
Phubbing as a Result of the 4th Industrial Revolution: Is it Dangerous?

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Abstract – Currently 4th Industrial Revolution is being echoed, many things are developing rapidly, one of which is how to communicate along with the increasingly sophisticated smartphones that are currently commonly owned by everyone. But on the other hand, someone pays more attention to his smartphone when communicating directly with other individuals. This behavior is called phubbing and has an impact on daily life. Method: Review e-journals obtained through Google Scholar, Scimedirect, Ebsco Host, ProQuest. Results: two main impacts were identified, namely (1) relationship satisfaction and (2) personal well-being while efforts to foster awareness of phubbing behavior by developing smartphone applications and sensors as well as the Let's Disconnect to Connect campaign. Conclusion: Based on the review of this literature, phubbing has a detrimental impact and currently there is still little research in terms of its intervention.

Keywords: phubbing, smartphone, the 4th Industrial Revolution

1. Introduction

Technology plays a big role in our lives in the era of the industrial revolution 4.0. One of the roles of technology is to change the way we communicate. The speed of communication has increased along with the increasing number and quality of communication devices. The most widely used communication device today is a smartphone. Smartphones have recently taken over personal computers and laptops as the most common devices that people use to access the Internet (Buckle, 2016). The combination of smartphone and internet quality is the perfect match for communication media. However, unwanted problems come with the development of information technology. Among them are smartphone addiction (Aljomaa et al., 2016) Smartphone addiction can include game addiction (Park, 2005), social media (Turel & Seren-ko, 2012) and the internet (Beard, 2002; Guazzini et al., 2019). Although known with a smartphone allows one to communicate with anyone, facilitating social interaction of people closest to or from other parts of the world, but sometimes smartphones can bring the far but far closer (Turkle, 2012).

When this can be found and seen someone can ignore the other person when interacting physically and directly with more focus on using or looking at his smartphone. This phenomenon is called phubbing which comes from combining the words phone and snubbing. Whereas Phubbeb is the term for 'victim' of phubbing. This reality certainly cannot be avoided by modern people who live in urban areas especially smartphone prices are now very affordable so that it can be owned by almost all circles. In addition, the quality of the internet in Indonesia is also headed in a good direction because it has trodden 4G technology and has started towards 5G technology (Admaja, 2015).

In the research of Karadag et al., (2015) the most important determinants of phubbing behavior are cellphones / smartphones (Robert & David, 2017; Abeele & Postma-Nilsenova, 2018; Vetsera & Sekarasih, 2019; Abeele et al., 2019), Texting, social media and internet addiction. Even research (Chotpitayasonondh & Douglas, 2016; Vetsera & Sekarasih, 2019) found that internet addiction, fear of lagging, self-control and smartphone addiction, is predicted to cause a person to behave phubbing

while also being phubbed. So that phubbing and phubbed are said to be a common norm in social interactions today.

In addition, specifically (Franchina et al., 2018; Vetsera & Sekarasih, 2019) in their research mentioned Fear-of-missing-out (FOMO) makes a person behave phubbing. FOMO can be identified as an intra-personal nature that encourages people to stay aware of what other people are doing on social media platforms, so that if they miss the news, they will feel anxious.

The discussion on phubbing and phubbed is relatively new in Indonesia, for this reason, this study will become a useful and renewable study in the context of the industrial revolution 4.0 in the field of communication shaping phubbing. But in this case, the writer will limit the discussion by only answering the following questions:

1. What is the impact of phubbing in daily life?
2. What is work done against Phubbing?

2. Methodology

2.1. Inclusion and Exclusion Criteria

To be included in this review, the articles reviewed must explore and elaborate research related to phubbing. Articles obtained by inclusion must be based on studies that examine phubbing in influencing daily life with adolescent research respondents. If there is an adult respondent or participant, then the article is included in the excluded article.

