



Impact of Partner Phubbing on Marital Quality among Married Couples in Malaysia: Moderating Effects of Gender and Age

Sonia Khodabakhsh¹ & Yong Le Ong²

¹Universiti Tunku Abdul Rahman (UTAR), Malaysia

²UCSI University, Malaysia

Received: 2020-12-30

Accepted: 2021-3-9

doi:10.51698/aloma.2021.39.1.9-16

Impact of Partner Phubbing on Marital Quality among Married Couples in Malaysia: Moderating Effect of Gender and Age

Abstract. Smartphones and the internet have indeed revolutionized our lives in innumerable ways, among them the emergence of a social phenomenon called 'phubbing.' Phubbing is a portmanteau combining the words "phone" and "snubbing". A person engaging in "phubbing" interacts obsessively with his/her phone rather than communicating with nearby people. Partner phubbing (Pphubbing) is defined as phubbing behaviour when in the presence of one's spouse or significant other. The aim of this study is to explore the relationship between Pphubbing and marital quality, and to investigate the moderating role of gender and age in this relationship. The participants in the survey were 390 married adults living in Kuala Lumpur. The respondents were selected randomly and volunteered to answer a series of questionnaires made up of the Partner Phubbing Scale, the Dyadic Adjustment Scale and a section on demographic data. Results showed that Pphubbing behaviour has a significant negative relationship with marital quality. Moreover, gender and age were found to have significant moderating effects on the relationship between Pphubbing and marital quality. The reported impact of Pphubbing on marital quality was stronger among females than males, and the effects were also stronger among younger adults. These findings may have implications for family and couple counselling and for the coaching profession. Future research should be done to address this phenomenon more thoroughly.

Keywords: interpersonal communication; marital quality; partner phubbing; phubbing; relationship

Impacto del phubbing de pareja en la calidad marital entre parejas casadas en Malasia: efecto moderador del género y la edad

Abstract. Los teléfonos inteligentes e Internet han revolucionado nuestras vidas de innumerables formas, entre ellas la aparición de un fenómeno social llamado "phubbing". Phubbing es un acrónimo que combina las palabras "pone (teléfono)" y "snubbing (desairar)". Una persona que participa en "phubbing" interactúa obsesivamente con su teléfono en lugar de comunicarse con personas cercanas. El phubbing de pareja (Pphubbing) se define como un comportamiento de phubbing cuando está en presencia del cónyuge o de la pareja. El objetivo de este estudio es explorar la relación entre Pphubbing y la calidad marital, e investigar el papel moderador del sexo y la edad en esta relación. Los participantes de la encuesta eran 390 adultos casados que vivían en Kuala Lumpur. Los encuestados fueron seleccionados de forma aleatoria y se ofrecieron como voluntarios para responder una serie de cuestionarios compuestos por la escala Partner Phubbing Scale, la Dyadic Adjustment Scale y una sección sobre datos demográficos. Los resultados mostraron que el comportamiento de Pphubbing tiene una relación negativa significativa con la calidad marital. Además, se encontró que el género y la edad tenían efectos moderadores significativos sobre la relación entre Pphubbing y la calidad marital. El impacto informado de Pphubbing sobre la calidad marital fue más fuerte entre las mujeres que entre los hombres, y los efectos también fueron más fuertes entre los adultos más jóvenes. Estos hallazgos pueden tener implicaciones para la terapia familiar y de pareja y para la profesión de coaching. Se deben realizar investigaciones futuras para abordar este fenómeno de manera más exhaustiva.

Palabras clave: comunicación interpersonal; calidad marital; phubbing de pareja; phubbing; relación

Correspondencia

Sonia Khodabakhsh, PhD

Department of Psychology and Counselling, Faculty of Arts and Social Science,

Universiti Tunku Abdul Rahman (UTAR), Kampar 31900, Malaysia

ORCID: <http://orcid.org/0000-0002-4217-4979>

Email: soniak@utar.edu.my; 2nd Email: dr.sonia.khodabakhsh@gmail.com

Introduction

The word ‘phubbing’ is a combination of the words “phone” and “snubbing” (Steinmetz, 2013). The term refers to the actions of people who are totally engrossed with their phones or other gadgets instead of communicating and interacting with individuals around them (Chotpitayasunondh & Douglas, 2016). Being phubbed means being ignored by someone who is absorbed with their smartphone while in your presence (Roberts & David, 2016). In the family context, partner phubbing (Pphubbing) refers to the phubbing of one’s spouse or significant other (Roberts & David, 2016), a conduct that may cause the other partner’s discomfort and consequently may lead to a strained relationship, as explained by the expectancy violations theory (Burgoon & Hale, 1987; Burgoon, 1993).

