

Psychological Explanation of Phubbing Behavior: Smartphone Addiction, Emphaty and Self Control

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Abstract— Phubbing is the behavior of ignoring someone in a social environment by turning attention to the telephone (such as to reply to messages or see notifications in their smartphone). This study aims to explain the psychological explanation for phubbing behavior. We hypothesized some factors that contribute to phubbing are smartphone addiction, empathy, and self-control. The participants in this study were 246 college students who use smartphones in their daily life. Hypothesis test results show the value of $RSquare = 0.496$, meaning that the proportion of the variance of phubbing behavior explained by all independent variables is 49.6%, while 50.4% is influenced by other variables. There are three sub-variables that have a significant positive influence on phubbing behavior, namely norms, withdrawal, and tolerance, and one variable that has a negative significant influence, namely self-control.

Keywords— *phubbing, smartphone addiction, self-control, empathy in communication*

I. INTRODUCTION

Smartphones can meet people's needs to make phone calls, take photos, pay bills, listen to music, watch videos, browse the internet, chat through social networks, check weather, news and stock prices, find restaurants for dinner, find information to shop and provide information for traveling [4]. Smartphones have simplified the way people maintain their interpersonal relationships [1], facilitate their daily tasks [2], and make it easier to connect with others through online [3].

All of these functions have substantially improved and simplified life. Rahmayani said that active smartphone users in Indonesia in 2015 reached more than 100 million people [6]. With such a large number, Indonesia will become the country with the fourth largest active smartphone user in the world after China, India, and America. With this amount, no one can guarantee to control its use. In some studies related to excessive use of smartphones can cause health problems such as neck pain, leg pain, lack of sleep, addiction, and factors that affect the quality of sleep that causes chronic illness and neuropsychiatric disorders [7]. Other studies have shown that excessive smartphone usage behavior when communicating with others has an influence on relationship satisfaction and can even lead to depression [8], increased feelings of jealousy in spouses [9], damaging relational relationships due to social exclusion; excluded or ostracized by other individuals [10], in the field of education, cellphone ringing disrupts student performance during lessons [11].

Excessive use of smartphones while communicating with others is very familiar with the term phubbing. The term phubbing comes from the words phone and snubbing which was coined by Alex Haigh. This word was born as part of a campaign by the Macquarie Dictionary. In May 2012, the advertising agency behind the Melbourne McCann campaign invited a number of lexicographers, writers, and poets to come up with new words to describe this behavior. This term appears in the media all over the world and was popularized by the Stop Phubbing campaign created by McCann [12]. The campaign by the Macquarie Dictionary resulted in the creation of words to represent this problematic behavior [13]. Specifically, the terms "phubbing" (from the words "phone" and "snubbing") describe the act of insulting someone in a social setting by using his telephone rather than talking to that person directly [14]. Phubbing is the behavior of ignoring someone in a social environment by turning attention to the telephone [15]. Phubbing Behavior can be described as an individual who sees his cellphone during a conversation with another individual or deals with his cellphone during interpersonal communication. Preliminary studies conducted by researchers on 67 people who have social media both who know phubbing or unknown that 85.1% have consciously committed phubbing behavior with the highest target of phubbing, namely friends 88.1% followed by spouse and family. The researcher utilizes the findings to understand the factors that predict this phubbing behavior; whether a smartphone addiction or problematic smartphone usage can predict phubbing behavior.

In research conducted by Prasetyo [16] stated that the negative impact of smartphones causes students to be indifferent to other people or the loss of empathy, arrogance, immoral acts such as fraud, theft, murder and so on. Individuals should be able to communicate effectively with others, be able to empathize well and be able to develop harmonious relationships with others. This fact is reinforced in the results of Davis & Kraus's research which found that individuals who have an attitude of empathy tend to be more tolerant and able to adjust to others [17]. Thus, the relationship between smartphone use and empathy is thought to be one of the factors that influence socio-cultural changes that result in the discovery of new behaviors such as phubbing behavior in society.

Not only empathy is closely related to smartphone addiction behavior. Research also shows that self control is also closely related to addiction behavior [18] and has also

been linked to smartphone usage problems [19]. It is said that people with high levels of difficulty controlling self-impulses cannot control their cellphone use [20]. Individuals are ideally able to control themselves to behave in accordance with the norms in society so that when individuals are confronted with smartphones they can control themselves to guide and direct the use of smartphones [21]. Therefore it makes sense to show that self-control in predicting smartphone addiction, in turn can predict problematic behavior in the form of phubbing. In this case, it is suspected that smartphone addiction itself is a proximal predictor or central predictor in phubbing behavior.

