Review Article

Phubbing: A literature review of the technological invasion that has changed lives for the last decade

Liyana Thabassum[1]

Guidance and Counseling Department, Ibn Haldun University, Turkey

Article Info	Abstract
	Technology and its chief by-product, 'the smartphone', have presented human lives with ease and comfort. The smartphone, a revolutionary invention, has changed the playing field of the communications industry, taking the idea of virtual one-to-one communications to the next level. However, like all boons, this one too has its share of shortcomings and challenges that significantly affects the face of communication that it was supposed to enhance. One such challenge has provoked immense research on it; this challenge is the phenomenon of 'Phubbing'. This decade-old term has evolved with the sporadic growth of the smartphone and its multifaceted use. This term was born as an ode to the peculiar 21st-century phenomenon of ignoring the person/people in front of you to pay attention to your smartphone. Phubbing involves three components: the phubber (the doer), the phubbee (the victim), and the social context in which phubbing takes place. This context can be a professional setting, within romantic relationships, or a public setting. The consequences of phubbing vary from strained relationships, broken trust, feelings of jealousy, anxiety, and depression among victims. Considering the novelty of the phenomenon and its consequences on human communication and relationship building, it becomes pertinent that further research is done in this area. A decade's worth of research has done little in exploring the facets of the phubbing phenomenon. The prime purpose of this paper is to understand and analyze the last decade of literature regarding Phubbing and see how the term and the understanding of it have evolved over time. Literature findings suggest two broad understandings of Phubbing, one as a form of addiction and the other as a social phenomenon. The paper explores these two broad understandings of phubbing behaviors and also expands on the challenges faced in categorizing this new phenomenon. Additionally, the paper also focuses on different forms of phubbing such as boss phubbing, partner phubbing, classroom phubbing, etc. The paper also tries to explore phubbing between different genders and whether gender makes a difference in such scenarios.

Introduction

Humans have thrived millennia finessing the elements of their communication. What started out as hand gestures and basic sounds, became symbols, words, and then language. After carvings, papyrus, and paper came the FAX, e-mail, and Skype. Communication itself has evolved with the evolution of human beings and has become crucial to human survival. Communication has had the power to make and break nations, to start and end wars, to create and destroy. Humans have since been refining the process of communication to satisfy the needs of a technology-driven world and to make possible the impossible by connecting people from across the world in real-time. Thus, the smartphone was born. As of the year 2019, there are 4 billion smartphone users across the world spending an average of 6.5 hours on the internet per day (We are Social, 2019). What makes this a wonder device? The smartphone has given a new meaning to virtual communication. What was traditionally a process that entails a 'sender' who wishes to pass across a 'message' to the 'receiver' through a certain 'medium' (Nazir, 2020) has become even more efficient through this

[1] Master student, Guidance and Counseling Department, Ibn Haldun University, Turkey. E-mail: liyana.thabassum@ibnhaldun.edu.tr Orcid: 0000-0001-9047-4995

wonder device, enhancing the speed and accuracy of information sharing (Nazir & Piskin, 2015). Smartphones have decentralized our communication systems, allowing us to communicate with multiple other entities from across the globe in real-time (Srivastava, 2005). With just the press of some buttons, one is able to transport themselves to a virtual room where they can communicate with their loved ones, business partners, and strangers, without worrying about the distance. Additionally, the smartphone hosts a wide array of different applications for entertainment, organization, and other purposes. From playing games to buying furniture, every single "needs" and "wants" are available at the tip of one's fingers. Evidently, the smartphone has become an irreplaceable part of our lives, a boon to modern society. However, the multifaceted purposes of smartphones have also made us slaves to this "wonder gadget". Needless to say, the smartphone has become the necessary evil in everyday lives. The overwhelming presence of this device in peoples' lives has brought about a selection of different issues that influence their physical, socio-emotional, and psychological selves. One of its major impacts comes at the expense of damaging the same interaction and communication for which the smartphone was originally acclaimed for. Specifically, this impact was brought on by the phenomenon called 'Phubbing'.