2.2. Systematic Search Procedure

Systematic searches were conducted in four electronic databases: Google Scholar, Scencedirect, Ebsco Host, ProQuest, during August 2019 of which all articles had DOI. The search is limited to articles in English and Indonesian in full published from 2015 to 2019. In all four electronic databases above, the author searches for articles using a combination of keywords as follows: phubbing *

2.3. Data Extraction and Analysis

Using a systematic search procedure as mentioned above, there are a number of 27 articles identified that are suitable for inclusion in this literature review. Database determination, reference list, and journal article search are performed by the author, and data analysis is also carried out by the author. Data analysis was carried out by conducting a thorough reading of each study, where relevant sections of the text were highlighted to extract key findings that were the subject of this literature review. These interpretations and findings are grouped into thematic categories; these categories were then cross-referenced in 27 studies to identify common themes.

3. Result and Discussion

3.1. Participant Characteristics

Youarti & Hidayah (2018) and Al-Saggaf & O'Donnell (2019) are literature reviews. Metsiritrakul et al., (2016) research development and Du et al., (2017) is a seminar paper.

Karadag et al., (2015) used 409 student participants with an average age of 21.9 years. Hanika (2015) used 60 participants from Diponegoro University's Social Sciences Faculty with an age range of 21-30 years. Ugur & Koc (2015) used 349 student participants from six majors at universities in Turkey. Chotpitayasunondh & Douglas (2016) used 276 participants (102 men and 174 women) with an age range of 18 to 66 years consisting of 88 undergraduate students at the University of Kent, 88 participants from Amazon's Mechanical Turk (MTurk) and 100 volunteers from social contact Researcher's personal media. Robert & David (2016) used 308 adult participants.

Wang et al., (2017) used 243 adult married participants with a classification of 192 married adults from urban areas and 51 from rural areas, 42% aged 26-35 years, 16.9% aged 46-55 years and 8.2 % are 56 years or older. Robert & David (2017) used 200 participants (48% male) with an average age of 35 and 45 years. Franchina et al., (2018) used 2663 Flemish adolescents (ethnic groups in Germany) with an average age of 14.87 years. Abeele & Postma-Nilsenova (2018) used 125 participants (64 men with an average age of 24.17 years). Chotpitayasunondh & Douglas (2018) used 1,836 respondents who were recruited from 6 survey institutions with an age range of 18-63 years.

Balta et al., (2018) used a total of 423 adolescents and adults aged 14 and 21 years (53% women). Normawati et. Al., (2018) used 10 respondents with an age range of 20-25 years. Chotpitayasunondh & Douglas (2018) used 153 participants (19 men and 134 women) with an age range of 18-36 years. Al-sagaf et al., (2018) used 385 participants (101 men, 253 women and 2 "others"). Guazzini et al., (2019) used 394 participants. Aagaard (2019) used 25 students (16-20 years) as participants. Vetsera & Sekarasih (2019) used 27 participants with an age range of 18-40 years.

Xie et al., (2019) used as many as 1007 teenagers with an age range of 11 to 16 years. Wang et al., (2019) used 429 adult Chinese participants (40% aged 25 years or under, 26% aged between 26 and 35 years, 19% aged 36 and 45 years, 10% aged between 46 and 55 years and 5% aged 56 years or older). Al-Saggaf & MacCulloch (2019) used 387 participants with an average age of 41.04 years. Abeele et al., (2019) used 200 participants (153 women) with an age of 197 participants an average of 20.49 years and 3 participants between 25 and 30 years. Erzen et al., (2019) used 539 Turkish University students as participants with an average age of 18.84 years. Çikrikci et al., (2019) used 292 Turkish University students as participants with an average age of 20.05 years.

3.2. Main Findings

3.2.1. Impact of Phubbing in daily life

Broadly speaking, the two phubbing effects found in this literature study are (1) relationship satisfaction and (2) personal well-being. In addition, it was also found that phubbing behavior has become a common norm in today's society and it seems not to be fully aware of all the effects on intimacy of disturbance and conversation, both positive and negative (Chotpitayasunondh & Douglas, 2016; Abeele et al., 2019).

3.2.1.1 Relationship satisfaction

(Robert & David, 2016; Chotpitayasunondh & Douglas, 2018; Al-sagaf et al., 2018; Wang et al., 2019) mention that phubbing can affect the quality of partner relationships and the quality of communication which creates conflict between partners due to smartphone usage. The quality of relationship satisfaction that is not good can cause depression for married couples (Wang et al., 2017).