According to expectancy theory (Burgoon & Hale, 1987; Burgoon, 1993), people will feel discomfort and become agitated when their partner is not behaving as they expected. In other words, when the behaviour of one partner in an interaction is not in line with the expectations of others, this behaviour increases discomfort and can incite disappointment. Individuals tend to point to their partners’ characteristics to justify their anger or discomfort (Burgoon, 1993). Several studies related to smartphone use and relationships show that using a phone during a physical conversation is not considered acceptable (Cameron & Webster, 2011; Inbar et al., 2014; Moser et al., 2016).

Meanwhile, according to technological determinism theory, technology is seen as the main driving force behind the evolution of social structure and cultural value in society (Smith & Marx, 1994), and the transformative power of technology inevitably affects communication patterns among people. The occurrence of phubbing is inevitable due to the ubiquitous narcissistic engagement with smartphones that have internet access and various applications. Karadağ et al. (2015) suggested that the smartphone appears to be the strongest determinant of phubbing behaviour. They also reported that the tendency toward increased smartphone usage could be the basis for the rampant phubbing phenomenon in society.

In addition, with regard to the displacement hypothesis, partner phubbing can have a negative effect on relationship satisfaction. This hypothesis suggests that the time spent on smartphones can displace or decrease the frequency of partners’ intimate experiences, which in turn can diminish the happiness of their marriage. Likewise, during face-to-face communications, smartphone use makes people less interested in the conversation, thus reducing the quality of the conversation (Turkle, 2011).

Some previous literature found that Pphubbing was indeed detrimental to romantic relationships. Pphubbing was found to be negatively correlated with relationship satisfaction, which in turn decreased overall life satisfaction and indirectly increased depression symptoms (Robert & David, 2016). Many studies have

found that Pphubbing is a common phenomenon among romantic partners (Coyne et al., 2011; Lenhart & Duggan, 2014). In McDaniel and Coyne’s (2016) study, 70% of females in romantic relationships stated that smartphones regularly interrupted their communication with their partners, resulting in increased depressive symptoms and decreased relationship satisfaction.

In a study featuring 243 Chinese couples, the results showed that Pphubbing has a significant negative effect on relationship satisfaction and that it can lead to increased depression via the moderating role of relationship satisfaction (Wang, Xie, et al., 2017). However, in a recent study on 429 Chinese adults (Wang, Zhao, et al., 2019), Pphubbing was not associated with relationship satisfaction. In the latter study, however, self-esteem moderated this relationship.

According to Turkle’s (2011) research, phubbing behaviour impacts one of the most important elements of interpersonal interaction, which is eye contact. Indeed, when people are engaged in phubbing behaviour during their interactions with those around them, their eye contact is significantly reduced. This affects these interactions (Turkle, 2011) in several ways. It decreases the quantity and quality of the interaction and results in negatively perceived affiliation (Boelen, 2014; Drago, 2015). Couples are not exempt from this issue, meaning that such communication problems can affect marital quality. High-quality marriage is linked to marital happiness, good adjustment and satisfaction (Francis, 2012). Conversely, however, low marital quality increases the probability of divorce (Boo, 2014).

Several studies have focused on finding the mediators and moderators of the negative relationship between Pphubbing and relationship satisfaction. Krasnova et al. (2016) found that jealousy is a significant mediator between Pphubbing and relational cohesion, as Pphubbing can promote feelings of jealousy that trigger negative effects in terms of relational cohesion. Elsewhere, a study by Robert and David (2016) study concluded that conflict over phone use was a significant mediator in the relationship between Pphubbing and relationship satisfaction. They also found that attachment styles are a significant moderator between the relation between Pphubbing and cell phone-related conflict. Participants with anxious attachment styles reported having higher levels of cell phone conflict than others with less anxious attachment styles.

Previous research has documented that numerous smartphone-related behaviours (the preference for online activities, smartphone addiction, internet addiction, online shopping, internet banking, self-control abilities and communication etiquette) differ between males and females (Baron & Campbell, 2012; Jang & Ji, 2012; Ha & Hwang, 2014; Chotpitayasunondh & Douglas, 2016). Moreover, Lenhart and Duggan (2014) stated that Pphubbing behaviour among smartphone owners is reported to occur the most frequently among

younger people aged between 18 and 29. According to the Malaysian Communications and Multimedia Commission (2018), 47.4% of mobile users in Malaysia are 20-34 years old, 26.3% are 35-49, 13.3% are 50-64, and 4% are 65 years old and above.