This paper provides an understanding of the phenomenon of Phubbing, its determinants, and its impacts on human lives, through a review of different literature. Phubbing research is only a decade old and is a relatively unexplored territory. A comprehensive idea about phubbing behaviors is yet to be uncovered and therefore, this review may provide us with a contemporary idea of phubbing as obtained from a decade worth of literature. The paper will look into the components of phubbing, its determinants, and the different types of phubbing behaviors observed between people in different social contexts.

Phubbing and its Components

The phubbing phenomenon was brought forth with the advent of smartphones and the associated addiction (Karadağ et al., 2015). The term, however, came into existence when The Macquarie Dictionary as part of a campaign by an advertising agency McCann Melbourne, invited authors, poets, linguists, and lexicologists, among others to come up with a term that would address the behavior of ignoring others while focusing on one's smartphone. Naturally, the need for such a term arose from the fact that smartphones were increasingly being used as a means to cut off face-to-face communications, either intentionally or unintentionally. The term 'Phubbing' was thus born and defined as the act of snubbing or ignoring a person by focusing on one's smartphone in social settings (Nazir & Piskin, 2015). In other words, it is the act of ignoring others while looking at one's phone, be it to check social media, answer a text message, or simply to browse the internet (Chotpitayasunondh & Douglas, 2018). The concept of phubbing is intricately connected to its components; the phubber, Phubbee, and the social context where phubbing takes place (Nazir & Piskin, 2015). The phubber is the one who engages in the act of Phubbing, and the Phubbee the recipient (Chotpitayasunondh & Douglas, 2018). A social context is quite important for an act to be defined as phubbing, for there needs to be a recipient of the phubbing behavior in a social context for it to be phubbing.

Unfortunately, phubbing behaviors are increasingly considered normative in today's society. The reason for this according to Chotpitayasunondh and Douglas (2016) can be understood through the concept of reciprocity from social psychology, which maintains that phubbing by use of smartphones or other tech gadgets may be reciprocated intentionally or unintentionally by those who were phubbed. When this repeats over time, with people responding to phubbing by engaging in phubbing behaviors themselves, the behavior becomes normative. Similarly, phubbing itself is said to predict the extent to which others are phubbed, ensuring that the phubber initiates a self-reinforcing cycle of phubbing behaviors making it normative (Chotpitayasunondh & Douglas, 2018). On the other hand, certain others don't consider the virtual interactions through a smartphone to be any different from actual face-to-face interactions (Ergün, Göksu & Sakız, 2020). Therefore, phubbing someone while in a virtual conversation on the smartphone is not considered an issue. Phubbing being increasingly normative in itself is a serious concern; however, phubbing affects not just the phubber or the victim but also another generation of human beings. Research evidence suggests that parents who are phubbers can expose their children to a higher risk of smartphone addiction (Xie, Chen, Zhu & He, 2019).

The underlying mechanism behind phubbing can be explained in terms of two other components of communication, namely verbal and nonverbal forms of communication (Nazir, 2020). Of course, verbal communication entails spoken words and sentences. Nonverbal communication, on the other hand, comprises of unspoken words and behaviors such as body language, posture, facial expression, etc., and is instrumental in getting the complete information across to the receiver. The combination of verbal and nonverbal forms of communication is significant to an effective conversation (Nazir, 2020). However, the nonverbal aspects of communication, which

make up most of the message, are often not perceived by the receiver (phubber) since they are focused on their phones (Nazir & Piskin, 2015). Hence, the message is left incomplete and the receiver is unable to grasp it in its entirety. Phubbers exhibit what is known as the 'absent-presence', a phenomenon within a conversation wherein phubbers are physically present but mentally and emotionally absent (Nazir, 2020). Taking an example of the importance of eye contact in face-to-face conversations, one can appreciate the importance of immediacy cues (non-verbal communication) for effective communication. However, phubbers are unable to receive and process these immediacy cues, making it seem as if they are disinterested in the conversation or just plain rude (Kelly, Miller-Ott & Duran, 2017; Karadağ et al., 2016; Rothwell, 2010). Hence, the quality of the conversation deteriorates resulting in less meaningful face-to-face conversations (Nazir & Bulut, 2019b). Furthermore, phubbing has negative effects on affiliation through which people make relational judgments, resulting in awkward and distant relationships (Nazir & Piskin, 2015).

