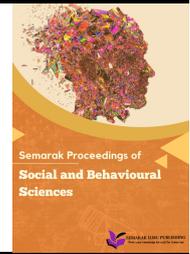




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When Love Meets the Screen: Demographic Predictors of Phubbing among Married People

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ABSTRACT

This study examines the frequency, patterns, and demographic associations of phubbing among married individuals in Peninsular Malaysia. A cross-sectional survey (N = 407) employing multistage sampling across four regions utilised a bilingual (Malay/English) questionnaire evaluated on a 5-point Likert scale. Exploratory factor analysis confirmed a multidimensional construct of partner-directed phone usage, yielding five trustworthy dimensions: Phone Prioritisation, Phone Dependency, Relationship Disruption, Social Interference, and Compulsive Phone Usage. The sampling adequacy was exceptional (KMO = 0.926) with a substantial Bartlett's test, confirming suitability for factor analysis. Descriptively, overtly dismissive behaviours were typically minimal; yet, numerous respondents reported maintaining phones in sight or within reach, indicating a subtle yet continuous attentional draw towards electronics. The inferential tests revealed selective, factor-specific demographic influences. One-way ANOVA revealed that education substantially influenced Relationship Disruption (F3) ($F = 3.307, p = .006$) and Social Interference (F4) ($F = 2.333, p = .042$), although the effects on Phone Prioritisation, Phone Dependency, and Compulsive Use were not significant. Income groups exhibited significant differences on F3 ($F = 3.818, p = .002$) and F4 ($F = 3.021, p = .011$), with higher-income respondents attaining elevated scores; no income disparities were observed in other categories. Independent-samples t-tests indicated gender disparities, with males exhibiting higher levels of Phone Prioritisation ($p < .001$) and Social Interference ($p < .05$), while age and ethnicity showed no correlation with any factor. Research indicates that socioeconomic status is more significantly associated with the relational and social-contextual aspects of phubbing than with overall dependency or compulsion. Practical consequences encompass couple-oriented "phone-free" rituals and the establishment of boundaries around alerts and job obligations. Future study ought to utilise longitudinal or experimental methodologies to examine mechanisms and assess targeted, context-specific solutions.

Keywords: Phubbing; relationship disruption; social interference; phone prioritization; phone dependency; compulsive use

1. Introduction

A communication is a way to interact with other people around us and people from other places. In the year 2020, the method of communication is also improved to a better way. Now days, smartphone is a stuff that is very important to most of the individual. This gadget is so seductive, so addictive, so enticing and so entertaining. Prior studies also show that new mobile-based innovations, such as augmented reality, have transformed how individuals engage with technology and daily

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activities [6]. Smartphone is a tool that becomes complementary and indispensable part in our everyday live which sometimes makes the users immersed in the technology. A smartphone is an inextricable thing that makes the users are going to hold it for all the time without limits, when they are alone or in the middle of a conversation. The increasing number of smartphone users at this time presents benefits and adverse effects in its use [4]. Simultaneous e-communication in the presence of another person and lack of rejection of face-to-face contact are just the most common kinds of social behaviour [11]. This phenomenon related to this behaviour called phubbing. It shows the behavior of ignoring others to focus on a smartphone, reflecting findings that technology use is driven by both usefulness and enjoyment, which explains its strong grip on attention [5]. This field of research is the research that has proliferated since it becomes norm behaviour in our daily lives.

Phubbing is one of the social exclusions where the present of smartphone interrupt the social relationship. Phubbing behaviour is pervasive but the examination of the determinants and measurement invariance remains deficient. Phubbing is often perceived as a disrespectful [28], rude and socially inappropriate [1] behaviour. Surprisingly, although people are aware of the bad effect and negative consequences of phubbing, they still continue phubbing in social contexts [19]. Some studies done in this issue imply that excessive mobile phone use may lead to psychological difficulties and damage relations [19,23]. As such, communication between two people may portray the phubbing behaviour as impolite behaviour that breach how they expect their partner to act [20].

Phubbing is a constant or excessive use of smartphones in individuals which causes a lack of human interaction or attitude of hurt to the other person [4]. Phubbing is a new behaviour and nearly become new culture that emerges because of the impact of rampant modernization. According to Karadag *et al.*, [19], there were four dimensions of phubbing which included: smartphone addiction, internet addiction, social media addiction and game addiction. Smartphone addiction is influenced by the availability of the attractive features that are practical in one the phone, as well as the form of loneliness fulfilment. Internet addiction can be said to be a causal relationship with smartphone addiction because individuals have access to the internet and there has been a transition from what was once on the computer now to cell phones. Social media addiction is related to individuals' efforts to maintain their presence on networking sites, often at the expense of real-life interactions. Prior studies have highlighted how attitudes and perceived risks shape individuals' willingness to adopt and engage with social media, underscoring its strong influence on daily behaviour [21].

1.1 Background

A vital tool for preserving emotional support, social connection, and the wellbeing of relationships is communication. The widespread use of smartphones has resulted in a significant change in communication methods; vocal or face-to-face interactions are now frequently conducted through displays. Although smartphones provide connectedness and convenience, there is a risk of misuse and relationship disruption.

Phubbing—the practice of ignoring present relationships in favour of smartphone engagement—is recognised by an increasing amount of study as a prominent behaviour in modern social life. A thorough scoping review by Deschamps *et al.*, [16] details how phubbing is becoming more commonplace, especially among peers, and how it departs from expectations in intimate relationships.

The impact of phubbing on conversational quality and emotional engagement during face-to-face interactions is examined by Garrido *et al.*, [18]. In the meantime, a meta-analysis of partner phubbing shows how phubbing destroys intimacy and trust in romantic relationships by including ideas from social exchange and attachment theory.

Negative emotional states and a decline in wellbeing have been linked to smartphone overuse in general. According to Zhu and Zhang [29], smartphone addiction is positively correlated with negative emotions, such as worry and depression, which lower life satisfaction.

