precautions were taken to minimize harm. For the present study, around 245 participants were contacted, out of which 200 participants volunteered for the participation with interest, so the response rate was 81.63%. SPSS version 22 was used to analyze the data.

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RESULTS

The details of sociodemographic characteristics are given in table 1.

Table 1
Descriptive statistics of demographic variables (N=200)

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Variables	Frequency (%)	Mean (SD)
Age		21.4(1.94)
Gender		
Male	93(46.5)	
Female	107 (53.5)	
Education (in years)		14.60 (1.31)
Relationship Status		
Single	160(80.0)	
Married	38(9.0)	
Engaged	22(11.0)	
Employment Status		
Employed	21(10.5)	
Unemployed	179(89.5)	
Family System		
Nuclear	108(54.0)	
Joint	92(46.0)	
Residence		
Rural	61(30.5)	
Urban	139(69.5)	
Physical Disease		
Yes	12(6.0)	
No	188(94.0)	
Any Psychological Disease		
Yes	16(8.0)	
No	184(92.0)	

NOTE: N=Number of Participants, SD= Standard Deviation

To determine the psychometric properties of the scales used in the study, reliability analyses were conducted (see Table 2). To assess the degree to which phubbing, emotional intelligence, and psychological suffering are related, Pearson product-moment correlation coefficient was used (see Table 3). Multiple regression analyses were conducted to examine emotional intelligence and phubbing as predictors of psychological distress in youth (see Table 4 and 5).

Table 2, represent the descriptive statistics and Cronbach's alpha reliabilities of the phubbing scale, Wong and Law emotional intelligence Scale and Depression Anxiety and Stress Scale (DASS). These Cronbach's alpha values suggested that all scales used in the research have enough reliability to carry out further analyses.

Table 2
Psychometric Properties of Scales and Subscales

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Psychometric Properties of Scales and Subscales

Scales	<i>k</i>	<i>M</i>	<i>SD</i>	Range	Cronbach's α
Phubbing Scale	10	26.1	6.44	11 - 42	.72
Communication Disturbance	5	11.0	3.26	5 - 21	.58
Phone Obsession	5	15.1	4.23	5 - 24	.64
Wong & Law Emotional Intelligence Scale	16	75.2	18	23 - 111	.90
Self-Emotion Appraisal	4	18.7	5.72	5 - 28	.84
Regulation of Emotion	4	19.5	5.47	5 - 28	.79
Use of Emotion	4	18.7	6.16	4 - 28	.88
Other's Emotion Appraisal	4	18.2	5.70	4 - 28	.83
Depression Anxiety Stress Scale	21	45.8	10.3	51 - 150	.85
Depression	7	15.2	3.67	8 - 26	.58
Anxiety	7	15.7	4.20	7 - 28	.72
Stress	7	14.9	4.34	7 - 28	.74

NOTE: *k*=No. of Items, *M*=Arithmetic Mean, *SD*= Standard Deviation, α =Alpha

Results of table 3 showed a significant positive relationship amongst phubbing and psychological distress, similarly the significant positive relationship was also reported in communication disturbance and phone obsession of phubbing behavior with overall psychological distress and its subscales depression, stress and anxiety. Moreover, the findings also showed a significant positive relationship of regulation of emotion of emotional intelligence with overall psychological distress and its subscales; depression and anxiety. Additionally, the results also indicated a significant negative relationship between communication disturbance of phubbing behavior and use of emotion of emotional intelligence. The results also indicated a considerable positive relationship of phone obsession with emotional intelligence and its subscales; self-emotion appraisal and regulation of emotion. These findings suggest that increased levels of phubbing behavior are linked with increased levels of psychological distress, while emotional intelligence may have a protective effect against psychological distress.