Phubbing creates an atmosphere where people find their interactions to be of poor quality, their relationships less satisfactory, and hence become quite disappointed or dissatisfied with the interaction (Chotpitayasunondh & Douglas, 2018; Vanden Abeele, Antheunis & Schouten, 2016). Apart from this, phubbed individuals begin to feel that they can no longer trust their partners (phubber) (Cameron & Webster, 2011) and experience jealousy (Cizmeci, 2017; Karsanova, Abramova, Notter & Baumann, 2016). Phubbing and unrestrained smartphone usage not only affects interpersonal relationships and interactions (Dwyer, Kushlev & Dunn, 2018; Karadağ et al., 2016), but also causes stress (Lepp, Barkley, & Karpinski, 2014), loneliness, depression (Park, 2005) and anxiety when separated from their phones (Ling, 2005; Park, 2005). Similarly, Phubbing was found to be negatively correlated with loneliness and positively with depression, somatization, anxiety, negative self, hostility, and phone use duration (Ergün, Göksu & Sakız, 2020). These are just some of the ways that phubbing can impact one's mental health, social, and professional lives.

It is important to note, however, that phubbing is not necessarily an intentional act and could just likely be an unintentional act that is a product of a rather busy day, a need to socialize virtually, or even a smartphone addiction. This is evident from how a lack of eye contact could be interpreted/misinterpreted in different ways; either as social rejection or social awkwardness (Chotpitayasunondh & Douglas, 2018). Phubbing can also be used by certain individuals to escape unwanted social situations, or in the presence of their significant others more so than with others (Ergün, Göksu & Sakız, 2020). Additionally, people may resort to phubbing as a way to escape from the lack of satisfaction in their lives or as a diversion from somatic symptoms (Ergün, Göksu & Sakız, 2020). Phubbing has also been considered to be an act of introversion or the result of a smartphone/social media addiction (Nazir & Bulut, 2019a). These highly plausible and varying explanations for phubbing have led to further extensive research on the probable determinants of this phenomenon.

Is Phubbing an addiction

Phubbing is said to have a multidimensional structure, of which mobile phone addiction, gaming addiction, internet addiction, and social media addiction, are important determinants (Nazir & Bulut, 2019a; Karadağ et al., 2015). Similarly, Chotpitayasunondh and Douglas (2016) revealed that internet addiction, self-control, and fear of missing out predict smartphone addiction, which in turn predicts phubbing behaviors. Fear of missing out refers to the feelings of anxiety that arise out of the belief that one is missing out on rewarding experiences that others have, and predicts phubbing both directly and indirectly (Fang, Wang, Wen & Zhou, 2020; Franchina et al., 2018). Naturally, phubbing has been mistaken as a form of mobile phone addiction. That is, when people excessively use smartphones, they do so to reduce loneliness, depression, or the anxiety they feel when separated from their phones (Park, 2005), and this can often be mistaken for phubbing. Furthermore, phubbing's close association with impulse controls or a lack thereof can explain why phubbing is often mistaken for addiction (Erzen, Odaci & Yeniçeri, 2019). Since addiction is also a problem of impulse control, it is assumed that both are strongly related to each other.

A study looked into the relationship between phubbing and the types of addiction mentioned above to reveal that mobile phones, messaging services, internet addiction, gaming addiction, and social media addiction significantly predict Phubbing (Karadağ et al., 2015). Messaging services in smartphones are perhaps the most used ones, apart from social media or gaming applications. Additionally, now that social media platforms and internet browsing are easily available in smartphones, people spend even more time in front of a mobile phone screen (Karadağ et al., 2015). Furthermore, the emotional support that one receives from social media significantly predicts phubbing behaviors (Fang et al., 2020). When people tend to busy themselves with these smartphone services in specific social settings where others are present, such behavior may be roughly translated to phubbing behaviors. Therefore, one can

conclude that the above-mentioned addictions predict phubbing behavior, but to say that phubbing is another form of smartphone addiction would not be entirely correct. Furthermore, a behavior can only be termed phubbing if there are three entities involved: a Phubber, Phubbee, and social setting. In other words, a smartphone or internet addiction does not necessitate the presence of another person, but phubbing does.