Shen *et al.*, [25] demonstrate reciprocal correlations between problematic mobile phone use (PMPU) and bad affect over time using longitudinal data. At the same time, exercise seems to have preventive effects. Self-control and resilience operate as mediators between increased physical activity and mobile phone addiction.

These results suggest a complicated interaction: using a smartphone improperly can impair interpersonal performance, and this relationship becomes worse by negative feelings and disrupted habits. The relationship aspect of smartphone usage (i.e., phubbing) in adult or married contexts has received less attention than the majority of the literature, which concentrates on youth, students, or general smartphone addiction.

Therefore, examining phubbing behaviour in married people—as well as its causes, effects, and boundary conditions—provides important information on how contemporary technology affects marriage and lifestyle choices.

1.2 Statement of Problems

Although phubbing is a relatively recent phenomenon, it has rapidly spread within society and become nearly normalised. Although it may appear little, it causes significant impact on relationships and social interactions. Academics state that phubbing is a form of social isolation that negatively impacts relationships and psychological well-being, in addition to serve as a form of escape [1,11].

Despite prior studies examining the relationship between phubbing, social media usage, and smartphone addiction [19], a comprehensive understanding of its causes, prevalence, and broader societal implications remains insufficient. A large number of studies have mainly concentrated on young populations or dyadic relationships, resulting in limitations in our understanding of its impact on married couples and adults throughout diverse cultural contexts [20,23].

Moreover, studies demonstrate that individuals continue to practice phubbing while recognizing its harmful consequences [19,28]. This contradiction presents significant issues: What sustains the prevalence of phubbing as a habit? What impact does it impose on lifestyle decisions and interpersonal relationships? Interventions aimed at enhancing healthy communication practices or reducing problematic smartphone usage may prove ineffective if these deficiencies are not addressed.

The growing normalisation of phubbing in daily interactions and the insufficient study on its psychological, relational, and lifestyle impacts—especially among certain demographics such as married couples—constitute the core of the problem. This topic must be addressed to understand how digital behaviour impacts interpersonal connections and overall well-being.

This study aims to examine the predictors and consequences of phubbing behaviour among married individuals, with a particular focus on the impact of demographic variables. The aims are: (1) To examine the extent of phubbing behaviour among Malaysian married people; (2) To investigate the relationship between demographic of married people and phubbing behaviour and (3) analyse the results using social exchange theory and attachment theory to enhance the theoretical comprehension of the impact of phubbing behaviours on marital satisfaction.

1.3 Literature Review

The rapid growing of smartphone usage has changed methods of communication, yet it has also developed practices that decrease face-to-face relationships, shown by phubbing. Prior research has demonstrated that phubbing negatively affects relationship satisfaction, intimacy, and psychological well-being. Simultaneously, demographic factors such gender, age, and education may affect the degree to which individuals participate in this conduct. This study analyses previous studies on smartphone usage, phubbing behaviour, and their relational implications, adopting Social Exchange Theory and Attachment Theory as foundational frameworks.

1.3.1 Social Exchange Theory

SET proposes that individuals assess their connections by weighing the costs against the advantages. In the context of phubbing, smartphone usage during marital encounters constitutes a "cost" to the partner, reducing attention, intimacy, and perceived respect. If these costs exceed the relational advantages, satisfaction with marriage might decrease. Previous studies indicate that partner phubbing increases conflict and decreases satisfaction [24], underscoring its significance as a relational detrimental behaviour. This theory is especially beneficial for comprehending how demographic characteristics (e.g., education, income) may affect phubbing behaviour as they inform views of value and priorities in marital relationships.

1.3.2 Attachment Theory

Attachment theory [10] asserts that early interactions between individuals shape individuals' approaches to seeking and maintaining intimacy in adult relationships. In marriage, healthy attachment promotes intimacy and responsiveness, whereas anxious or avoidant attachment can heighten susceptibility to distraction or increase separated tendencies. Phubbing behaviour illustrates attachment dynamics: individuals with avoidant tendencies may utilise phones as a means of distancing, while those with anxious tendencies may experience increased anxiety when their partner is distracted. Recent evidence indicates that phubbing decreases closeness and trust, triggering attachment anxiety [22]. Consequently, Attachment Theory provides a significant framework for understanding why certain couples sustain more relationship strain from phubbing than others.

2. Methodology

This is quantitative research that employed the quantitative survey method for data collection. Survey research is widely used to determine specific characteristics of groups towards certain issues [9]. A survey was conducted to examine the partner phubbing behaviour among married people in Malaysia.

2.1 Research Instrument

The questionnaire consisted of four pages excluding the cover page (same pages in Google Form). The questionnaire contained nine demographic questions. This part sought information on the respondents' background, which is important for data analysis (e.g. the relationship between gender

and phubbing behaviour). In more specific, the questions in this part include gender, age, races, education level, status, duration marriage, income and occupation.

Measurement items in this study were generally generated from previous research. However, minor modifications were done to suit the context of the current study. This was done following the feedback from the pre-testing. Nevertheless, the modifications do not alter the content of the constructs. Originally, this questionnaire was developed using the English language because all the adapted questions from the previous literature used the English version. The researcher translated the questions into the Malay language was deemed appropriate since the levels of English language proficiency among Malaysians are different. Furthermore, the translation must be simple and easily understood by the respondents in order to get more meaningful answers. Both languages are presented in sequences in the questionnaire.

The questionnaire consisted of 4 pages which in Part A was divided into three sections. Instruction was clearly and precisely stated on the first page of each section. Instruction was given to guide the respondents when answering the questionnaire. Itemized scales rating, i.e., Likert-type scale, was applied to all the questions in Part A. All statements and questions in Part A used a 5-point Likert scale (1= Never, 2= Seldom, 3= Sometimes, 4= Often, and 5= Always).