In the world of work, leaders who conduct phubbing behavior cause negative effects on employees, namely the lack of employee engagement which is an attachment of members of the organization to

the organization itself not only physically, cognitively but even emotionally in terms of its performance (Robert & David, 2017) . Besides phubbing behavior by looking at the phone when communicating with colleagues is worse than communicating while looking at the newspaper (Abeeel & Postma-Nilsenova, 2018).

3.2.1.2 Personal well-being

Hanika (2015) in his findings revealed that even though respondents did phubbing it turned out that they also felt disturbed if other people did the same thing. Balta et al., (2018) found that women had far higher phubbing scores, fear of being left behind (Chotpitayasunondh & Douglas, 2016; Vetsera & Sekarasih, 2019), excessive Instagram use, anxiety, and neuroticism. The negative effect of phubbing also affects life satisfaction and mood (Al-sagaf et al., 2018), self-control (Chotpitayasunondh & Douglas, 2016), digital accrual (Aagaard (2019) where someone knows the negative impact of smartphones but is unable to avoid it.

In families, parents who are phubbing can cause and strengthen cellphone addiction in adolescents (Xie et al., 2019). Al-Saggaf & MacCulloch (2019) found that women do not phubbing more often than men and that people from urban areas do not phubbing more often than people from rural areas. In addition, it was found that younger people are more often phubbed than older people. More importantly, the study revealed that people are more likely to phubbing with people who have a closer relationship than with people who have distant relationships.

While Erzen et al., (2019) mentioned that someone with personality aspects of neuroticism and conscientiousness tends to be phubbing. Neuroticism has been shown to have a significant effect on communication disorders, and communication disorders have a significant effect on life satisfaction (Çikrikci et al., 2019)

Table 1. Impact of Phubbing in daily life

Indicator	Research
Relationship satisfaction	Robert & David (2016); Chotpitayasunondh & Douglas (2018); Al-sagaf et al., (2018); Wang et al., (2017); Robert & David (2017); Abeeel & Postma-Nilsenova (2018)
Personal well-being	Hanika (2015); Chotpitayasunondh & Douglas (2016); Balta et al., (2018); Al-sagaf et al., (2018); Aagaard (2019); Vetsera & Sekarasih (2019); Xie et al., (2019); Al-Saggaf & MacCulloch (2019); Erzen et al., (2019); Çikrikci et al., (2019)

3.2.2 Work done against Phubbing

In this literature study, it was found 3 (three) efforts in the implementation of phubbing namely Metsiritrakul et al., (2016) is a research development application program using Augmented Reality & Computer Vision to enhance phubbing creativity and seek to help socially. Du et al., (2017) makes sensor-based phubbing detectors available on smartphones. Normawati et. Al., (2018) conducted the Let's Decide to Connect campaign to create an anti-phubbing attitude.

In addition, Wang et al., (2019) added couples who have high self-esteem have a good relationship with partners who are phubbing, so that for further research self-esteem can be chosen as a comparison to support in terms of phubbing.

4. Conclusion

Based on this literature review, smartphone addiction, social media, FOMO, games and the internet can be the cause of the emergence of phubbing. But more smartphone studies are the culprit of phubbing. Phubbing itself has recorded losses to the culprit, namely relationship satisfaction and personal well-being. Relationship satisfaction refers to satisfaction in relationships, be it with a partner or with a colleague / leader-employee. While personal well-being is a condition where individuals have a positive attitude towards themselves and others, can make their own decisions and regulate their own behavior, can create and regulate environments that are compatible with their needs, have a purpose in life and make their lives more meaningful , and try to explore and develop themselves.

This literature study that has been compiled, consists of 23 international research results and only 4 journals from Indonesia so that this becomes a limitation in specifically identifying phubbing that occurs in Indonesia. Moreover, there is still not much discussion about handling and efforts to anticipate phubbing.

Based on the existing limitations, this topic is very interesting to study further in order to get even more in-depth information about phubbing especially the development of counseling interventions that accommodate Indonesian cultural (indigenous) values in handling phubbing.

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