Studies have also looked into how personality may lay the groundwork for phubbing behaviors to take root. With reference to the Big Five Personality model (extroversion, agreeableness, openness, conscientiousness, and neuroticism), neuroticism seemed to positively predict Phubbing behaviors (Balta, Emirtekin, Kircaburun & Griffiths, 2018; T'ng, Ho & Low, 2018) whereas openness negatively predicted Phubbing behaviors (T'ng, Ho & Low, 2018). A study by Erzen et al. (2019) revealed that neuroticism contributed negatively, and conscientiousness contributed positively to predicting phubbing behavior. Furthermore, the study also revealed that no significant relationship was found between phubbing and openness, extraversion, or agreeableness (Erzen, Odaci & Yeniçeri, 2019). The association between phubbing and depression/loneliness can also be explained by the fact that neuroticism is also closely associated with depression (Erzen, Odaci & Yeniçeri, 2019).

According to Nazir and Bulut (2019b) certain personal and situational factors may also act as determinants to phubbing behavior. For example, introversion, weariness/exhaustion, boredom, playing a game, or waiting for important news, could all be determinants to phubbing behaviors and misconstrued as addiction (Nazir & Bulut, 2019b; Bayer, Campbell, & Ling, 2016). Similarly, trait boredom (Al-Saggaf, MacCulloch & Wiener, 2018) and an inability to sustain attention (Hadar et al., 2017) have also been identified as a predictor of phubbing. That is, individuals may involuntarily return to their smartphones during a face-to-face conversation because they are unable to focus their attention on one stimulus. On the other hand, some authors have tried to pass off phubbing as a form of social exclusion (Chotpitayasunondh & Douglas, 2018; David & Roberts, 2017). Phubbing is similar to social exclusion in that both involve being ignored or excluded from social interactions, although the latter is exclusively for settings where a smartphone is involved. Further, the authors maintained that similar to social exclusion, phubbing causes debilitating effects on some of our most fundamental needs: such as the need to belong, the need for a meaningful existence, the need for self-esteem, and the need for control (Chotpitayasunondh & Douglas, 2018). Therefore, according to the authors, phubbing can be considered a form of social exclusion or ostracism. From the literature given above, it is understandable that phubbing as a phenomenon is still foreign to academic circles. However, literature has tried to uncover the different types of phubbing that can be encountered in different social settings.

Forms of Phubbing

Phubbing can be found in all kinds of different social settings, be it professional, classroom, or relationship settings. In whatever setting it may be in, phubbing interferes with the interactional process causing, what is known as, 'technoference' in relationships (McDaniel & Coyne, 2016). Phubbing in a professional setting, loosely termed 'boss phubbing', is defined as the employees' perception that their bosses are distracted by smartphones instead of focusing on the employees (Nazir & Bulut, 2019a). In a work setting, employees who face phubbing by superiors tend to feel unappreciated, their work undervalued, leading to a reduction in work efficacy (David & Roberts, 2017; Li & Tan, 2013). Furthermore, professional boundaries are considered broken as phubbed employees lose trust in their supervisors (Li & Tan, 2013). They may feel that their supervisors do not have their best interests at heart and care very little for them (Abeele, Antheunis & Schouten, 2016). Considering how important trust is in an employer-employee relationship, such issues can negatively affect the efficacy of the work and the security of the work environment.