2.2 Sampling

A total of 407 questionnaires were distributed in Peninsular Malaysia. In this research, four regions were chosen from Peninsular Malaysia which are central region, southern region, northern region and eastern region. For the geographical location, 40 percent from Central area, 23 percent from the Southern area, 21 percent from the Eastern area and 16 percent from Northern area were targeted. In each region/area, three districts were selected. This is due to the highest number of marriage number in the districts based on the statistic from Department of Statistic Malaysia (2023). Three districts from Selangor were Ulu Langat, Petaling and Klang, from Johor were Batu Pahat, Johor Bharu and Kluang, from Perak were Kinta, Manjung and Lakut/Matang while from Kelantan were Kota Bharu, Pasir Mas and Bachok.

In this research, researchers used a multistage sampling technique in which two or more levels of units are embedded one in the other. It involves the repetition of two basic steps i.e. listing and sampling. Typically, at each stage the cluster gets smaller in size and in the end, subject sampling is done [3]. Multistage sampling is an additional progress of the belief that cluster sampling has. Normally in multi-stage sampling design is applicable in a big inquires of geographical area, for the entire country [17]. Multistage sampling must be with the combination of the various methods of probability sampling in most effective and efficient approach.

Respondents were selected using multistage sampling technique of married people in Malaysia. In this survey, four regions are chosen from Peninsular Malaysia using cluster sampling at the first stage which are central region, southern region, northern region and eastern region. It followed by second stage, simple random sampling technique which stated all states for each region. In the third stage, a state will be selected for each region based on the highest number of marriages in the region. There are Selangor, Johor, Perak and Kelantan. Stratified area sampling will be used to select the districts for each state. Final stage is using criterion sampling. All the districts which are the final units of sampling are surveyed. It is not as robust as true random sampling but probably helps to resolve the limitations inherent to random sampling. It is extremely useful as it involves multiple stages of randomisations. Multi-stage sampling is used frequently when a complete list of all the members of the population does not exist and is inappropriate [3]. See Figure 1.

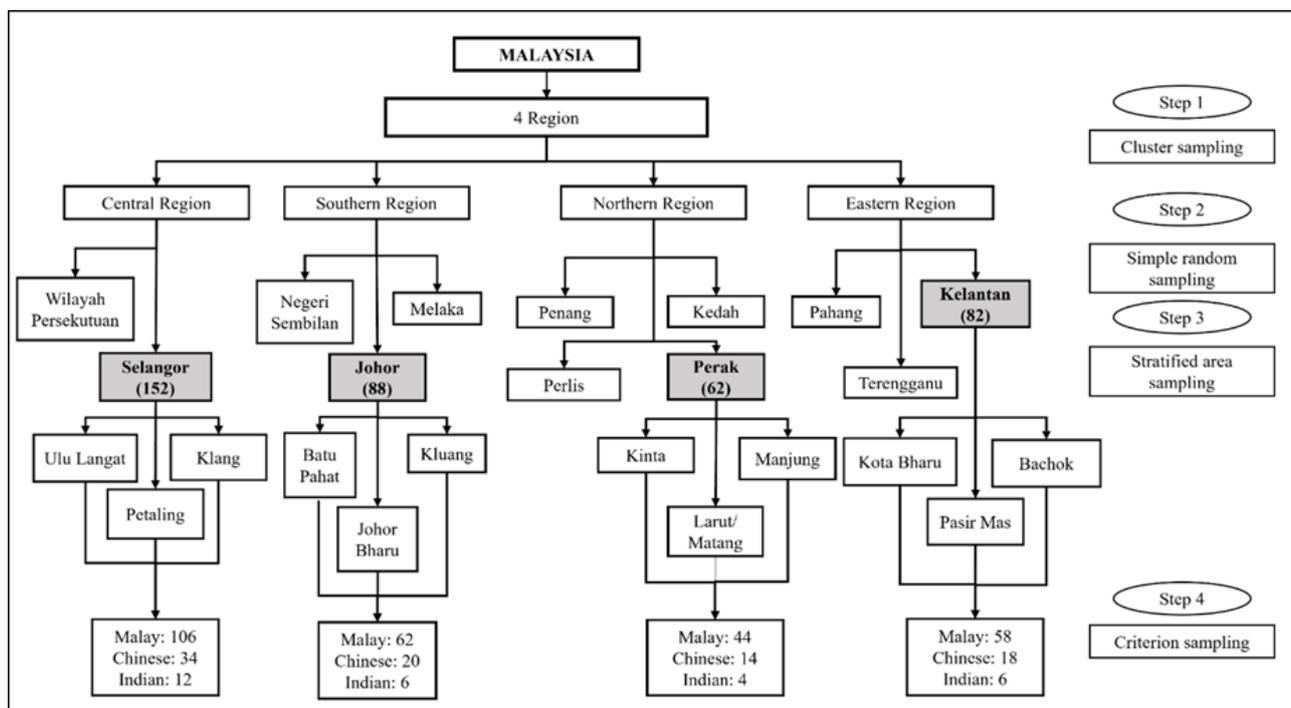


Fig. 1. Multistage sampling technique

3.Result

The demographic profile of the respondents, namely, age, gender, ethnic, education, marriage duration, personal income and occupation, were included in this study. Frequency distribution and percentage distributions were used to describe responses on categorical demographic variables. In terms of gender, majority of the respondents are females (52.3%), whilst males contributed to about 47.7% of the respondents. In terms of age, most of the respondents were in the 36 to 40 years old bracket (32.6%). In terms of ethnic, majority of the respondents are Malays 70.2%. As for the education level, the majority of the respondents are Degree/Master/Ph.D holders (60.4%). In terms of marriage duration, most of the respondents have been married for 6 to 10 years (31.3%). In terms of personal income, 26.4% earned RM3000-RM4999.