Phubbing behavior is also generally seen everywhere in modern society. With a nominal that is not small, the question that arises is how this behavior can be accepted as a norm. Understanding the relationship between the person who is phubbing and the person they are talking with is an important part of answering this question. The concept of reciprocity in social psychology plays a key role in understanding human interaction and social exchange [22]. Reciprocal relationships occur when someone responds to social actions that have positive consequences [23] or reciprocates with actions that result in negative consequences [24].

In phubbing, ignoring a friend via a smartphone can cause such behavior to be intentionally or unintentionally replied to. In turn, this can affect the extent to which phubbing is considered normative or acceptable. In the past, social norms took decades and centuries to be developed or amended [25]. However, society always experiences shifts in new social norms and people tend to adopt these norms quickly [26]. Norms also originate from observable behavior [27]. Along with its development, people become victims of phubbing, but they are also the perpetrators of phubbing. This happens because behaviors, beliefs, and attitudes often cause false-consensus effects where individuals assume that other people think and do the same thing as them [28]. Therefore, measuring phubbing behavior is expected to be able to predict the extent to which people see phubbing as normative.

In addition, gender was found to play a role in influencing many smartphone-related behaviors such as a preference for online activities [29], cellphone addiction [30], internet addiction [31], self-control [32], and communication etiquette [33]. However, very little information is known about how the behavior of phubbing and the social norms felt by phubbing differ between men and women.

II. RESEARCH METHODS

A. Participants

The population in this study is college students who have smartphones originating from large cities. The number of samples in this study was 246 people with an average age range of 17-20 years. Sampling in this study uses non-probability sampling techniques with the accidental sampling method, which is a sampling method where anyone who accidentally or happens to meet with researchers and the possibility of being selected from each respondent member of the population cannot be calculated. Data collection is obtained by using questionnaires manually and online.

B. Measurement

Phubbing behavior is measured using the phubbing scale by Karadag which is adopted into Indonesian. This phubbing scale consists of two dimensions, namely (a) communication disruption and (b) obsession with mobile phones which was developed into 18 items. Smartphone addiction is measured using a smartphone addiction scale-short version (SAS-SV) developed by Kwon and Yang [34] which was adopted into Indonesian and has 10 items. Meanwhile, the empathy variable, the scale used is the Interpersonal Reactivity Index (IRI) which was adopted into Indonesian. In a recent study also many who use IRI as a measure of Empathy because it has a score that is valid and reliable [35]. For self-control measurements based on the theory and dimensions described by Averill [36], there are 3 dimensions namely Behavior Control, Cognitive Control and Decisional Control which were developed into 11 items. Furthermore, norms are measured using The Perceived Social Norms of Phubbing Scale developed by Borsari & Carey which was adopted into Indonesian [37]. This scale has 5 items that measure social norms, consisting of descriptive and injunctive norms. The data collection method used is a questionnaire. In this study, researchers used five scale Likert scale models using four answer choices namely, very appropriate (SS), appropriate (S), not suitable (TS), very not suitable (STS).

III. RESULTS

At the research hypothesis testing stage, researchers used a regression analysis technique with SPSS 24 software. In regression there are three things that are seen, namely the first look at R Square to find out what percentage (%) of variance DV is explained by IV, the second is whether overall IV influences significant to DV, then finally see whether or not the regression coefficient of each IV is significant. The first step the researcher looks at is the amount of R square to find out what percentage (%) of the variance of DV explained by IV. The results found R-Square of 0.496 or 49.6%. This means that 49.6% of the variation in phubbing behavior can be explained by variations in all IV (norms, disruption of daily life, withdrawal, tolerance, perspective taking, fantasy, emphatic concern, personal distress, self-control, and gender) while the remaining 50.4% is influenced by other variables outside this study.

TABLE I. R SQUARE

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704 ^a	.496	.475	7.24833

a. Predictors: (Constant), norms, daily-life disturbance, withdrawal, tolerance, perspective taking, fantasy, emphatic concern, personal distress, self-control, gender

In the next step, the researcher looks at the regression coefficients of each IV. If sig < 0.05, the regression coefficient is significant, which means the independent variable has a significant effect on phubbing behavior. The magnitude of the regression coefficients of each independent variable on phubbing behavior can be seen in the following table 2:

TABLE II. COEFFICIENT REGRESSION

Coefficients ^a						
		Unstandardized Coefficients	Standardized Coefficients		T	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	21.432		5.409	3.962	.000
	Norms	.260		.051	.260	.000
	Daily-life Disturbance	.047		.054	.047	.386
	Withdrawal	.341		.062	.341	.000
	Tolerance	.188		.062	.188	.003
	Perspektive	.002		.057	.002	.975
	Taking	-.066		.060	-.066	.272
	Fantasy	-.085		.055	-.085	.122
	Emphatic Concern					
	Personal	.066		.060	.066	.276
	Distress	-.174		.050	-.174	.001
	Self-Control					
	Gender	-.255		1.105	-.011	.818

a. Dependent Variable: Phubbing Behaviour

From the regression equation, it can be seen that there are four variables whose regression coefficient values are significant, namely; (1) Norm (2) withdrawal (3) Tolerance (4) self-control. While 6 other variables are not significant.