The relationship between study Variables

Variables	2	3	4	5	6	7	8	9	10	11	12
1. Phubbing	.81**	.89**	.05	.09	.09	-.02	-.02	.40**	.26**	.42**	.33**
2. Communication Disturbance		.47**	-.14	-.02	-.11	-.91**	.09	.30**	.20**	.35**	.23**
3. Phone Obsession			.18*	.16*	.23**	.12	.04	.37**	.24**	.36**	.33**
4. Emotional Intelligence					.80**	.79**	.74**	.07	.13	.04	-.03
5. Self-Emotion Appraisal					.65**	.41**	.42**	-.002	.05	.03	-.09
6. Regulation of Emotion						.52**	.36**	.17*	.18**	.16*	.07
7. Use of Emotion							.51**	-.004	.07	-.06	-.01
8. Others' Emotions Appraisal								.029	.12	-.01	-.03
9. Psychological Distress									.80**	.89**	.85**
10. Depression										.57**	.49**
11. Anxiety											.67**
12. Stress											

NOTE: *p < .05. **p < .01. ***p < .001

Table 4 indicated that the overall variance indicated by this regression model was 16% with $F(2,197) = 18.324^{***}$, $p < .001$ where phubbing was a significant predictor of psychological distress ($\beta = .39$, $p < .001$) in youth. However emotional intelligence did not predict it.

Table 4

Multiple Linear Regression Analysis of Phubbing and Emotional Intelligence as predictors of Psychological Distress (N=200)

Variables	B	B	SEB	95% CI	
				LL	UL
Constant	54.25	-	7.6	39.23	69.27
Phubbing	1.2***	.392***	.21	.82	1.6
Emotional Intelligence	.04	.039	.07	-.10	.19
R^2			.16		
$F(2, 197)$			18.32***		

*** $p < .001$

Further, results of table 5 showed that the overall variance indicated by this regression model was 20% with $F(6,193) = 8.23^{***}$, $p < .001$. Table 5 predicted that communication disturbance ($\beta = .21$, $p < .01$) and phone obsession ($\beta = .24$, $p < .01$) of phubbing behavior significantly predicted psychological distress in youth. Whereas self-emotion appraisal ($\beta = -.22$, $p < .01$) negatively and regulation of emotion ($\beta = .30$, $p < .01$) positively predicted psychological distress in youth. However, use of emotion ($\beta = -.09$, $p < .001$) and others' emotions appraisal ($\beta = .07$, $p < .001$) of emotional intelligence were no significant predictors of psychological distress.

Table 5

Multiple Linear Regression Analysis of Phubbing and Emotional Intelligence as predictors of Psychological Distress (N=200)

Variables	B	B	SEB	95% CI	
				LL	UL
Constant	52.3		7.73	37.10	67.6
Communication Disturbance	1.30**	.21**	.47	.36	2.24
Phone Obsession	1.14**	.24**	.37	.41	1.86
Self-Emotion Appraisal	-.78*	-.22*	.31	-1.4	-.17
Regulations of Emotion	1.10**	.30**	.34	.42	1.78
Use of Emotion	-.31	-.09	.27	-.86	.22
Others' Emotions Appraisal	.28	.07	.28	-.29	.80
R^2			.20		
F (6, 193)			8.23***		

** $p < .01$. *** $p < .001$.

Furthermore, gender differences among study variables were also determined. The results depicted a non-significant difference in gender for phubbing behaviour, emotional intelligence, and psychological distress in youth.

DISCUSSION

Several studies have investigated the connection between these variables and support the findings of this study. The present study found a positive relationship between phubbing and psychological distress in youth, which is consistent with previous research by Tekkam et al.¹⁸ who revealed a positive relationship between phubbing and psychological distress, emphasizing the detrimental influence of phubbing on psychological health. Similarly, study by Ivanova et al.⁴ reported a correlation between phubbing and mental health problems such as depression, anxiety, and stress. Results of this study showed that higher level of depression was associated with higher level of habit of phone use and higher level of phubbing behavior, with the mediator effect of phubbing between phone addiction and depression.