3.1 Objective 1: To Examine the Extent of Phubbing Behaviour among Malaysian Married People

Generally, as shown in Table 1, most of the married people are not phub to their partners. They generally give attention to their partners but still put their phone as their priority.

Table 1
 Phubbing behaviour- mean and percentage

Phubbing Behaviour	Mean**	Standard Deviation	Never***	Sometimes	Always***
1. My eyes start wandering on my phone when I'm together with my partner.	1.624	0.672	48.4	40.8	10.8
2. I am always busy with my mobile phone when I'm with my partner.	1.484	0.661	60.9	29.7	9.3
3. People complain about me dealing with my mobile phone.	1.494	0.684	61.4	27.8	10.8
4. I'm busy with my mobile phone when I'm with my partner.	1.418	0.634	66.1	26.0	7.9
5. I don't think that I annoy my partner when I'm busy with my mobile phone.	1.762	0.806	47.2	29.5	23.3
6. My phone is always within my reach.	2.197	0.798	23.8	32.7	43.5
7. When I wake up in the morning, I first check the messages on my phone.	2.089	0.855	32.4	26.3	41.3
8. I feel incomplete without my mobile phone.	2.143	0.842	29.2	27.3	43.5
9. My mobile phone use increases day by day.	1.902	0.788	36.4	37.1	26.5
10. The time allocated to social, personal or professional activities decreases because of my mobile phone.	1.737	0.783	47.2	31.9	20.9
11. During a typical mealtime that my partner and I spend together, my partner pulls out and checks his/her cell phone	1.776	0.810	46.4	29.5	24.1
12. My partner places his or her cell phone where they can see it when we are together	2.187	0.821	26.0	29.2	44.7
13. My partner keeps his or her cell phone in their hand when he or she is with me	1.767	0.779	44.7	33.9	21.4
14. When my partner's cell phone rings or beeps, he/she pulls it out even if we are in the middle of a conversation	2.084	0.798	28.0	35.6	36.4
15. My partner glances at his/her cell phone when talking to me	1.659	0.752	51.1	31.9	17.0
16. During leisure time that my partner and I are able to spend together, my partner uses his/her cell phone	1.806	0.775	41.5	36.4	22.1
17. My partner does not use his or her phone when we are talking	1.998	0.805	32.4	35.4	32.2
18. My partner uses his or her cell phone when we are out together	1.998	0.774	30.0	40.3	29.7
19. If there is a lull in our conversation, my partner will check his or her cell phone	1.892	0.821	39.6	31.7	28.7
20. I feel anxious if my phone is not nearby	1.815	0.809	43.5	31.3	25.1
21. I cannot stand leaving my phone alone	1.805	0.834	46.3	26.8	26.8
22. I place my phone where I can see it	2.234	0.818	24.4	27.8	47.8
23. I worry that I will miss something important if I do not check my phone	2.185	0.827	26.6	28.3	45.1
24. I have conflicts with others because I am using my phone	1.337	0.602	73.2	20.0	6.9
25. People tell me that I interact with my phone too much	1.345	0.616	73.2	19.2	7.6

Phubbing Behaviour	Mean**	Standard Deviation	Never***	Sometimes	Always* ***
26. I get irritated if others ask me to get off my phone and talk to them	1.392	0.638	69.2	22.4	8.4
27. I use my phone even though I know it irritates others	1.429	0.666	67.0	23.2	9.9
28. I would rather pay attention to my phone than talk to others	1.325	0.619	75.6	16.3	8.1
29. I feel content when I am paying attention to my phone instead of others	1.330	0.628	75.6	15.8	8.6
30. I feel good when I stop focusing on others and pay attention to my phone instead	1.333	0.644	76.4	14.0	9.6
31. I get rid of stress by ignoring others and paying attention to my phone instead	1.456	0.714	67.5	19.5	13.1
32. I pay attention to my phone for longer than I intend to do so	1.645	0.768	53.4	28.6	18.0
33. I know that I must miss opportunities to talk to others because I am using my phone	2.039	0.842	33.5	29.1	37.4
34. I find myself thinking "just a few more minutes" when I am using my phone	1.931	0.795	35.2	36.5	28.3

* Based on 5-point scale from 1= never, 2= seldom, 3= sometimes, 4= often, 5= always- (Always: Always and Often), (Never: Never and Seldom)

***Category 'Always' and 'Often' were merged into one category called "Always".

****Category 'Never' and 'Seldom' were merged into a category called "Never"

Only for statement no. 22, i.e., "I place my phone where I can see it", they tend to make sure they can reach their phone easily. The highest level of disagreements is for the statement "I would rather pay attention to my phone than talk to others" and "I feel content when I am paying attention to my phone instead of others", more than 70% said they won't do this.

3.2 Objective 2: To Investigate the Relationship between Demographic of Married People and Phubbing Behaviour

The result of factor analysis shows a KMO value of 0.926, indicating that it is a good value to use the factor analysis, in addition, the Barlett's test of sphericity also exhibited $p < 0.000$, indicating the appropriateness of using the factor analysis. A summary of the factor analysis results is presented in Table 2.

Table 2 shows that there are five factors extracted (see Table 3). There were eight items on Factor 1, labelled as 'Phone Prioritization' which depicts respondents' who put prioritize on the phone more than the people around them. Factor 2, which is labelled as 'Phone Dependency', refers to the respondents' who depend too much on the phone. Factor 3 was loaded by the items related to the disruptions by the phone in a relationship, labelled as 'Relationship Disruption'. In Factor 4, in total, six items loaded which labelled as 'Social Interference', portrays individuals' phone which interrupt the social relationship. In Factor 5, three items from 'Compulsive Phone Usage' were loaded into this factor, reflects individuals who think that the usage of mobile phone is more than they need to do.