It is conceivable that phubbing occurs relatively more often between partners in a romantic relationship. Phubbing in the presence of a spouse or partner is termed 'partner phubbing' and is detrimental enough to create weaker relationships (Nazir & Bulut, 2019a; Cizmeci, 2017). The presence of smartphones and the resulting phubbing can interfere with partner-to-partner communications and interactions (McDaniel & Coyne, 2016). Furthermore, phubbing among partners with an anxious attachment style can lead to more confrontational reactions (David & Roberts, 2017). Phubbing can lead to partners questioning their value in the relationship, questioning their closeness, their interactions, and the overall quality of conversations (Przybylski & Weinstein, 2012), further affecting relationship satisfaction between partners (Nazir & Bulut, 2019a). Phubbing is also known to affect one's basic fundamental needs such as the need for belongingness, which is a deep enough emotional scar that may cause maladjustments later on in life (Chotpitayasunondh & Douglas, 2016).

Classroom phubbing is yet another type that can cause major disruptions in classes (Abramova, Baumann, Krasnova & Lessman, 2017) and affect the learning process (Nazir & Bulut, 2019a). Extensive usage of smartphones during classes, for purposes other than learning, may be considered classroom phubbing. It is quite common in lecture halls wherein students, instead of focusing on the lesson, busy themselves with their smartphones effectively phubbing the professor/teacher in the process (Nazir, 2020). Literature has shown that a major percentage of students across the world use smartphones in class, disrupting lectures for other students and professors (Tindell & Bohlander, 2012; Jacobsen & Forste, 2011). Nazir (2020) tried to understand the influence of phubbing on professors and revealed that 41% of the students from their study reported using smartphones at least once during classes to browse through websites and social media unrelated to the contents of the class. The results of the study indicated that teachers belonging to the 30-40 age group felt incompetent, unmotivated, and disappointed as a result of phubbing, whereas teachers above the age of 40 were able to view the phubbing behavior positively and related it to the generation gap between them and their students (Nazir, 2020). Classroom phubbing has also been associated with an inability to multi-task enabling students to focus solely on their phones instead of also focusing on the work at hand (Nazir & Bulut, 2019a). This finding is even more significant given multitasking is strongly related to phubbing behaviors (Vorderer, Hefner, Reinecke & Klimmt, 2017).

Phubbing and Gender

Gender plays an important role in the manifestation of phubbing behaviors. Literature maintains that females tend to phub more frequently than males (Chotpitayasunondh & Douglas, 2016; Karadağ et al., 2015). A study by Karadağ et al. (2015) showed that mobile phones, social media, and SMS addiction predict phubbing behaviors more strongly in females than in males. On the other hand, internet and game addiction showed the same results more strongly in males than in females. Similarly, boys ranked higher in internet addiction and deviant peer affiliation than girls (Liang, Zhou, Yuan, Shao & Bian, 2016). Gender has also been identified as a moderator for the relationship between being phubbed and perceived social norms of phubbing, further revealing that the relationship was stronger for males than females (Chotpitayasunondh & Douglas, 2016). In other words, males were more likely to develop a social norm of phubbing after being phubbed themselves. Similarly, gender also moderated the relationship between mobile phone addiction and conformity, wherein boys showed a higher correlation between the two variables than did girls (Chen, Zhang, Gong, Zhao, Lee & Liang, 2017). In yet another study, Xie et al. (2019) revealed that gender moderated the relationship between parent's phubbing and smartphone addiction in children through deviant peers. In other words, parent's phubbing leads children (boys more than girls) to develop deviant peer relations and smartphone addiction (Xie et al., 2019). The presence of gender in phubbing literature, although present, is not comprehensive.