Objective of the Study

The objective of this study was to determine the relationship between Pphubbing behaviour and the quality of marriage and to analyse the moderating effects of gender and age on the relationship between Pphubbing and marital quality. Specifically, this study attempted to test the following research hypotheses: 1) There is a significant relationship between Pphubbing behaviour and marital quality. 2) Gender has significant moderating effects on the relationship between Pphubbing and marital quality. 3) Age has significant moderating effects on the relationship between Pphubbing and marital quality.

Methods

Pphubbing is a social reality that can be observed and felt. Hence, epistemologically, it can be determined quantitatively in the social science arena through the survey method. In order to accomplish this, it was necessary to come to a precise conception of the Pphubbing phenomenon and to be able to measure it with a valid and reliable survey instrument, discussed further below.

Participants and Sampling

This research was a quantitative correlational study using a cross-sectional survey design. The target sample of this study consisted of a segment of married adults in the city of Kuala Lumpur, Malaysia. The sampling method was convenience sampling carried out in different environments such as universities and public areas, as well as through the researchers' personal networks. Some of the selected respondents were given the survey questionnaire directly, while others answered the questionnaire online. After data collection, 390 individuals who met the inclusion criteria and did not meet the exclusion criteria were selected as research participants. The inclusion criteria called for married adults who had been in their first marriage for at least one year, and who resided in Kuala Lumpur. Since this research was intended to examine whether Pphubbing behaviour has a different effect on different age groups, the age of the respondents in this study ranged from 21 to 60 years old ($M=40$, $SD=8.6$). Additionally, both men and women were welcomed to participate in this study. Among the total number of participants, 29.50% were males and 70.50% were females. Individuals who had been married for less than a year or had been married prior to their current marriage were excluded from this study to control the possible unwanted effects.

Survey Instruments

The survey instrument used in this research consisted of three sections: the demographic section, the Partner Phubbing Scale (PPS) section, and the Dyadic Adjustment Scale (DAS) section. The demographic section was concerned with particulars regarding gender, age, ethnicity, religion and the number of children.

Partner Phubbing Scale (PPS). The PPS, created by Robert and David (2016), consists of nine items that measure the frequency with which the participant's partner engaged in Pphubbing behaviour. The response to each item was given on a scale ranging from never (1) to all the time (5). The total score of the scale indicates the intensity to which individuals feel that they are being phubbed by their partners, with higher scores indicating a greater degree of Pphubbing, and vice versa. Convergent validity and discriminant validity were also established through a Confirmatory Factor Analysis (CFA) (Robert & David, 2016). This PPS achieved a Cronbach's Alpha value of .93 for internal consistency reliability, indicating that it appeared to be highly reliable, as it exceeded the ideal Cronbach's Alpha of .7 (DeVellis, 2003). All of the items in the original PPS were included in this study, and the internal consistency reliability of the PPS instrument was calculated with a Cronbach's Alpha value of .87 in the current study.

The Dyadic Adjustment Scale (DAS). This is a 32-item self-administered questionnaire that measures marital quality (Spanier, 1976). DAS is one of the most commonly used instruments designed to measure the quality of marriage and other similar dyads such as marital satisfaction and marital adjustment (Spanier, 1976; Graham et al., 2006). The DAS includes subscales measuring Dyadic Satisfaction, Dyadic Consensus, Dyadic Cohesion, and Dyadic Affectional Expression. In this study, the total score for the scale as a whole was considered, as the main interest of the study was in the overall marital quality in the participants. The total score on this scale can range from 0-151. Higher scores indicate higher degrees of dyadic adjustment within the relationship (Spanier, 1989). The reliability generalisation meta-analysis for the DAS was carried out by Graham et al. (2006), who examined 91 published studies with 25035 participants. They found this scale to have an acceptable degree of reliability, and they determined that the scores do not differ as a function of gender, sexual orientation, ethnicity, or the marital status of the sample. In this study, DAS achieved a Cronbach's Alpha value of .93 for internal consistency reliability.

Pilot Study

A pilot study was carried out before the actual test to verify the reliability of the scales in Kuala Lumpur, Malaysia. Forty married respondents were selected to take part in this pilot test. Paper questionnaires including an informed consent form, a demographic form,

PPS, and the DAS were distributed to the participants who fulfilled the inclusion criteria. The data collected in the pilot test showed that the selected instruments were reliable and suitable to be used in the targeted context. The reliability test score of PPS was .79 and .94 for DAS.

