

# An international online survey on extent of phubbing and its correlates

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## Abstract

### Introduction:

Phubbing can be described as an individual looking at his or her mobile phone during a conversation with other individuals, dealing with the mobile phone and escaping from interpersonal communication. Being a new concept, research on its correlates is limited. The aims of the study were to find the extent of phubbing and its correlates.

### Material & Methods:

It was an online survey through Google forms with cross-sectional design and convenience sampling. Those above 18 years who were willing to participate and provided consent were included. The questionnaire included socio-demographic and clinical details, Patient health questionnaire (PHQ-4), and couples' satisfaction index (CSI) scale. Descriptive statistics, group comparisons, and Pearson's correlation were done.

### Results:

904 participants (463 from India, 224 from Nepal, 132 from Indonesia, others 85) were included in the study.

2.3% had a higher likelihood of phubbing. The total phubbing score showed a statistically positive significant correlation with the duration of internet use ( $p < 0.001$ ), social media use ( $p < 0.001$ ), and total PHQ score ( $p < 0.001$ ) and statistically negative significant correlation with duration of the relationship ( $p = 0.004$ ), and total CSI score ( $p < 0.001$ ). Phubbing was significantly higher among males ( $p = 0.044$ ), those educated less than graduate level ( $p = 0.012$ ), in a relationship ( $p = 0.009$ ), using psychoactive substances frequently ( $p = 0.001$ ), dissatisfied with the relationship ( $p = 0.024$ ), and among those with anxiety ( $p < 0.001$ ) and depressive symptoms ( $p < 0.001$ ). There was no difference in phubbing in between the countries ( $p$  value = 0.193).

### Conclusion:

Prevention and management of phubbing should target those at risk. Focusing on reducing phubbing will improve mental health, couples' relationship, and reduce excessive internet and social media use.

### Key words:

Phubbing, mobile use, couples' satisfaction, anxiety, depression

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## INTRODUCTION

Mobile phones are omnipresent in modern life. Globally, 73 % of the population aged ten and over owned a mobile phone in 2023. <sup>1</sup> They have multiple benefits, as are portable means of communication, information, and entertainment. <sup>2</sup> However, they act like double-edged swords. Exces-

sive use of smartphones has negative physical and mental health consequences. <sup>3</sup> It also hampers social communication and relationship satisfaction. <sup>4</sup> This phenomenon is so significant that such behavior has given rise to a new concept, such as phubbing.

Phubbing has been derived from the words "telephone" and "snubbing" and the term has not been used for more than two decades. <sup>5</sup> According to Karadag et al. (2015) "Phubbing can be described as an individual looking at his or her mobile phone during a conversation with other individuals, dealing with the mobile phone and escaping from interpersonal communication" (p.60). <sup>6</sup> Phubbing can occur anywhere and anytime. <sup>7</sup> Some common signs of

being a phubber are carrying on two conversations at once, on the phone and in person, immediately bringing the phone out at dinner or other social settings, and being unable to get through a meal without checking the phone.<sup>8</sup> Phubbing is a disturbance at the intersection of many addictions, such as mobile or internet addiction.<sup>6</sup> Further, it can give rise to physical health problems as it is associated with a sedentary lifestyle and obesity.<sup>9</sup> There can be a plethora of mental health consequences like mental distress, depression, anxiety symptoms, and low self-esteem.<sup>6,10-13</sup> It is also associated with social dysfunctions such as relationship issues and poor communication quality as a consequence of lack of empathy, trust, and jealousy.<sup>4,10,14,15</sup> Overall, it impairs quality of life. Moreover, phubbing behavior is so powerful that if one is a phubber, he or she expects to be phubbed.<sup>16</sup> Therefore, phubbing may threaten our social and cultural aspects of communication. Hence, it should be an important outcome to be targeted for interventions.

Phubbing has multiple dynamics and definitions.<sup>5,6</sup> Further, the existing literature suffers from various limitations. For example, there is the use of different instruments and techniques in quantitative and qualitative studies related to phubbing, making the results difficult to compare, and the majority of studies are descriptive.<sup>5</sup> Studies have mainly studied the association of phubbing with communication, technological, psychological, social, and cultural constructs. Moreover, the bulk of literature on its correlates are focused on relationship satisfaction, FoMO (Fear of Missing Out), loneliness, attention, neuroticism, jealousy and boredom personality, well-being, depression, social interaction, dependence, assertiveness, passivity, exhaustion, narcissism, and kindness.<sup>5</sup> Therefore, being a new concept, research on the extent of phubbing and its correlates is limited. Hence, to address these lacunae and add to the growing literature, it is essential to study phubbing systematically. Considering this, we aimed to examine the extent of phubbing and to identify factors like sociodemographic, clinical, and psychological distress and couples' satisfaction associated with phubbing.