Conclusion

The term phubbing was coined from the words 'phone' and 'snubbing' to refer to the act of using one's phone during social interaction with other(s) present (Vanden Abeele, Hendrickson, Pollmann & Ling, 2019). In other words, phubbing involves behaviors such as looking at one's smartphone, checking social media, answering text messages, or simply browsing the internet, and ignoring the people around (Chotpitayasunondh & Douglas, 2018). It is an act of dismissal in social settings, knowingly or unknowingly. The large amount of time that people spend using smartphones has naturally led to the normalization of phubbing behaviors. This is further exacerbated through a reciprocity effect of sorts, whereby the victims of phubbing behavior engage in phubbing behaviors themselves. Phubbing has been established to have severe negative consequences on the communication process, quality of relationships, and trust between partners. Apart from these, phubbing has also been associated with negative emotionality, depression, and attachment anxiety (McDaniel & Drouin, 2019; Chotpitayasunondh & Douglas, 2018; Vanden Abeele et al., 2016). The quality of interactions is often decided by the level of intimacy or affiliation one is able to achieve. However, when people are focused on their phones instead of on people, they miss out on different non-verbal immediacy cues, further hindering the development of intimacy of feelings of affiliation (Przybylski & Weinstein, 2012). Due to its tenacious hold on human lives, the smartphone and the resulting phubbing are becoming increasingly normative in this technology-driven world. Phubbing can happen anywhere, from classrooms to bedrooms, on a bus, or at a party. Both professional and romantic relationships are negatively affected when faced with phubbing behaviors (McDaniel & Drouin, 2019). The phubbing phenomenon is just a decade old and this explains the rising interest in the field. However, this also explains that literature is yet to understand it completely.

Phubbing is more often than not mistaken for addiction, and literature suggests it is because of the close relationship between phubbing and some forms of addictions. Mobile phone addiction, gaming addiction, internet

addiction, social media addiction, self-control, fear of missing out, impulse control significantly predicted Phubbing (Erzen et al., 2019; Nazir & Bulut, 2019a; Chotpitayasunondh & Douglas, 2016; Karadağ et al., 2015). Similarly, personality factors such as neuroticism and openness were also found to predict phubbing (Balta et al., 2018; T'ng et al., 2018). Although phubbing is closely related to these factors, it is a stand-alone phenomenon that needs to be studied as such. Smartphones and the internet have become an irreplaceable part of our social and professional lives. We have become slaves to this device, without which trivial day-to-day activities cannot be fulfilled. In such a scenario, it is important to consider all potential solutions to phubbing behavior.

Despite the interest, this topic has garnered over the years, there is still a gap in the conceptualization of the phubbing phenomenon. Literature has tried to explain phubbing, its different components, and types, and the negative consequences of such behavior. However, the issue hasn't received enough academic appreciation. Moreover, the dangers of smartphones and the resulting phubbing phenomenon begs the question: How can we go about addressing the issue of phubbing while navigating the essentials of smartphone and internet usage? What are the methods that could be taken to curb the onslaught of phubbing behaviors? Given the necessity of smartphones in today's era, answering this question would require much more studying.

Biodata of Author

Liyana Thabassum, Masters Students and Research Assistant, Guidance and Counseling Department at Ibn Haldun University E-mail: liyana.thabassum@ibnhaldun.edu.tr ORCID: 0000-0001-9047-4995 Research Interest: Bullying, Effectiveness of Mindfulness in Social anxiety, Relationship between Perceived Discrimination and Self-esteem, Phubbing and mental health.

References

Abramova, O., Baumann, A., Krasnova, H., & Lessmann, S. (2017). To phub or not to phub: Understanding off-task smartphone usage and its consequences in the academic environment. Twenty-Fifth European Conference on Information Systems (ECIS), Guimarães, Portugal.

Al-Saggaf, Y., MacCulloch, R., & Wiener, K. (2018). Trait Boredom Is a Predictor of Phubbing Frequency. *Journal of Technology in Behavioral Science, 4*(3), 245–252. doi:10.1007/s41347-018-0080-4

Balta, S., Emirtekin, E., Kircaburun, K., & Griffiths, M. D. (2018). Neuroticism, trait fear of missing out, and phubbing: The mediating role of state fear of missing out and problematic instagram use. *International Journal of Mental Health and Addiction*, *18,* 628-639

Bayer, J. B., Campbell, S. W., & Ling, R. (2015). Connection Cues: Activating the Norms and Habits of Social Connectedness. *Communication Theory, 26*(2), 128–149. doi:10.1111/comt.12090