Procedure

The research was approved by the Scientific and Ethical Review Committee of the UCSI University, Malaysia, and research was conducted in accordance with the ethical standards of the university research ethics committee. The instruments were distributed to the targeted samples through paper questionnaires. The actual test was carried out immediately after the pilot test. The informed consent form was attached to the questionnaire to provide participants with brief information on the study, and their voluntary participation and the confidentiality of the data were highlighted in the informed consent. All data collected were entered into and analysed by IBM SPSS Statistics for Windows, Version 21.0, released in 2012. The Pearson correlation coefficient was used for the purposes of data analysis in order to investigate the relationship between Pphubbing behaviour and the quality of marriage. The tests of the moderating effects of gender and age on the relations between Pphubbing and marital quality were performed using Hayes's SPSS macro PROCESS analysis.

Results

The frequencies of the categorical demographic variables included in this study are displayed in Table 1.

Before carrying out the Pearson correlation analysis and moderation analyses in this study, basic assumptions were tested, including the absence of outliers, normality, linearity, homoscedasticity and multicollinearity. Since all the assumptions were fulfilled, the Pearson correlation analysis was deemed appropriate to determine the relationship between Pphubbing and marital quality. Based on the correlation statistics generated using the SPSS programme, Table 2 below shows the results of the analysis. Table 2 also shows that the correlation coefficient (r) is $-.419$ and significant. This means that there is a moderate negative significant correlation between Pphubbing and marital quality. Hence, the first hypothesis of this study is supported.

The moderation analysis was performed using Hayes's SPSS macro PROCESS analysis, and it showed that gender moderates the relationship between Pphubbing and marital quality. The overall model was significant with $p < .001$ and $F(3, 386) = 33.526$, with an effect size of $.212$.

The results displayed in Table 3 show that the relationship between Pphubbing and marital quality was significant in both genders with the $p = .005$ for males and $p < .001$ for females. For males, one additional unit of Pphubbing score produced an effect of $-.796$ units

Table 1. Frequency of Categorical Demographic Variables (N = 390)

		Frequency	Percentage
Gender	Male	115	29.50
	Female	275	70.50
Age Group	21-30	49	12.60
	31-40	176	45.10
	41-50	122	31.30
	51-60	43	11.00
Ethnicity	Malay	47	12.10
	Chinese	308	79.00
	Indian	23	5.90
	Bumiputera Sabah/ Sarawak	7	1.80
	Others	5	1.30
Religion	Muslim	50	12.80
	Buddhist	270	69.20
	Hindu	18	4.60
	Christian	42	10.80
	Others	10	2.60
Number of Children	0	37	9.50
	1	74	19.00
	2	204	52.30
	3	59	15.10
	4	16	4.10

Table 2. Correlation Statistics for Pphubbing and Marital Quality (N = 390)

Variables	Min	Max	M	SD	r	p
Pphubbing	12	42	28.54	7.077		
Marital Quality	22	130	87.68	24.642	$-.419^{**}$.000

Note: $** p < .01$ (2-tailed).

Table 3. Conditional Effect of Pphubbing on Marital Quality by Gender

Gender	Effect	se	t	p	LLCI	ULCI
Male	$-.796$.285	-2.793^{**}	.005	-1.355	$-.235$
Female	-1.765	.188	-9.350^{**}	.000	-2.136	-1.394

Note: $** p < .01$.

on marital quality. In the case of females, one unit of Pphubbing score produced a decrease of -1.765 units in marital quality.

Figure 1 shows that the intensity of the links between Pphubbing and marital quality is stronger for females than it is for males. This means that Pphubbing behaviour matters more for women's views of the quality of their marriages than those of men. Hence, the second hypothesis of this study is supported, since gender is seen to have a significant moderating effect on the relationship between Pphubbing and marital quality.

The moderation analysis was performed using Hayes's SPSS macro PROCESS analysis, and it showed that age moderates the relationship between Pphubbing and marital quality. Here, too, the overall model was significant with $p < .001$, $F(7, 382) = 36.846$, and an effect size R^2 of $.301$. The conditional effect of Pphubbing on marital quality with respect to age-group could be observed in Table 4.