## MATERIALS AND METHODS

### Study Design and Procedure

It was an online survey with a cross-sectional design and convenience sampling. Through Google Forms, the link was shared across the investigators' social media. Those above 18 years who were willing to participate and provided written informed consent(online) were included. The survey was conducted between April 2020 and September

2020. The components of the online survey had sociodemographic details, details of the current relationship, mobile phone use, internet use, and substance use in the last 30 days, along with scales to assess phubbing, couple satisfaction, depression, and anxiety symptoms. To avoid multiple responses by the participants, a unique identifier was assigned to their email addresses. The first page of the survey included information about the study, the participant's rights, and the investigators' contact details. It was mentioned that the completion of the survey implied consent to participate in the same. Further, for the Indonesian population, due to the language barrier, the questionnaires were translated from English to Indonesian language using the WHO-translation-back translation method.

### Measures

We used a semi-structured questionnaire to assess sociodemographic characteristics and clinical details, including use of psychoactive substances. Information about participants' mobile and internet use, such as, the most used application, cost of mobile phone, duration of internet and social media, and mobile use, were also noted. The phubbing scale developed by Karadag et al.(2015) was used to assess the phubbing behavior using ten items.<sup>6</sup> It is graded from 1 (never) to 5 (always) on a 5-point Likert scale and generates a composite score ranging from 10 to 50; the higher the composite score, the more severe the phubbing behavior. Scores exceeding 45 indicate a higher likelihood of phubbing.<sup>6</sup> We used a Patient health questionnaire (PHQ-4), a brief screening scale with four items, which consisted of PHQ-2 screening tool for depression symptoms and generalized anxiety disorders (GAD) screener (GAD-2) for anxiety symptoms.<sup>17</sup> It has a 4-point Likert scale from 0 = "not at all" to 3 = "nearly every day. The total PHQ-4 score ranges from 0 to 12, with higher scores denoting greater distress. Total score is determined by adding together the scores of each of the four items, and scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12). Another way of interpretation is if GAD-2  $\geq$  3 and PHQ-2  $\geq$  3, the subjects were assigned positive for anxiety and depression, respectively. Couples' Satisfaction Index (CSI) scale with four items to measure relationship satisfaction in couples.<sup>18</sup> Each item is graded from 0 (not at all) to 5 (absolutely). The higher the score, the higher the satisfaction of the couple. CSI-4 scores falling below 13.5 suggest notable relationship dissatisfaction.<sup>19</sup>

### Statistical Analyses

The data collected from the Google form was extracted in Microsoft Excel, where it was cleaned, coded, and exported to SPSS version 16 for analysis. Categorical variables were

described in frequency and percentages, while the continuous variables were presented in mean and standard deviation and the reporting of minimum and maximum values. The correlation of the phubbing score was assessed with age, duration of the relationship, duration of mobile use, duration of social media use, duration of internet use, total PHQ-4 score, and total CSI score using Pearson correlation. Similarly, the phubbing score was compared across categories of characteristics using a t-test (for upto two categories) and an ANOVA test (for three or more categories). All the analyses have been done at a 5% significance level, considering a p-value of <0.05 as statistically significant. The reliability of the scales used in this study (Phubbing scale, PHQ-4 scale, and CSI scale) was assessed using Cronbach's alpha. Ethical clearance was obtained from the institutional ethics committee (IEC/C-P/06/2020).

## RESULTS

A total of 913 participants participated in the online study. Nine participants were excluded due to incomplete responses in any of the items in the PHQ-9, CSI, and Phubbing scale. Therefore, data from 904 participants were included in the study.