Table 2
 Results of exploratory factor analysis on phubbing behaviour

Phubbing Behaviour	Factor Loadings					
	F1	F2	F3	F4	F5	F6
1. My eyes start wandering on my phone when I'm together with my partner.				0.700		
2. I am always busy with my mobile phone when I'm with my partner.				0.773		
3. People complain about me dealing with my mobile phone.				0.653		
4. I'm busy with my mobile phone when I'm with my partner.				0.790		
5. I don't think that I annoy my partner when I'm busy with my mobile phone.				0.660		
6. My phone is always within my reach.		0.591				
7. When I wake up in the morning, I first check the messages on my phone.		0.578				
8. I feel incomplete without my mobile phone.		0.754				
9. My mobile phone use increases day by day.		0.614				
10. The time allocated to social, personal or professional activities decreases because of my mobile phone.				0.441		
11. During a typical mealtime that my partner and I spend together, my partner pulls out and checks his/her cell phone			0.713			
12. My partner places his or her cell phone where they can see it when we are together			0.517			
13. My partner keeps his or her cell phone in their hand when he or she is with me			0.754			
14. When my partner's cell phone rings or beeps, he/she pulls it out even if we are in the middle of a conversation			0.691			
15. My partner glances at his/her cell phone when talking to me			0.748			
16. During leisure time that my partner and I are able to spend together, my partner uses his/her cell phone			0.785			
17. My partner does not use his or her phone when we are talking						0.728
18. My partner uses his or her cell phone when we are out together			0.763			
19. If there is a lull in our conversation, my partner will check his or her cell phone			0.745			
20. I feel anxious if my phone is not nearby		0.770				
21. I cannot stand leaving my phone alone		0.808				
22. I place my phone where I can see it		0.746				
23. I worry that I will miss something important if I do not check my phone		0.772				
24. I have conflicts with others because I am using my phone	0.678					
25. People tell me that I interact with my phone too much	0.748					
26. I get irritated if others ask me to get off my phone and talk to them	0.777					
27. I use my phone even though I know it irritates others	0.770					

Phubbing Behaviour	Factor Loadings					
	F1	F2	F3	F4	F5	F6
28. I would rather pay attention to my phone than talk to others	0.752					
29. I feel content when I am paying attention to my phone instead of others	0.814					
30. I feel good when I stop focusing on others and pay attention to my phone instead	0.681					
31. I get rid of stress by ignoring others and paying attention to my phone instead	0.613					
32. I pay attention to my phone for longer than I intend to do so					0.481	
33. I know that I must miss opportunities to talk to others because I am using my phone					0.669	
34. I find myself thinking “just a few more minutes” when I am using my phone					0.621	

Table 3
 Phubbing behaviour dimensions

Factor	Phubbing Behaviour Dimension	No of Items
F1	Phone Prioritization	8
F2	Phone Dependency	8
F3	Relationship Disruption	8
F4	Social Interference	6
F5	Compulsive Phone Usage	3

3.3 The Relationship between Demographic and Phubbing Behaviour Dimensions

The following demographic factors were subjected to tests of significance: gender, age, ethnic, education, marriage duration, personal income and occupation. When comparing the means for the two-group demographic variables of gender, the independent sample t-test was employed. In the meantime, the means of three or more groups of the demographic variables—such as age, ethnic, level of education, marriage duration, income and occupation—were compared using a one-way ANOVA.

3.3.1 The Relationship between gender and phubbing behaviour dimensions

To determine whether there were any significant variations between the male and female respondents' means of the risk-taking behaviour dimensions, an independent sample t-test was employed. Two dependent variables, 'Phone Prioritization' ($p < 0.001$) and 'Social Interference' ($p < 0.05$) were shown to be significant between the male and female respondents in Table 4. Based on the results, it appeared that male respondents were more likely to prioritize mobile phone than female respondents. Regarding the practice of 'Social Interference', the findings indicated that men were more likely than female to report on social interference. The other three variables, namely 'Phone Dependency', 'Relationship Disruption' and 'Compulsive Phone Usage' indicated $p > 0.01$. Therefore, no significant differences were found between gender with regards to these dimensions.

Table 4
 Relationship between gender and phubbing behaviour dimensions

Dependent Variables	Gender	N	Mean	t-value	Sig. [^]
Phone Prioritization	Male	193	16.77	2.976	<.001**
	Female	213	14.79	2.937	
Phone Dependency	Male	193	24.49	-.465	.155
	Female	213	24.83	-.462	
Relationship Disruption	Male	193	21.81	-2.493	.653
	Female	213	23.51	-2.489	
Social Interference	Male	193	14.72	1.554	.011*
	Female	213	13.95	1.541	
Compulsive Phone Usage	Male	193	8.47	.962	.529
	Female	213	8.20	.960	

*- significance at $p < 0.05$

** -significance at $p < 0.01$

[^] - test of significance using the independent sample t-test

3.3.2 The relationship between age, ethnic, duration of marriage, occupation and phubbing behaviour dimensions

The mean differences between the groups with regard to the respondents' age, ethnic, duration of marriage and occupation were assessed using one-way ANOVA. The p-value indicated that there were no significant differences between age, ethnic, duration of marriage and occupation with regards to the five phubbing behaviour dimensions.

3.3.3 The relationship between education level and phubbing behaviour dimensions

Education level did not significantly affect the F1 ($p = .330$), F2 ($p = .114$), or F5 ($p = .097$) phubbing factors, according to the one-way ANOVA. Nonetheless, F3 ($F = 3.307$, $p = .006$) and F4 ($F = 2.333$, $p = .042$) showed significant effects. Stronger educational attainment was frequently linked to stronger phubbing tendencies in F3 and F4, according to the mean scores. The overall variation was more noticeable throughout the entire range of education levels than between individual pairs, according to post hoc Scheffé tests, which revealed that the variations between particular education groups were not statistically significant.