The relationship between Pphubbing and marital quality was significant among the participants aged

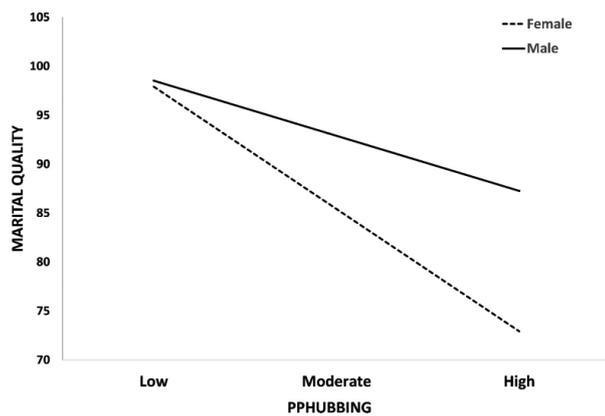


Figure 1. Slopes depicting the relationship between Pphubbing and Marital Quality by gender.

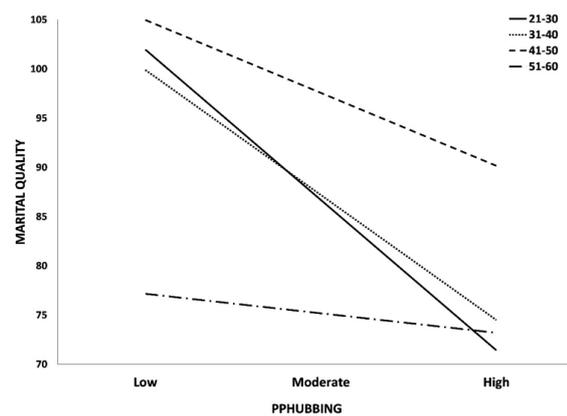


Figure 2. Slopes depicting the relationship between Pphubbing and Marital Quality by age group

Table 4. Conditional Effect of Pphubbing on Marital Quality by Age Group

Age Group	Effect	se	t	p	LLCI	ULCI
21-30	-2.157	.4576	-4.7145**	.000	-3.057	1.257
31-40	-1.794	.248	-7.2143**	.000	-2.283	1.305
41-50	-1.0461	.2853	-3.6665**	.003	-1.607	.485
51-60	-.280	.4504	-.6219**	.534	1.165	.605

Note: ** $p < .01$

21- 30, 31- 40, and 41-50. The effect of Pphubbing on marital quality decreased correspondingly with the increase of age. Meanwhile, the relationship between Pphubbing and marital quality was not significant among participants aged 51-60. This means that Pphubbing had no relationship with marital quality among the participants in this eldest age range.

Figure 2 shows the intensity of the relationship between Pphubbing and marital quality. The intensity declined accordingly across the age-groups from 21-30, 31-40, 41-50, to 51-60. The intensity of the link between Pphubbing and marital quality is strongest among the participants aged 21-30. This means that Pphubbing behaviour matters more to the marital quality of participants aged 21-30 than to that of the participants in any of the other age groups. The intensity of the relationship between Pphubbing and marital quality was weakest among the participants aged 51-60. In fact, Pphubbing behaviour did not have any effect on marital quality among these participants.

Discussion

The Negative Relationship between Pphubbing and Marital Quality

By expanding the existing knowledge of the harmful effects of Pphubbing behaviour on romantic relationships, the present study has shed additional light on the relationship between this behaviour and the quality of marriage. One of the important findings of this study is the negative relationship between Pphubbing and marital quality. The negative relationship here means that the more the participants felt they had been phubbed by their partners, the lower they were likely

to rate the quality of their marriage. This finding addresses a gap in the current literature, since this research appeared to be the first study to investigate the relationship between Pphubbing and marital quality in the Malaysian context.

The negative relationship between Pphubbing and marital quality might be a reflection of the technological determinism theory. According to this theory, technology is seen as the main governing force that drives the evolution of the social structure and of cultural values in society (Smith & Marx, 1994). Assessed in light of this theory, Pphubbing behaviour and couple's marital quality would be correlated because technology, in this case the smartphone that acted as a distraction in the interactions between married couples, would have led to changes in the couple's marital quality. Such changes might take the form of new communication and conflict resolution patterns within the couples, leading to a decrease in time spent together, additional conflicts, a loss of exclusive attention, an intensification of feelings of jealousy, and other problems (Turkle, 2011; McDaniel & Coyne, 2016; Drago, 2015; Krasnova et al., 2016; Robert & David, 2016).