Cameron, A.-F., & Webster, J. (2011). Relational Outcomes of Multicommunicating: Integrating Incivility and Social Exchange Perspectives. *Organization Science, 22*(3), 754–771. doi:10.1287/orsc.1100.0540

Chen, C., Zhang, K. Z. K., Gong, X., Zhao, S. J., Lee, M. K. O., & Liang, L. (2017). Examining the effects of motives and gender differences on smartphone addiction. *Computers in Human Behavior, 75*, 891–902. doi:10.1016/j.chb.2017.07.002

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. doi:10.1016/j.chb.2016.05.018

Chotpitayasunondh, V., & Douglas, K. M. (2018). The effects of "phubbing" on social interaction. *Journal of Applied Social Psychology, 48*(6), 304–316. doi:10.1111/jasp.12506

David, M. E., & Roberts, J. A. (2017). Phubbed and alone: Phone snubbing, social exclusion, and attachment to social media. *Journal of the Association for Consumer Research, 2,* 155–163. doi:10.1086/690940

Cizmeci, E. (2017). Disconnected, though satisfied: phubbing behavior and relationship satisfaction. *The Turkish Online Journal of Design, Art and Communication, 7*(2), 364–375. doi:10.7456/10702100/018

Dwyer, R. J., Kushlev, K., & Dunn, E. W. (2018). Smartphone use undermines enjoyment of face-to-face social interactions. *Journal of Experimental Social Psychology, 78*, 233–239. doi:10.1016/j.jesp.2017.10.007

Ergün, N., Göksu, İ., & Sakız, H. (2020). Effects of phubbing: Relationships with psychodemographic variables. *Psychological Reports, 123*(5), 1578-1613.

Erzen, E., Odaci, H., & Yeniçeri, İ. (2019). Phubbing: Which Personality Traits Are Prone to Phubbing? *Social Science Computer Review,* 089443931984741. doi:10.1177/0894439319847415

Fang, J., Wang, X., Wen, Z., & Zhou, J. (2020). Fear of missing out and problematic social media use as mediators between emotional support from social media and phubbing behavior. *Addictive Behaviors, 107,* 106430. doi:10.1016/j.addbeh.2020.106430

Franchina, V., Vanden Abeele, M., van Rooij, A., Lo Coco, G., & De Marez, L. (2018). Fear of Missing Out as a Predictor of Problematic Social Media Use and Phubbing Behavior among Flemish Adolescents. International *Journal of Environmental Research and Public Health, 15*(10), 2319. doi:10.3390/ijerph15102319

Hadar, A., Hadas, I., Lazarovits, A., Alyagon, U., Eliraz, D., & Zangen, A. (2017). Answering the missed call: Initial exploration of cognitive and electrophysiological changes associated with smartphone use and abuse. *Plos One, 12*(7), e0180094. doi:10.1371/journal.pone.0180094

Jacobsen, W. C., & Forste, R. (2011). The Wired Generation: Academic and Social Outcomes of Electronic Media Use Among University Students. *Cyberpsychology, Behavior, and Social Networking, 14*(5), 275–280. doi:10.1089/cyber.2010.0135

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. doi:10.1556/2006.4.2015.005

Karadağ, E., Tosuntaş, Ş. B., Erzen, E., Duru, P., Bostan, N., Mızrak Şahin, B., … Babadağ, B. (2016). The Virtual World's Current Addiction: Phubbing. *Addicta: The Turkish Journal on Addictions, 3*(2). doi:10.15805/addicta.2016.3.0013

Kelly, L., Miller-Ott, A. E., & Duran, R. L. (2017). Sports scores and intimate moments: An expectancy violations theory approach to partner cell phone behaviors in adult romantic relationships. *Western Journal of Communication, 81*(5), 619–640. https://doi. org/10.1080/10570314.2017.1299206.

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. European Conference in Information Systems, Istanbul, Turkey.