Table 1 includes the socio-demographic profile of the participants. The respondents ranged from 18 years to 73 years of age, with a mean age of 30.9 ± 8.3 years. More than half of the respondents were females (54.3%), educated up to post-graduate and higher (53%). Most of them belonged to the nuclear family (70.1%) and were residing in urban areas (85.2%). More than half of the respondents were from India (51.2%), followed by a quarter from Nepal (24.8%) and Indonesia (24.0%). One-third of the respondents belonged to the medical field (34.2%), followed by students (23.0%). Among the respondents, 29.8% were single, 14.8% were in a relationship, and more than half (54.1%) were married. The mean duration of the relationship was 7.1 years, ranging from 2 months to 50 years. Two-thirds of the married or divorced/separated respondents had children. (Table 1)

**Table 1: Sociodemographic and clinical profiles of the participants (n = 904)**

Characteristics	Frequency	Percent	
Sex	Female	491	54.3
	Male	413	45.7
Age	Mean ± SD (min, max)	30.9 ± 8.3 (18, 73)	
Education	Below graduate	91	10.1
	Graduate	334	36.9

Characteristics	Frequency	Percent	
Occupation	Post-graduate and higher	479	53.0
	Medicine	309	34.2
	Engineering/IT	37	4.1
	Government/Service	95	10.5
	Student	208	23.0
	Others	255	28.2
Country	India	463	51.2
	Indonesia	132	14.6
	Nepal	224	24.8
	Others	85	9.4
Residence	Rural	134	14.8
	Urban	770	85.2
Family type	Nuclear	634	70.1
	Joint	256	28.3
	Staying alone /Single /Hostel	14	1.5
Relationship status	Single	269	29.8
	In a relationship	134	14.8
	Married	489	54.1
	Divorced /Widowed	9	1.0
	Others	3	0.3
Duration of relationship (years)	Mean ± SD (min, max)	7.1 ± 6.7 (0.2, 50)	
Number of children (n=501)	None	166	33.1
	Single child	157	31.1
	Two or more children	178	35.5
Use of psychoactive substance	Never	718	79.4
	Sometimes	156	17.3
	Most of the times	30	3.3
	Total	904	100.0

The characteristics of the respondents' internet and mobile use profiles have been presented in Table 2. The most commonly used mobile application was WhatsApp (31%), followed by YouTube (18.3%), Facebook (16.8%) and Instagram (12.3%) respectively. The mean (sd) duration of internet use was 6.1 (4.1) hours, and social media use was 3.6 (3) hours. The majority used mobile phones costing less than Rs. 15,000(50.9%), followed by Rs. 25,000 or more (43%), and the mean duration of mobile use was 11.4 (5.2) years.

**Table 2: Characteristics of participants' mobile and internet use**

Characteristics	Frequency	Percent	
*Most used application	WhatsApp	280	31.0
	Youtube	165	18.3
	Facebook	152	16.8
	Instagram	111	12.3
	Gaming	46	5.1
	Media streaming	39	4.3

Characteristics		Frequency	Percent
	Others (email, google, twitter, etc)	111	12.0
Duration of internet use per day(hours)	Mean ± SD (min, max)	6.1 ± 4.1 (0.3, 24)	
Duration of social media use(hours)	Mean ± SD (min, max)	3.6 ± 3 (0, 24)	
Cost of mobile phone (in INR)	Less than 15000	460	50.9
	15000 to less than 25000	55	6.1
	25000 or more	389	43.0
Duration of mobile use (in years)	Mean ± SD (min, max)	11.4 ± 5.2 (1, 29)	

\*Multiple responses

**Table 3: Couples' relationship satisfaction, anxiety and depression symptoms, and phubbing scores (n = 904)**

Characteristics		Frequency	Percent
Dissatisfied relationship (n= 635)	No (CSI ≥13.5)	432	68.0
	Yes (CSI <13.5)	203	32.0
CSI score(n= 635)	Mean ± SD (min, max)	14.3 ± 4.9 (0, 21)	
Anxiety symptoms	No	746	82.5
	Yes	158	17.5
Depression symptoms	No	719	79.5
	Yes	185	20.5
Total PHQ4 score	Mean ± SD (min, max)	2.8 ± 2.8 (0, 12)	
Phubbing	Lower likelihood (score <45)	883	97.7
	Higher likelihood (score ≥45)	21	2.3
Phubbing score	Mean ± SD (min, max)	27.94± 7.69 (10,50)	

The couples' relationship satisfaction, anxiety and depression symptoms, and phubbing scores have been reported in Table 3. Out of 635 respondents, more than two-thirds (68%) were satisfied with their relationship. The mean CSI score was 14.3(4.9). The mean phubbing score was 27.94 (7.69), indicating a lesser likelihood of phubbing overall. Only 2.3% had a higher likelihood of phubbing. The total PHQ-4 score was 2.8(2.8), indicating normal value, but 17.5% had anxiety symptoms, and one-fifth had depressive symptoms (20.5%). Similarly, there was a higher likelihood of phubbing among 21 respondents. Most respondents reported always keeping phones within reach (39.3%) and checking the messages on their phones when they woke up in the morning (38.4%). Over one-fourth (28.2%) felt incomplete without a mobile phone (Table 4).