Furthermore, researchers want to find out how to increase the proportion of variants of each independent variable on the behavior of phubbing.

TABLE III. VARIANS PROPORTION

Proporsi variants		Model Summary						
		Change Statistics						
Model	R	R Square	R Square Change	F Change	df1	df2	Sig. F Change	
1	.411 ^a	.169	.169	49.518	1	243	.000	
2	.495 ^b	.245	.076	24.274	1	242	.000	
3	.653 ^c	.427	.182	76.345	1	241	.000	
4	.674 ^d	.454	.027	11.908	1	240	.001	
5	.675 ^e	.456	.002	.935	1	239	.335	
6	.679 ^f	.461	.005	2.193	1	238	.140	
7	.683 ^g	.466	.005	2.283	1	237	.132	
8	.685 ^h	.469	.003	1.327	1	236	.251	
9	.704 ⁱ	.469	.027	12.620	1	235	.000	
10	.704 ^j	.496	.000	.053	1	234	.818	

The norm variable contributed 16.9% in the variance of phubbing behavior. These contributions were statistically significant at sig 0,000 (<0.05). Variable disruption of daily life in smartphone addiction contributed 7.6% in the variance of phubbing behavior. These contributions were statistically significant at sig 0,000 (<0.05). The withdrawal variable in smartphone addiction contributed 18.2% in the phubbing behavior variance. These contributions were statistically significant at sig 0,000 (<0.05). The tolerance variable in smartphone addiction contributed 2.7% in the variance of phubbing behavior. These contributions were statistically significant at sig 0.001 (<0.05). Perspective taking variable in

Empathy contributed to phubbing behavior by 0.2%. The contribution was not statistically significant because the sig value was 0.335 (> 0.05). Fantasy variables in Empathy contribute to phubbing behavior by 0.5%. This contribution was not statistically significant because the sig value was 0.140 (> 0.05). The emphatic variable in Empathy contributed to 0.5% phubbing behavior. The contribution was not statistically significant because the sig value was 0.132 (> 0.05). Personal distress variable in Empathy contributed to phubbing behavior by 0.3%. The contribution was not statistically significant because the sig value was 0.251 (> 0.05). The self-control variable contributed 2.7% in the variance in phubbing behavior. These contributions were statistically significant at sig 0,000 (<0.05). The gender variable contributed to 0% phubbing behavior. The contribution was not statistically significant because the sig value was 0.818 (> 0.05).

IV. CONCLUSION

Thus there are only four minor hypotheses that are accepted that there is a significant positive effect on norms for phubbing behavior, there is a significant positive influence of withdrawal on phubbing behavior, there is a significant positive effect of tolerance on phubbing behavior, there is a significant negative effect of self-control on phubbing behavior. The author concludes that phubbing behavior is influenced by norms, self-withdrawal, tolerance, and self-control.

V. DISCUSSION

The findings in this study indicate that significant factors contribute to phubbing behavior, namely: social norms, self-withdrawal, tolerance, and self-control.

First, an explanation of social norms found that the higher the social norms, the higher the behavior of phubbing occurs. Society always experiences shifts in new social norms and people tend to adopt these norms quickly [26]. Norms also

originate from observable behavior [27]. Along with its development, people become victims of phubbing, but they are also the perpetrators of phubbing. This happens because behaviors, beliefs, and attitudes often cause false-consensus effects where individuals assume that other people think and do the same thing as them [28]. When people see phubbing as normative, they will do phubbing as a society do.

Moreover, self-withdrawal and tolerance are part of the smartphone addiction variable. The results of this study found that the higher the self-withdrawal and tolerance, the higher the behavior of phubbing. The more an individual withdraws and the more intense the use of his smartphone, the more often he does phubbing.

Finally, self-control found that the lower the self-control, the higher the tendency for people to do phubbing. Lack of perseverance in controlling oneself can disrupt the focus of the task and improve irrelevant thought processes which can also increase the frequency of cellphone use [39]. Therefore it makes sense to show that self-control in predicting smartphone addiction, in turn, can predict problematic behavior in the form of phubbing. It seems inevitable that people who are addicted to smartphones will use their devices uncontrollably in places and times that are forbidden to do so [40].

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