Meanwhile, the displacement hypothesis provides another interesting framework in which to view these results. This hypothesis might tell that when people spend more time on their phones, they tend to minimize interaction time with their partner. This would reduce relationship satisfaction and marital quality in couples. Furthermore, the amount of time and money we spend on a specific medium will displace the time and money we spend on other media activities and non-media tasks. This is because, for most people, the amount of time and money available to spend is limited (Lee & Leung, 2008). This could help explain the relationship between Pphubbing and marital quality as well, since the time or attention spent on the smartphone has displaced the time spent together and taken away from the attention given to their partner. This might account for the negative relationship between Pphubbing and marital quality in this study, then, since spending time together and paying attention to one's partner are very important in a healthy relationship

(Fein, 2009; Leggett & Rossouw, 2014; McDaniel & Coyne, 2016).

Gender as a Moderator

This study found that gender acts as a significant moderating factor in the relationship between Pphubbing and marital quality. Gender alters the strength of the relationship between Pphubbing and marital quality, as the impact of Pphubbing on marital quality is stronger for females than males. Given that there is scant research on whether males and females are affected differently by Pphubbing behaviour, this study fills a gap in the current literature.

Karadağ et al. (2015) found that females are more likely to engage in phubbing behaviour because of their addictions to the smartphone, SMS, and social media. However, males are more likely to engage in phubbing behaviour because of internet and game addiction. According to a survey by Coyne et al. (2012), the time men spent on playing video games was significantly correlated with spousal conflict over such play. This is because conflict arises when the time spent on video games displaces the time that could have been spent with one's spouse or partner. Similarly, Ahlstrom et al. (2012) in a study of online game players found that the time spent on gaming had created conflict among the couples studied. Meanwhile, 70% of the women in the sample of a study by McDaniel and Coyne (2016) reported that smartphones regularly interrupted their interactions with their partners. This caused conflict over the use of technologies within the relationship and led the female participants to have more depressive symptoms and lower relationship satisfaction.

Expectancy theory (Burgoon & Hale, 1987; Burgoon, 1993) can also shed some light on these results. Under this theory, it can be said that females expect their partners to pay more attention to them while they are communicating. Women feel discomfort and become agitated when their partner does not behave as expected, in this case paying more attention to their phones than to their wives. This may also may impact marital quality.

These findings of other studies show that the usage of smartphones in a relationship matters more to females, conclusions that in turn support the finding of the present study that gender has a significant moderating effect on the relationship between Pphubbing and marital quality.

Age as a Moderator

The results of this study showed that the effect of Pphubbing on marital quality was also moderated by age. The relationship between Pphubbing and marital quality was significant among the age groups of participants who were 21-30, 31-40, and 41-50 years old. However, the relationship between Pphubbing and marital quality was not significant among the group aged 51-60. The intensity of Pphubbing and marital quality declines consistently across the age groups from

21-30, 31-40, 41-50, to 51-60. This might be due to the mobile subscriptions of the different age groups in Malaysia. According to the statistics provided by the Malaysian Communications and Multimedia Commission (2018), 47.4% of mobile users in Malaysia are aged 20-34. In other words, smartphone users in Malaysia are mainly young adults. At the same time, people are more likely to engage in Pphubbing behaviour when they own a smartphone, and Pphubbing behaviour was reported to occur more frequently among younger respondents aged between 18 and 29 (Lenhart & Duggan, 2014). These might explain why age appeared to be a significant moderator in the present study, as the study showed differences in the strength of the relationship between Pphubbing and marital quality in the different age groups. The effect of Pphubbing on marital quality appeared to be the strongest among participants aged 21-30 and the weakest among the participants aged 51-60.

Conclusion

Smartphones and digital technology have become an essential part of our lives. However, they also have created many new phenomena that are yet to be explored and that may be cause for concern. In this research, we focused on Pphubbing, specifically to investigate the relationship between this phenomenon and marital quality. Pphubbing appeared to have a significant negative correlation with marital quality. This means that the more the participants felt they had been phubbed by their partner, the lower they rated their quality of marriage. It should be considered that because this is a correlation study, it was not able to establish whether Pphubbing behaviour affects people's marital quality, or whether the causality is the other way round in Malaysian culture.

In this study, the impact of Pphubbing on marital quality was stronger among females than among males. Echoing previous findings that numerous smartphone-related behaviours can be different in males and females, the present research found that different genders may be affected differently by Pphubbing behaviour in their partners. The effect of Pphubbing on marital quality also appeared to be stronger among younger participants. The marital quality of elder participants in this study (aged 51-60) had no relationship with Pphubbing behaviour.