A number of earlier research have found that phubbing behaviour is correlated with educational level, and they frequently find that those with higher education (e.g., university students) report higher scores for phone obsession or phubbing (e.g. Barbed-Castrejón et al., 2024). Our results supported these findings by demonstrating that education level strongly influenced phubbing scores on factors F3 and F4, with higher scores being linked to more advanced education. However, not all phubbing aspects varied by education in our study: F1, F2, and F5 showed non-significant results, in line with caution expressed in recent studies [16]. This pattern of selection implies that education may have a stronger effect on some phubbing characteristics than others, possibly those related to usage intensity, attentional displacement, or social assumptions, as opposed to interpersonal neglect or lower levels of engagement. Further suggesting that the impact of education is more noticeable in the dimension that F3 captures is the greater importance and effect magnitude in F3 as compared to F4. To understand how education level interacts with device availability, norms, and motives to generate diverse phubbing behaviours, more study is required, taking into account geographical, technological, and sample diversity.

Table 5
 Relationship between education level and phubbing behaviour dimensions

Dependent Variables	Education Level	Mean	F	Sig. [^]	Diff ^{^^}
Phone Prioritization (F1)	UPSR	13.25	1.156	.330	-
	PMR/SRP	16.00			
	SPM/MCE	16.42			
	STPM/HSC	17.43			
	College/Diploma	16.93			
	Degree/Master/Ph.D	15.24			
Phone Dependency (F2)	UPSR	20.38	1.788	.114	-
	PMR/SRP	20.67			
	SPM/MCE	25.58			
	STPM/HSC	24.00			
	College/Diploma	24.12			
	Degree/Master/Ph.D	25.02			
Relationship Disruption (F3)	UPSR	17.25	3.307	.006**	VI > III
	PMR/SRP	18.73			
	SPM/MCE	22.16			
	STPM/HSC	19.86			
	College/Diploma	21.93			
	Degree/Master/Ph.D	23.55			
Social Interference (F4)	UPSR	15.63	2.333	.042*	I > V
	PMR/SRP	10.53			
	SPM/MCE	13.68			
	STPM/HSC	13.29			
	College/Diploma	14.75			
	Degree/Master/Ph.D	14.55			
Compulsive Phone Usage (F5)	UPSR	6.000	1.877	.097	-
	PMR/SRP	7.333			
	SPM/MCE	8.122			
	STPM/HSC	8.429			
	College/Diploma	8.206			
	Degree/Master/Ph.D	8.549			

* significant at $p \leq 0.05$

** significant at $p \leq 0.01$

[^] test of significant using the one-way ANOVA

^{^^} to assess the pair-wise differences, the Scheffe post-hoc analysis is used: I=UPSR; II=PMR/SRP; III=SPM/MCE, IV=STPM/HSC, V=College/Diploma and VI=Degeeee/Master/Ph.D

3.3.4 The relationship between personal income and phubbing behaviour dimensions

Income groups did not differ substantially in F1: 'phone prioritization' dimension ($p = .846$), F2 ($p = .298$), or 'compulsive phone usage' dimension ($p = .835$) phubbing factors, according to the one-way ANOVA. However, F3: 'relationship disruption' ($F = 3.818$, $p = .002$) and F4: 'social interference' ($F = 3.021$, $p = .011$) showed significant differences. Higher income groups (RM7000 and above) reported higher phubbing mean scores in both F3 and F4 than did lower-income groups, according to post hoc Scheffé tests. These results imply that, especially in F3 and F4, financial level is a major predictor of some aspects of phubbing behaviour.

Table 6
 Relationship between income and phubbing behaviour dimensions

Dependent Variables	Income	Mean	F	Sig. [^]	Diff ^{^^}
Phone Prioritization (F1)	Below RM1000	15.27	.405	.846	-
	RM1000-RM2999	15.50			
	RM3000-RM4999	15.87			
	RM5000-RM6999	15.46			
	RM7000-RM8999	15.66			
	Above RM9000	17.02			
Phone Dependency (F2)	Below RM1000	24.09	1.222	.298	-
	RM1000-RM2999	24.00			
	RM3000-RM4999	23.83			
	RM5000-RM6999	25.81			
	RM7000-RM8999	25.69			
	Above RM9000	25.88			
Relationship Disruption (F3)	Below RM1000	21.71	3.818	.002**	V > IV
	RM1000-RM2999	21.66			
	RM3000-RM4999	21.69			
	RM5000-RM6999	23.20			
	RM7000-RM8999	25.81			
	Above RM9000	25.33			
Social Interference (F4)	Below RM1000	13.04	3.021	.011*	VI > VI
	RM1000-RM2999	13.71			
	RM3000-RM4999	13.89			
	RM5000-RM6999	14.77			
	RM7000-RM8999	15.41			
	Above RM9000	16.40			
Compulsive Phone Usage (F5)	Below RM1000	7.911	.419	.835	-
	RM1000-RM2999	8.217			
	RM3000-RM4999	8.274			
	RM5000-RM6999	8.625			
	RM7000-RM8999	8.571			
	Above RM9000	8.330			

* significant at $p \leq 0.05$

** significant at $p \leq 0.01$

[^] test of significant using the one-way ANOVA^{^^} to assess the pair-wise differences, the Scheffe post-hoc analysis is used: I=Below RM1,000; II=RM1,000 – RM2,999; III=RM3,000 – RM4,999; IV=RM5,000 – RM6,999; V=RM7,000 – RM8,999 and VI=Above RM9,000

ANOVA revealed significant income differences for F3 ($F=3.818$, $p=.002$; $\eta^2 \approx .046$) and F4 ($F=3.021$, $p=.011$; $\eta^2 \approx .036$), according to multiple reports that link higher socioeconomic position to elevated technology-related distraction (e.g., phubbing/smartphone overuse). Higher-income groups ($\geq RM7000$) reported higher levels of phubbing. These findings are consistent with research showing that phubbing prevalence is positively correlated with personal income, which may be due to increased gadget access and integration into work/leisure routines. Nevertheless, previous syntheses also point to conflicting income findings and contextual moderating by financial strain, indicating that cultural, developmental, and family-stress factors may have an impact on socioeconomic implications on phubbing [26].