In the present study, communication disturbance and phone obsession subscales of phubbing were significantly related to psychological distress, including its subscales of depression, anxiety, and stress. Hawi and Samaha¹⁹ supported these findings, highlighting the negative consequences of excessive phone use and its impact on mental health. Additionally, research found that phubbing behavior mediated the relationship between phone addiction and psychological distress. Further, Wang et al.²⁰ found a connection between partner phubbing, depression, and relationship satisfaction.

The study also found a significant positive relationship between emotional intelligence, specifically the regulation of emotions and psychological distress in youth. Studies by Wang et al.²⁰ and Usubini

et al.⁷ supported these findings, indicating that poor emotional regulation and emotion dysregulation are associated with psychological distress and mental health issues.

Furthermore, this study found a negative relationship between communication disturbance of phubbing and the use of emotion of emotional intelligence in youth. Guazzini et al.² demonstrated that phubbing is negatively correlated with emotional intelligence, indicating difficulties in emotion regulation, and decoding facial expressions among those who engage in phubbing behavior. Further, the phone obsession was positively related to emotional intelligence, particularly self-emotion appraisal and regulation of emotion in young adults. Previous studies have also highlighted the impact of phone obsession on emotional intelligence and its connection to internet and smartphone use.⁹

The present study highlighted the phubbing behavior as a predictor of psychological distress in youth, as supported by Parmaksız²¹ and Shahbaz et al.²² These studies found a significant positive relationship between phubbing and psychological distress, indicating that phubbing behavior contributes to depression, anxiety, and stress. However, emotional intelligence did not predict psychological distress, which is reliable with studies by Petrides et al.¹⁰, Jordan et al.¹¹, Matthews et al.²³, and Davis and Humphrey.²⁴ These studies revealed a modest or non-significant correlation between emotional intelligence and mental health outcomes, suggesting that emotional intelligence may not reliably predict psychological distress.

Regarding gender differences, the study found no significant variations in phubbing behavior, emotional intelligence, or psychological distress. This aligns with former research by Chen et al.²⁵ and Whang et al.²⁶ which demonstrated no important gender differences in phubbing behavior, smartphone addiction, emotional intelligence, or overall psychological distress.

Limitations

The study only used a correlation design, which limited the ability to make causal implications about the relationships between the variables. The sample used in the study was limited to students from specific universities in Lahore, which limits the generalizability of the findings. To investigate the underlying mechanisms of these correlations, more study is required and the potential effectiveness of interventions targeting phubbing behavior and emotional intelligence in youth.

CONCLUSION

This research provides evidence for the significant positive association between phubbing behavior and psychological distress among youth. Our findings highlight the likely negative impact of excessive mobile phone usage on mental health and suggest that emotional intelligence can buffer against the negative effects of phubbing behavior on mental health, as higher levels of emotional regulation correlated with reduced degree of psychological distress. The results are consistent with prior research and overall, these results reaffirm the importance of tackling mobile phone use and promoting emotional intelligence skills among young adults to lessen the negative impact of phubbing behavior on mental health. The study emphasizes the need for interventions and awareness campaigns to address this issue.

Implications: This study provides important insights into the relationships among phubbing, emotional intelligence, and psychological distress in young adults. The findings of this study can help individuals to comprehend the how extreme mobile usage affects their emotional intelligence and psychological distress levels. The findings suggest that interventions aimed at reducing phubbing and improving emotional intelligence may have potential in mitigating psychological distress in this population. The study highlights the importance of raising awareness about the negative impact of excessive mobile phone use on mental health and promoting healthy technology use among young adults.

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Data Availability Statement: The datasets of this study are not publicly accessible for ethical reasons but can be obtained from corresponding author [S.A.] upon reasonable request.

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AUTHOR(S) CONTRIBUTION

Sr. No	Authors	Affiliation	Contribution
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