It is recommended that future studies conduct more research on this important topic among couples in different countries and cultures. This study was done in English, but it is recommended to use questionnaires in different languages, since Malaysia is a multi-lingual country. Additionally, further studies could use different research design to determine whether there is any direction of flow in the relationship between Pphubbing and marital quality.

The result of the study could help married couples achieve improved marital quality. It could also have implications for several practices such as marriage

counselling and pre-marriage education, helping professionals raise couples' awareness of the factors that lead to the failure of a marriage.

Limitations

This research was an attempt to study the relationship between Pphubbing and marital quality and to explore the moderating roles of gender and age in this relationship. However, there are issues and limitations in this study that should be highlighted. One of the main matters is the role of marital duration in the relationship between Pphubbing and marital quality. As discussed earlier, age as one of the variables had a significant moderating role in this relationship. However, it is important to explore whether the duration of the marriage also moderates the association between Pphubbing and marital quality. This is because couples who have been living together longer may have developed relationship characteristics such as trust, mutual knowledge, a lesser tendency to seek attention from their spouse, etc., which insulate their marital quality from the influence of phubbing by a partner. Therefore, the moderating roles of age and marital duration should be linked together, and this issue needs deeper investigation. Future studies should consider the role of marital duration when exploring Pphubbing and marital quality.

Author's Disclosure Statement

There are no conflicting interests.

Acknowledgement

We would like to thank Professor Datuk Dr Sufean Hussin for advising and assisting us in the research and analysis.

References

- Ahlstrom, M., Lundberg, N. R., Zabriskie, R., Eggett, D., & Lindsay, G. B. (2012). Me, my spouse, and my avatar. *Journal of Leisure Research, 44*(1), 1-22. <https://doi.org/10.1080/00222216.2012.11950252>
- Baron, N. S., & Campbell, E. M. (2012). Gender and mobile phones in cross-national context. *Language Sciences, 34*(1), 13-27. <https://doi.org/10.1016/j.langsci.2011.06.018>
- Boelen, M. (2014). *Hello! I am sitting right in front of you*. Tilburg University.
- Boo, S.-L. (2014, March 3). *One divorce in Malaysia every 10 minutes*. Malay Mail Online. <http://www.themalaymailonline.com/malaysia/article/one-divorce-in-malaysia-every-10-minutes>
- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology, 12*(1e2), 30e48. <https://doi.org/10.1177%2F0261927X93121003>
- Burgoon, J. K., & Hale, J. L. (1987). Validation and measurement of the fundamental themes of relational communication. *Communication Monographs, 54*(1), 19e41. <https://doi.org/10.1080/03637758709390214>
- Cameron, A., & Webster, J. (2011). Relational outcomes of multicommuting: integrating incivility and social exchange perspectives. *Organization Science, 22*, 754e771. <https://doi.org/10.1287/orsc.1100.0540>
- Chotpitayasunondh, V., & Douglas, K. M. (2016). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone. *Computers in Human Behavior, 63*, 9-18. <https://doi.org/10.1016/j.chb.2016.05.018>
- Coyne, S. M., Busby, D., Bushman, B. J., Gentile, D. A., Ridge, R., & Stockdale, L. (2012). Gaming in the game of love: Effects of video games on conflict in couples. *Family Relations, 61*(3), 388-396. <https://doi.org/10.1111/j.1741-3729.2012.00712.x>
- Coyne, S. M., Stockdale, L., Busby, D., Iverson, B., & Grant, D. M. (2011). "I luv u!": A descriptive study of the media use of individuals in romantic relationships. *Family Relations, 60*(2), 150-162. <https://doi.org/10.1111/j.1741-3729.2010.00639.x>
- DeVellis, R.F. (2003). *Scale development: Theory and applications* (2nd ed.). Sage.
- Drago, E. (2015). The effect of technology on face-to-face communication. *The Elon Journal of Undergraduate Research in Communications, 6*(1), 13-19. <http://www.elon.edu/docs/e-web/academics/communications/research/vol6no1/02dragoejspring15.pdf>
- Fein, D. J. (2009). *Spending Time Together: Time Use Estimates for Economically Disadvantaged and Nondisadvantaged Married Couples in the United States*. MDRC. https://www.acf.hhs.gov/sites/default/files/opro/spending_time_together.pdf
- Francis, F. K. (2012). *A comparative study on the marital quality of couples with and without pre-marriage education* (Doctoral dissertation). Mahatma Gandhi University, Kottayam.
- Graham, J. M., Liu, Y. J., & Jeziorski, J. L. (2006). The dyadic adjustment scale: A reliability generalization meta-analysis. *Journal of Marriage and Family, 68*(3), 701-717. <https://doi.org/10.1111/j.1741-3737.2006.00284.x>
- Ha, Y. M., & Hwang, W. J. (2014). Gender differences in internet addiction associated with psychological health indicators among adolescents using a national web-based survey. *International Journal of Mental Health and Addiction, 12*(5), 660-669. <https://doi.org/10.1007/s11469-014-9500-7>
- Inbar, O., Joost, G., Hemmert, F., Porat, T., & Tractinsky, N. (2014). Tactful calling: investigating asymmetric social dilemmas in mobile communications. *Behavior & Information Technology, 33*, 1317e1332. <https://doi.org/10.1080/0144929X.2014.928743>
- Jang, M. H., & Ji, E. S. (2012). Gender differences in associations between parental problem drinking and early adolescents' internet addiction. *Journal for Specialists in Pediatric Nursing, 17*(4), 288-300. <https://doi.org/10.1111/j.1744-6155.2012.00344.x>
- Karadağ, E., Tosuntaş, Ş. B., Erzen, E., Duru, P., Bostan, N., Şahin, B. M., ... & Babadağ, B. (2015). Determinants of phubbing, which is the sum of many virtual