The findings of this study strongly align with both Social Exchange Theory and Attachment Theory. From an exchange point of view, actions like phone prioritising and relationship disruption represent relational "costs" that reduce relational interaction and restorative practices. This supports the concept of SET that when costs (e.g., neglect, disrespect) exceed benefits, relationship satisfaction decreases.

The findings indicate that demographic variables predict phubbing tendencies, suggesting that relational security is linked to environmental factors. Married persons who are excessively dependent on their phones may display avoidant behaviours, utilising gadgets as a barrier against intimacy. In contrast, the distress experienced by spouses who are phubbed indicates nervous attachment reactions to perceived neglect. These conclusions support previous studies indicating that phubbing decreases closeness and trust by triggering attachment concerns [22,24].

4. Conclusion

This study aimed to define the fundamental characteristics of phubbing and examine its prevalence and correlates among married individuals in Peninsular Malaysia. A strong five-factor structure—Phone Prioritisation, Phone Dependency, Relationship Disruption, Social Interference, and Compulsive Phone Usage—was derived via exploratory factor analysis. The structure was validated by a robust Bartlett's test and exceptional sampling adequacy ($KMO = .926$), indicating that phubbing is a complex phenomenon rather than a singular behaviour. Nevertheless, numerous respondents maintained their phones in plain sight and within convenient reach, signifying a slight yet enduring attentional attraction to the item. The majority of respondents exhibited minimal endorsement of overtly contemptuous items (e.g., "I would prefer to focus on my phone rather than engage in conversation with others").

Income and education demonstrated selective, factor-specific influences on demographics. Scores for Relationship Disruption (F3) and Social Interference (F4) were significantly affected by education level; however, no significant differences were observed in Compulsive Use, Phone Dependency, or Phone Prioritisation. Similarly, significant differences were observed among income groups on F3 and F4, with higher-income groups indicating greater scores. The data indicate that the components of phubbing related to relationships and social context are more strongly associated with socioeconomic position than with general dependency or compulsive behaviours. Although age and ethnicity were not associated with the problems, gender differences were observed, with males exhibiting higher scores in social interference and phone priority.

The findings suggest that phubbing is common among married people in diverse ways and is most impactful when it disrupts dyadic communication and broader social relationships. Couple-oriented interventions, such as phone-free meals and conversational norms, together with family and business routines that decrease constant connection demands, may prove beneficial. When trying to explain partner-directed phone use, the results theoretically emphasise how important it is to distinguish between various phubbing subdimensions and take socioeconomic context into consideration. Future research should examine variables such as stress and work demands, establish causal pathways (e.g., through longitudinal or experimental designs), and evaluate specific strategies that maintain face-to-face connections while not demonizing routine smartphone usage.

