



RESEARCH ARTICLE

The Effect of FoMO and Social Media Addiction on Phubbing Behavior in Adolescent K-Pop Fans

Catherine Agnesia Putri¹, Mochammad Sa' id^{2*}

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Abstract: Phubbing, the act of ignoring others in social settings by focusing on one's smartphone, has become a prevalent issue among adolescent K-Pop fans. This behavior is closely linked to social media addiction and Fear of Missing Out (FoMO), as these fans often seek constant updates about their idols and social networks. The excessive use of social media to satisfy their curiosity and avoid missing out on information can lead to a significant increase in phubbing behavior. This study aims to investigate the effect of FoMO and social media addiction on phubbing behavior among adolescent K-Pop fans. Using a quantitative correlational approach, 193 adolescents aged 10-21 years were surveyed. The study employed the Generic Scale of Phubbing (GSP), Online Fear of Missing Out Scale (ON-FoMO), and the Bergen Social Media Addiction Scale (BSMAS) to assess phubbing behavior, FoMO, and social media addiction, respectively. The results indicate that the majority of participants have low levels of FoMO (48.7%) but high levels of social media addiction (46.1%), with 53.4% exhibiting low phubbing behavior. Multiple linear regression analysis shows a significant positive effect of both FoMO and social media addiction on phubbing behavior, with FoMO contributing 36% and social media addiction contributing 22.9% to the variance in phubbing behavior. Together, these variables explain 58.9% of phubbing behavior among the participants. The study supports the Usability and Satisfaction Theory, emphasizing the role of FoMO and social media addiction in promoting excessive smartphone use during social interactions. Practical implications include the need for interventions to manage adolescents' social media usage and mitigate the psychological effects of FoMO to enhance healthy social engagement. Future research should explore longitudinal relationships and consider socio-environmental factors to better understand the causes of phubbing behavior in adolescents.

Keywords: Fear of Missing Out (FoMO), social media addiction, phubbing behavior, adolescents, K-Pop fans

INTRODUCTION

The phenomenon of the Korean popular culture wave, or what is commonly known as the Hallyu Wave, has spread widely across the globe and has become a hot topic in recent years. One of the main drivers of the Hallyu Wave is Korean Pop (K-Pop), a form of Korean culture. With globalization and rapid technological advancements, Korean pop culture has become increasingly easy to spread worldwide. A survey conducted by the Korea Foundation revealed that there were 156.6 million K-Pop fans worldwide in 2022, an increase of 29% from 100 million fans in 2020 (Hae-yeon, 2022). Indonesia is one of the countries most impacted by the K-Pop phenomenon, with the largest number of K-Pop fans in the world in 2021, followed by Japan, the Philippines, South Korea, and other

countries (CNN Indonesia, 2022).

K-Pop is favored by various age groups, particularly teenagers. According to a survey by IDN Times (Almaida et al., 2021), in 2019 in Indonesia, K-Pop fans aged 20-25 accounted for 40.7%, while fans aged 15-20 years made up 38.1%, with the rest coming from younger and older age groups. Teenagers, as defined by Steinberg (2013), are divided into three developmental stages: early adolescence, middle adolescence, and late adolescence, which span ages 10-21. Adolescence is a period in which individuals seek their identity and often try to break free from parental control by engaging in activities they enjoy (Hidayati & Indriana, 2022). The diversity and appeal of K-Pop have attracted teenagers because they feel it aligns with their personal interests.

The rising popularity of K-Pop has affected teenage behavior, both consciously and unconsciously. According to Putri (2020), some negative impacts of K-Pop include the emergence of fanaticism, characterized by excessive enthusiasm for the objects they enjoy, increased consumerism through the purchase of K-Pop-related products, and the rise of conformist behavior, where fans follow the actions of others within the K-Pop fan community to align with the group's norms.

^{1,2}Department of Psychology, Faculty of Psychology, Universitas Negeri Malang

**) corresponding author*

Mochammad Sa' id

Email: mochammad.sa'id.fpsi@um.ac.id

Technological advancements in information and communication have made it easier for fans to access and seek information about K-Pop through the internet or mass media. One of the most popular smartphone features is social media, which is used by people of all ages, from children to adults. Based on a survey by the Indonesian Internet Service Providers Association (APJII, 2022), internet users aged 13-18 years accounted for 99.16% of the population during the 2021-2022 period, making this age group the largest group of internet users. The increasingly digital world has also driven the rise of the phenomenon of phubbing. Phubbing behavior refers to individuals focusing more on their phones while conversing with others, neglecting interpersonal communication (Karadag et al., 2015). In other words, phubbing behavior is a form of ignoring the surrounding environment by focusing solely on phone use.