- addictions: A structural equation model. *Journal of behavioral addictions*, 4(2), 60-74. <https://doi.org/10.1556/2006.4.2015.005>
- Krasnova, H., Abramova, O., Notter, I., & Baumann, A. (2016). Why phubbing is toxic for your relationship: Understanding the role of smartphone jealousy among "generation Y" users. *Twenty-Fourth European Conference on Information Systems (ECIS)*, Research Gate. <file:///C:/Users/drson/Downloads/WhyPhubbingisToxicForYourRelationshipFINALECIS.pdf>
- Lee, P. S., & Leung, L. (2008). Assessing the displacement effects of the Internet. *Telematics and Informatics*, 25(3), 145-155. <https://doi.org/10.1016/j.tele.2006.08.002>
- Leggett, C., & Rossouw, P. J. (2014). The impact of technology use on couple relationships: A neuropsychological perspective. *International Journal of Neuropsychotherapy*, 2(1), 44-99. <https://doi.org/10.12744/ijnpt.2014.0044-0099>
- Lenhart, A., & Duggan, M. (2014). Couples, the Internet, and social media. *Pew Internet and American Life Project*. <http://www.pewinternet.org/2014/02/11/couples-the-internet-and-social-media/>
- Malaysian Communications and Multimedia Commission. (2018). *Handphone users survey 2018*. Malaysian Communications and Multimedia Commission. <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/HPUS2018.pdf>
- McDaniel, B. T., & Coyne, S. M. (2016). "Technoference": The interference of technology in couple relationships and implications for women's personal and relational well-being. *Psychology of Popular Media Culture*, 5(1), 85. <https://doi.org/10.1037/ppm0000065>
- Moser, C., Schoenebeck, S. Y., & Reinecke, K. (2016, May). Technology at the table: Attitudes about mobile phone use at mealtimes. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 1881-1892). <http://dx.doi.org/10.1145/2858036.2858357>
- Roberts, J. A., & David, M. E. (2016). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. *Computers in Human Behavior*, 54, 134-141. <https://doi.org/10.1016/j.chb.2015.07.058>
- Smith, M. R., & Marx, L. (1994). *Does technology drive history? The dilemma of technological determinism*. MIT Press.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 15-28. <https://doi.org/10.2307/350547>
- Spanier, G. B. (1989). *Dyadic Adjustment Scale (DAS): Manual*. Multi-Health Systems. https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Love_and_Compassion_Research_GENERAL_RELATIONSHIP_SATISFACTION.pdf
- Steinmetz, K. (2013, August 6). *Why the 'Stop Phubbing' Campaign Is Going Viral*. Time. <http://techland.time.com/2013/08/06/why-the-stop-phubbing-campaign-is-going-viral/>
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. Basic Books.
- Wang, X., Xie, X., Wang, Y., Wang, P., & Lei, L. (2017). Partner phubbing and depression among married Chinese adults: The roles of relationship satisfaction and relationship length. *Personality and Individual Differences*, 110, 12-17. <https://doi.org/10.1016/j.paid.2017.01.014>
- Wang, X., Zhao, F., & Lei, L. (2019). Partner phubbing and relationship satisfaction: Self-esteem and marital status as moderators. *Current Psychology*, 1-11. <https://doi.org/10.1007/s12144-019-00275-0>