**Table 4: Scores for the items in phubbing scale by the participants (n=904)**

S.N.	Items	Scores n(%)				
		1 Never	2 Rarely	3 Sometimes	4 Often	5 Always
1	My eyes start wandering on my phone when I am together with others	151 (16.7%)	304 (33.6%)	282 (31.2%)	102 (11.3%)	65 (7.2%)
2	I am always busy with my mobile phone when I am with my friends	279 (30.9%)	356 (39.4%)	182 (20.1%)	56 (6.2%)	31 (3.4%)
3	People complain about me dealing with my mobile phone	340 (37.6%)	283 (31.3%)	141 (15.6%)	99 (11%)	41 (4.5%)
4	I'm busy with my mobile phone when I'm with friends	328 (36.3%)	344 (38.1%)	140 (15.5%)	69 (7.6%)	23 (2.5%)
5	I don't think that I annoy my partner when I'm busy with my mobile phone	241 (26.7%)	240 (26.5%)	217 (24%)	126 (13.9%)	80 (8.8%)
6	My phone is always within my reach	40 (4.4%)	90 (10%)	169 (18.7%)	250 (27.7%)	355 (39.3%)
7	When I wake up in the morning, I first check the messages on my phone	75 (8.3%)	117 (12.9%)	140 (15.5%)	225 (24.9%)	347 (38.4%)
8	I feel incomplete without my mobile phone	82 (9.1%)	130 (14.4%)	225 (24.9%)	255 (28.2%)	212 (23.5%)
9	My mobile phone use increases day by day	112 (12.4%)	232 (25.7%)	286 (31.6%)	179 (19.8%)	95 (10.5%)
10	The time allocated to social, personal or professional activities decreases because of my mobile phone	180 (19.9%)	264 (29.2%)	235 (26%)	154 (17%)	71 (7.9%)

The total phubbing score showed a statistically significant positive correlation with the duration of internet use (p<0.001), social media use (p<0.001), and total PHQ score (p<0.001). However, it showed a statistically significant negative correlation with the duration of the relationship (p=0.004), and total CSI score (p<0.001) (Table 5).

**Table 5: Pearson's correlation of total phubbing score with different continuous variables**

Variables		Age	Duration of relationship (n = 635)	Duration of mobile use	Duration of internet use	Duration of social media use	Total PHQ score	Total CSI score (n = 635)
Total phubbing score	r	0.016	-.116**	-0.022	0.255***	0.330***	0.263***	-0.189***
	p-value	0.631	0.004	0.512	0.000	0.000	0.000	0.000

Moreover, phubbing was significantly higher among males (p=0.044), those educated less than graduate level (p=0.012), in a relationship (p=0.009), using psychoactive substances sometimes or most of the time (p=0.001), dissatisfied with the relationship (p=0.024), and among those with anxiety(p<0.001) and depressive symptoms (p<0.001) (Table 6). There was no difference in phubbing in between the countries.

**Table 6: Comparison of phubbing across different characteristics categories**

Characteristics		Frequency (n)	Phubbing score (mean ± sd)	p-value
Sex	Female	491	27.47 ± 7.61	0.044*
	Male	413	28.5 ± 7.75	
Education	Below graduate	91	30.46 ± 10.12	0.012*
	Graduate and higher	813	27.66 ± 7.32	
Occupation	Medicine	309	27.38 ± 7.4	0.362a
	Engineering/IT	37	29.16 ± 6.34	
	Government/Service	95	28.18 ± 5.84	
	Student	208	28.61 ± 8.42	
	Others	255	27.82 ± 8.15	
Country	India	463	28.37 ± 8.57	0.193 a
	Indonesia	132	27.27 ± 5.91	
	Nepal	224	27.25 ± 7.24	
	Others	85	28.48 ± 5.84	
Residence	Rural	134	27.81 ± 8.1	0.825
	Urban	770	27.96 ± 7.62	
Family type	Nuclear	634	27.93 ± 7.52	0.745 a
	Joint	256	27.89 ± 8.19	
	Staying alone/single/hostel	14	29.5 ± 5.4	
Relationship	Single	269	27.97 ± 8.2	0.009 a**
	In a relationship	134	29.73 ± 7.52	
	Married/divorced/others	501	27.45 ± 7.38	
Use of psychoactive substance	Never	718	27.49 ± 7.59	0.001**
	Sometimes/most of the times	186	29.67 ± 7.84	
Cost of mobile phone (in INR)	Less than 15000	460	27.79 ± 8.16	0.745 a
	15000 to less than 25000	55	27.65 ± 5.74	
	25000 or more	389	28.16 ± 7.35	
Dissatisfaction in relationship	No (CSI ≥13.5)	432	27.45 ± 7.1	0.024*
	Yes (CSI <13.5)	203	28.95 ± 8.1	
Anxiety symptoms	No	746	27.17 ± 7.33	<0.001***
	Yes	158	31.6 ± 8.27	
Depression symptoms	No	719	27.46 ± 7.3	0.001**
	Yes	185	29.8 ± 8.8	
Total		904	27.94 ± 7.69	