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References

- [1] Vanden Abeele, Mariek MP, Marjolijn L. Antheunis, and Alexander P. Schouten. "The effect of mobile messaging during a conversation on impression formation and interaction quality." *Computers in human behavior* 62 (2016): 562-569. <https://doi.org/10.1016/j.chb.2016.04.005>
- [2] Vanden Abeele, Mariek MP, Andrew T. Hendrickson, Monique MH Pollmann, and Rich Ling. "Phubbing behavior in conversations and its relation to perceived conversation intimacy and distraction: An exploratory observation study." *Computers in Human Behavior* 100 (2019): 35-47. <https://doi.org/10.1016/j.chb.2019.06.004>
- [3] Acharya, Anita S., Anupam Prakash, Pikee Saxena, and Aruna Nigam. "Sampling: Why and how of it." *Indian journal of medical specialties* 4, no. 2 (2013): 330-333. <http://dx.doi.org/10.7713/ijms.2013.0032>
- [4] Afdal, Afdal, Alizamar Alizamar, Ildil Ildil, Zadrian Ardi, Indah Sukmawati, Zikra Zikra, Asmidir Ilyas, Miftahul Fikri, Yuda Syahputra, and Hariyani Hariyani. "An Analysis of Phubbing Behaviour: Preliminary research from counseling perspective." In *International conference on educational sciences and teacher profession (ICETeP 2018)*, pp. 270-273. Atlantis Press, 2019. <http://doi.org/10.2991/icetep-18.2019.65>
- [5] Alam, Syed Shah, Mohammad Masukujjaman, Maisarah Ahmad, and Romlah Jaffor. "Acceptance of online distance learning (ODL) among students: Mediating role of utilitarian and hedonic value." *Education and information technologies* 28, no. 7 (2023): 8503-8536. <https://doi.org/10.1007/s10639-022-11533-3>
- [6] Alam, Syed Shah, Samiha Susmit, Chieh-Yu Lin, Mohammad Masukujjaman, and Yi-Hui Ho. "Factors affecting augmented reality adoption in the retail industry." *Journal of Open Innovation: Technology, Market, and Complexity* 7, no. 2 (2021): 142. <https://doi.org/10.3390/joitmc7020142>
- [7] Al-Saggaf, Yeslam, and Rachel MacCulloch. "Phubbing and social relationships: Results from an Australian sample." *Journal of Relationships Research* 10 (2019): e10. <https://doi.org/10.1017/jrr.2019.9>
- [8] Al-Saggaf, Yeslam, and Rachel MacCulloch. "Phubbing: how frequent? Who is phubbed? In which situation? And using which apps?." (2018).
- [9] Ary, D., L. C. Jacobs, C. Sorensen, and A. Razavieh. "Introduction to educational research." (2010).
- [10] Bowlby, John, Mary Ainsworth, and Ian Bretherton. "The origins of attachment theory." *Developmental Psychology* 28, no. 5 (1992): 759-775. <https://doi.org/10.1037/0012-1649.28.5.759>
- [11] Bratina, Tomaž. "Mobile Phones and Social Behaviour among Millennials: Future Teachers." *Journal of Elementary Education* 12, no. 4 (2019): 315-330. <https://doi.org/10.18690/rei.12.4.315-330.2019>
- [12] Chotpitayasunondh, Varoth, and Karen M. Douglas. "Measuring phone snubbing behavior: Development and validation of the Generic Scale of Phubbing (GSP) and the Generic Scale of Being Phubbed (GSBP)." *Computers in human behavior* 88 (2018): 5-17. <https://doi.org/10.1016/j.chb.2018.06.020>
- [13] Chotpitayasunondh, Varoth, and Karen M. Douglas. "The effects of "phubbing" on social interaction." *Journal of applied social psychology* 48, no. 6 (2018): 304-316. <https://doi.org/10.1111/jasp.12506>
- [14] Chotpitayasunondh, Varoth, and Karen M. Douglas. "How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone." *Computers in human behavior* 63 (2016): 9-18. <https://doi.org/10.1016/j.chb.2016.05.018>
- [15] Çizmeçi, Esra. "Disconnected, though satisfied: Phubbing behavior and relationship satisfaction." *The Turkish Online Journal of Design, Art and Communication* 7, no. 2 (2017): 364-375. <https://doi.org/10.7456/10702100/018>
- [16] Deschamps, Amélie, Marie-Ève Fortier, Natalia Muñoz Gómez, Anne-Marie Auger, Caroline Fitzpatrick, and Magaly Brodeur. "Understanding phubbing behavior: A scoping review of qualitative and mixed-methods studies." *Computers in Human Behavior Reports* 18 (2025): 100684. <https://doi.org/10.1016/j.chbr.2025.100684>
- [17] Etikan, Ilker, and Kabiru Bala. "Sampling and sampling methods." *Biometrics & Biostatistics International Journal* 5, no. 6 (2017): 00149.
- [18] Garrido, Sandra, Eliza Oliver, Lorna Pendergast, and Alison Short. "Online music listening programs for older adults with dementia during the COVID-19 Pandemic: A feasibility study." *The Arts in Psychotherapy* 87 (2024): 102097. <https://doi.org/10.1016/j.aip.2023.102097>
- [19] Karadağ, Engin, Şule Betül Tosuntaş, Evren Erzen, Pınar Duru, Nalan Bostan, Berrak Mızrak Şahin, İlkay Çulha, and Burcu Babadağ. "The Virtual World's Current Addiction: Phubbing." *Addicta: The Turkish Journal on Addictions* 3, no. 2 (2016). <https://doi.org/10.15805/addicta.2016.3.0013>
- [20] Kelly, Lynne, Aimee E. Miller-Ott, and Robert L. Duran. "Phubbing friends: Understanding face threats from, and responses to, friends' cell phone usage through the lens of politeness theory." *Communication Quarterly* 67, no. 5 (2019): 540-559. <https://doi.org/10.1080/01463373.2019.1668443>
- [21] Mhina, Julius Raphael Athuman, Md Gapar Md Johar, and Mohammed Hazim Alkawaz. "The influence of perceived confidentiality risks and attitude on Tanzania government employees' intention to adopt web 2.0 and social media for work-related purposes." *International Journal of Public Administration* 42, no. 7 (2019): 558-571. <https://doi.org/10.1080/01900692.2018.1491596>

- [22] Ni, Nie, Seyedali Ahrari, Zeinab Zaremohzzabieh, Mansoureh Zarean, and Samsilah Roslan. "A meta-analytic study of partner phubbing and its antecedents and consequences." *Frontiers in Psychology* 16 (2025): 1561159. <https://doi.org/10.3389/fpsyg.2025.1561159>
- [23] Oberst, Ursula, Elisa Wegmann, Benjamin Stodt, Matthias Brand, and Andrés Chamorro. "Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out." *Journal of adolescence* 55 (2017): 51-60. <https://doi.org/10.1016/j.adolescence.2016.12.008>
- [24] Roberts, James A., and Meredith E. David. "My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners." *Computers in human behavior* 54 (2016): 134-141. <https://doi.org/10.1016/j.chb.2015.07.058>
- [25] Shen, Guanghui, Guoyong Huang, Mengting Wang, Wenqian Jian, Hong Pan, Zheru Dai, Anise MS Wu, and Li Chen. "The longitudinal relationships between problematic mobile phone use symptoms and negative emotions: a cross-lagged panel network analysis." *Comprehensive Psychiatry* 135 (2024): 152530. <https://doi.org/10.1016/j.comppsy.2024.152530>
- [26] Tekkam, Sri Dharani, Sudha Bala, and Harshal Pandve. "Consequence of phubbing on psychological distress among the youth of Hyderabad." *Medical Journal of Dr. DY Patil Vidyapeeth* 13, no. 6 (2020): 642-647. https://doi.org/10.4103/mjdrdypu.mjdrdypu_315_19
- [27] Thibaut, John W. *The social psychology of groups*. Routledge, 2017. <https://doi.org/10.4324/9781315135007>
- [28] T'ng, Soo Ting, Khee Hoong Ho, and Sew Kim Low. "Are you "phubbing" me? The determinants of phubbing behavior and assessment of measurement invariance across sex differences." *International and Multidisciplinary Journal of Social Sciences* 7, no. 2 (2018): 159-190. <https://doi.org/10.17583/rimcis.2018.3318>
- [29] Zhu, Chunyue, Shuo Li, and Lei Zhang. "The impact of smartphone addiction on mental health and its relationship with life satisfaction in the post-COVID-19 era." *Frontiers in psychiatry* 16 (2025): 1542040. <https://doi.org/10.3389/fpsy.2025.1542040>