Lepp, A., Barkley, J. E., & Karpinski, A. C. (2014). The relationship between cell phone use, academic performance, anxiety, and Satisfaction with Life in college students. *Computers in Human Behavior, 31,* 343–350. doi:10.1016/j.chb.2013.10.049

Li, A. N., & Tan, H. H. (2012). What happens when you trust your supervisor? Mediators of individual performance in trust relationships. *Journal of Organizational Behavior, 34*(3), 407–425. doi:10.1002/job.1812

Liang, L., Zhou, D., Yuan, C., Shao, A., & Bian, Y. (2016). Gender differences in the relationship between internet addiction and depression: A cross-lagged study in Chinese adolescents. *Computers in Human Behavior, 63,* 463–470. doi:10.1016/j.chb.2016.04.043

Ling, R. (2000). "The impact of the mobile telephone on four established social institutions." In: ISSEI2000 Conference of the International Society for the Study of European Ideas. Bergen: Norway,14-18

Rothwell, J. D. (2010). *In the company of others: An introduction to communication* (pp. 65-84). New York: Oxford University Press.

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), 85–98. doi:10.1037/ppm0000065

McDaniel, B. T., & Drouin, M. (2019). Daily technology interruptions and emotional and relational well-being. *Computers in Human Behavior, 99,* 1–8. doi:10.1016/j.chb.2019.04.027

Nazir, T., & Pişkin, M. (2016). Phubbing: A Technological Invasion Which Connected the World But Disconnected Humans. *International Journal of Indian Psychology, 3*, 39-46.

Nazir, T. (2020). Impact of classroom phubbing on teachers who face Phubbing during lectures. *Psychology Research on Education and Social Sciences, 1*(1), 41-47.

Nazir T.& Bulut, S. (2019). Phubbing: a phenomenon that is mending social relationships. *Siberian Journal of Psychology, 74*(2), 101–109.

Nazir, T., & Bulut, S. (2019b). Phubbing and What Could Be Its Determinants: A Dugout of Literature. *Psychology, 10*(6), 819–829. doi:10.4236/psych.2019.106053

Nazir, T. (2020). Face-to-face communication, non-verbal body language and Phubbing: the intrusion in the process. *Russian Journal of Education and Psychology, 11*(2), 22. doi:10.12731/2658-4034-2020-2-22-31

Park, W. K. (2005). Mobile Phone Addiction. *Computer Supported Cooperative Work, 31*(3), 253–272. doi:10.1007/1-84628-248-9_1

Przybylski, A. K., & Weinstein, N. (2012). Can you connect with me now? How the presence of mobile communication technology influences face-to-face conversation quality. *Journal of Social and Personal Relationships, 30*(3), 237–246. doi:10.1177/0265407512453827

Srivastava, L. (2005). Mobile phones and the evolution of social behaviour. *Behaviour & Information Technology, 24*(2), 111–129. doi:10.1080/01449290512331321910

Tindell, D. R., & Bohlander, R. W. (2012). The Use and Abuse of Cell Phones and Text Messaging in the Classroom: A Survey of College Students. *College Teaching, 60*(1), 1–9. doi:10.1080/87567555.2011.604802

T'ng, S. T., Ho, K. H., & Low, S. K. (2018). 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*(2), 159–190. doi:10.17583/rimcis.2018.3318

Vanden Abeele, M. M. P., Antheunis, M. L., & Schouten, A. P. (2016). The effect of mobile messaging during a conversation on impression formation and interaction quality. *Computers in Human Behavior, 62,* 562–569. doi:10.1016/j.chb.2016.04.005

Vanden Abeele, M. M. P., Hendrickson, A. T., Pollmann, M. M. H., & Ling, R. (2019). Phubbing behavior in conversations and its relation to perceived conversation intimacy and distraction: An exploratory observation study. *Computers in Human Behavior, 100,* 35–47. doi:10.1016/j.chb.2019.06.004

We are Social. (2019). *Digital in 2019.* Retrieved from https://wearesocial.com/uk/digital- 2019

Xie, X., Chen, W., Zhu, X., & He, D. (2019). Parents' phubbing increases Adolescents' Mobile phone addiction: Roles of parent-child attachment, deviant peers, and gender. *Children and Youth Services Review, 105*(10), 104426.