<sup>a</sup>ANOVA test used; \*p-value <0.05; \*\*p-value <0.01, \*\*\* p-value <0.001

The internal consistency (assessed using Cronbach’s alpha) of the Phubbing scale, PHQ-4 scale, and CSI scale was reported to be 0.853, 0.828, and 0.892, respectively, showing the scales to be reliable. (Table 7)

**Table 7: Reliability of the scales used using cronbach's alpha**

Scales	Cronbach's alpha
Phubbing scale	0.853
PHQ-4 scale	0.828
CSI scale	0.892

## DISCUSSION

The present study aimed to find the extent of phubbing and its correlates. Even though the mean phubbing score was low, 2.3% had a higher likelihood of phubbing. Other key findings were that phubbing was significantly higher among males, and among those who were educated less than graduate level, in a relationship, using psychoactive substances sometimes or most of the time, dissatisfied with the relationship, and having anxiety and depressive symptoms. The total phubbing score showed a statistically positive significant correlation with the duration of internet use, social media use, and total PHQ score. However, it showed a statistically negative significant correlation between the duration of the relationship and the total CSI score.

The mean duration of internet use was one-third of a day (6.1 hours), and social media use was about one-sixth of a day (3.6 hours), and both are substantially high. The prevalence of higher likelihood of phubbing among 2.3% of the respondents in our study could not be compared to other studies which reported prevalences of phubbing as 49.3% in India, 12.7% in Turkey and 50% in males and 54% in females in Croatia.<sup>10,20,21</sup> The differences in the interpretation of the phubbing scales, age group of the participants, and methodologies could have resulted in the disparity. However, most respondents reported consistently keeping phones within reach, checking the messages on their phones when they woke up in the morning, and over one-fourth felt incomplete without a mobile phone. Such preoccupation with mobile use behaviors shows great concern. We also found that there was no difference in phubbing between the countries.

Phubbing was significantly higher in males than in females in our study, as was elsewhere.<sup>10,20</sup> However, some literature shows that females phub more than males.<sup>21, 22, 23</sup> Females are found to use more mobile phones for social communication, as compared to males, who are more addicted to the internet and use mobiles for pragmatic functions (e.g., looking for information, entertainment).<sup>21,22,</sup> <sup>24</sup> This finding is reciprocated in our study as the most common mobile application used was What's App, followed by YouTube. Further, various other factors contribute to the phubbing habits of males and females differently, such as self-control in males and internet addiction, the amount of time spent online during the weekends, and nonspecific psychological distress in females.<sup>21</sup> Therefore, there is a need to study various factors systematically to understand the gender differences in phubbing.

It is well known that phubbing leads to academic procrastination and cheating behaviors and impairs academic performance.<sup>25-27</sup> Hence, phubbing was significantly higher in those educated less than graduate level as compared to those educated upto graduate level and higher. Similarly, phubbing was higher among those using psychoactive substances sometimes or most of the time as compared to those who used at less frequency. The results are on similar lines with other studies, which showed a relationship between smoking tobacco and alcohol consumption with internet or mobile phone addiction and phubbing among adolescents and youths.<sup>20,23,28</sup> There can be multiple reasons for such association between behavioral and substance addiction, such as for stimulation to regulate negative affect, personality traits or due to addiction replacement, which refers to people who recover from one addiction are at increased risk of evolving to another form of addiction.<sup>29,30</sup> However, a Swiss study found negative association of problematic smartphone use with both the frequent use of cannabis and daily smoking.<sup>31</sup> The inclusion of both genders and participants from different countries in our study may explain the inconsistency in the findings.

Even though less than one-fifth had anxiety symptoms and one-fifth had depressive symptoms, phubbing was significantly higher in those with anxiety and depressive symptoms in our study. Also, total phubbing score showed a statistically positive significant correlation with the total PHQ score. There are similar findings in other studies for depression and phubbing<sup>10, 11,13,6</sup> and anxiety and phubbing.<sup>6,12,13</sup> Phubbing worsens quality of meaningful interaction, perceived closeness, connection,<sup>14</sup> increases a sense of social withdrawal and loneliness,<sup>6,32</sup> worsens life satisfaction, relationship satisfaction among couples<sup>11,13,33,34</sup> and eventually in turn increases depressive and anxiety symptoms. Furthermore, social withdrawal and sense of loneliness, which are hallmark features of depression, are predictors of mobile phone and social media addiction.<sup>35, 36</sup> Also, those with high social anxiety prefer online communication to face-to-face interaction as they fear negative evaluation.<sup>37-38</sup> Hence, those with anxiety are likely to be involved in phubbing more.

Therefore, there can be a bi-directional relationship between phubbing and depression. As in the literature, in our study, the explained mechanisms of avoiding communication could be why phubbing was significantly higher in those dissatisfied with the relationship and showed a statistically negative significant correlation with total CSI score, though only one-third of the couples were dissatisfied with the relationship. Phubbing showed a statistically negative

significant correlation with the duration of the relationship in our study. The result was opposite to the findings of a study done in China<sup>13</sup> and US<sup>11</sup>, which found that partner phubbing increased with increased relationship duration. It can be assumed that having respondents from different cultural backgrounds and multiple countries in the study could have differed the results. Similarly, phubbing positively predicts the extent to which people are phubbed.<sup>16</sup> So, when people phub and notice being phubbed by their partners frequently around them over time in their relationship, they may conclude this behavior is socially acceptable.<sup>39</sup> Our study imparts a need to focus on reducing phubbing to improve the mental health of couples' relationships and reduce excessive internet and social media use.

Phubbers pay more attention to the virtual world than conversation with people around.<sup>34, 40</sup> and have poor relationship with others and psychological health issues, as found in our study and the literature.<sup>10,11,13</sup> Hence, it can be speculated that they use social media and the internet for a long duration for communication, recreation, and other purposes. Therefore, in our study, the total phubbing score showed a statistically positive significant correlation with the duration of internet use and social media use. Moreover, excessive mobile phone use and internet use themselves are associated with interpersonal problems such as lack of closeness trust, romantic relationship issues and, poor social interaction, less physical activity.<sup>14, 41-46</sup> Therefore, through various ways, mobile phone habits or addiction and internet addiction are the strongest predictors of phubbing.<sup>6, 10,16,20,21</sup>

There are some limitations to our study. In the non-randomized sampling procedure, the majority of participants were from urban areas and those affording expensive mobiles, English-speaking participants except those from Indonesia, and the study frame during the COVID-19 pandemic limited the generalizability of the findings. We cannot determine the direction of causality because of the cross-sectional design of the study. Also, online assessment methods are another limitation. The scales used in the current study were not validated for online assessment as well as in the context of the various countries. We did not look into various factors that affect phubbing, such as personality, self-esteem, health-related behaviors, medical comorbidities, behavioral addiction, complexities of relationships, for example, passion, normalization, marital distress, and attachment styles. Psychoactive substance use was evaluated using self-report only. However, this is the first study conducted in an international front to under-

stand the extent and correlates of phubbing behavior. We used reliable tools to measure the various variables. Though an online survey, the steps was taken to avoid multiple responses.

## CONCLUSION

Our study showed that higher likelihood of phubbing was present among 2.3% of the participants. Phubbing was significantly higher among males, and among those who were educated less than graduate level, in a relationship, using psychoactive substances sometimes or most of the time, dissatisfied with the relationship, and having anxiety and depressive symptoms. The total phubbing score statistically positively correlated with the duration of internet use, social media use, and total PHQ score. However, it showed a statistically negative significant correlation between the duration of the relationship and the total CSI score. Therefore, prevention and management of phubbing should target those at risk. Focusing on reducing phubbing will improve mental health, couples' relationship, and reduce excessive internet and social media use. Future studies should attempt to use a longitudinal design to understand the determinants and consequences of phubbing across different sociocultural contexts.

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