One indication of phubbing behavior is when someone pretends to focus on the person they are talking to, but their eyes remain fixed on their phone (Youarti & Hidayah, 2018). Teenagers who engage in phubbing behavior tend to continuously check their phones while interacting with others, find it difficult to stop using their phones, ignore ongoing conversations, pretend to listen but remain focused on their phones, and offer minimal responses (Hura et al., 2021). The impacts of phubbing behavior include decreased social interaction quality, dissatisfaction with social relationships, loss of trust during interactions, diminished feelings of closeness when a phone is present, feelings of jealousy, disrupted moods, lack of focus, feelings of being ignored, a sense of not being valued, and a loss of opportunities to communicate with new people (Chotpitayasunondh & Douglas, 2016; Silmi & Novita, 2022; Amelia et al., 2019).

One predictor of phubbing behavior is FoMO, or Fear of Missing Out (Chotpitayasunondh & Douglas, 2018). FoMO occurs when someone fears missing out on important individual or group events and wants to stay connected to what others are doing via social media (Przybylski et al., 2013). Teenagers with FoMO often check their phones frequently to stay connected with others, which can lead to mental fatigue, stress, and phubbing behavior (Wiesner, 2017; Przybylski et al., 2013; Al-Saggaf & O'Donnell, 2019). Research has shown that there is a significant influence of FoMO on phubbing behavior in teenagers, with higher levels of FoMO leading to more frequent phubbing behavior (Hura et al., 2021; Hasmi, 2022).

Individuals experiencing FoMO often have high levels of curiosity, constantly seeking the information they need (Aisafitri & Yusrifah, 2020). This is also common among K-Pop fans who fear missing out on information about their idols. According to Marseal et al. (2022), K-Pop fans frequently search for information about their idols' activities from the current or previous day and continuously update themselves with the latest K-Pop news. When they successfully find the information they desire, they feel happy and entertained. However, when they cannot obtain the information they seek, they feel disappointed.

In addition to FoMO, phubbing behavior is also influenced by social media addiction (Karadag et al., 2015). Social media addiction is defined as excessive and unhealthy social media use, characterized by a lack of self-control and continued behavior despite negative consequences (Franchina et al., 2018). Teenagers spend an average of 6.5 hours per day on social media, while only 2.25 hours per day are spent with their parents (Santrock, 2012). This addiction is also experienced by K-Pop fans, who can spend 10 hours or more per day on social media,

leading to reduced productivity, addiction, and less interaction with family and friends (Marseal et al., 2022). Previous studies have found a significant relationship between social media addiction and phubbing behavior, with higher social media addiction leading to increased phubbing (Ratnasari & Oktaviani, 2020; Rachman, 2021).

Several previous studies have examined the influence of FoMO on phubbing behavior in teenagers in general (Hura et al., 2021; Pemayun, 2019; Hasmi, 2022; Fariha, 2020; Franchina et al., 2018; Tandon et al., 2022) and the relationship between social media addiction and phubbing behavior (Ratnasari & Oktaviani, 2020; Rachman, 2021; Chi et al., 2022). However, no studies have specifically focused on teenage K-Pop fans. The unique influence of K-Pop culture provides a significant context for understanding adolescent behavior.

Therefore, this study aims to determine the effect of FoMO and social media addiction on phubbing behavior among teenage K-Pop fans. The study hypothesizes that: (i) there is an effect of FoMO on phubbing behavior among teenage K-Pop fans, (ii) there is an effect of social media addiction on phubbing behavior among teenage K-Pop fans, and (iii) there is a simultaneous effect of FoMO and social media addiction on phubbing behavior among teenage K-Pop fans.

METHODS

Research Design

This study employed a correlational quantitative approach to examine the relationship between Fear of Missing Out (FoMO), social media addiction, and phubbing behavior among adolescent K-Pop fans. The independent variables were FoMO (X1) and social media addiction (X2), while the dependent variable was phubbing behavior (Y).

Participants and Sampling Technique

Participants in this study were adolescents aged 10-21 years, identified as K-Pop fans and active users of social media. The population size was unknown, so the sample size was determined using the Lameshow et al. (1997) formula for sample estimation: $n = \frac{Z^2 p (1-p)}{(d)^2}$ where Z is the Z value (1.96 for 95% confidence level), p is the estimated proportion of the population (0.5), and d is the margin of error (10%). Based on this formula, the minimum sample size required was 96 respondents, rounded up to 100. The final sample size was 193 participants, recruited through non-probability convenience sampling. The choice of convenience sampling was due to the ease of accessing respondents who met the inclusion criteria, given the time and resource limitations. However, this technique may limit the generalizability of the findings beyond the sample.

Instruments

Phubbing Behavior: Phubbing behavior in this study was measured using the Generic Scale of Phubbing (GSP), developed by Chotpitayasunondh and Douglas (2018), which was adapted into Indonesian by Isrofin (2020) to suit the cultural context and language of the participants. The adaptation process involved a translation and expert review to ensure conceptual and linguistic equivalence between the original and the translated versions. The GSP

consists of 15 items that assess four distinct dimensions of phubbing behavior. The first dimension, *nomophobia*, refers to the fear of being without or unable to use one's mobile phone, capturing how individuals feel anxious or stressed when they are not using their phone or are away from it. An example of this is: "I feel anxious when I can't use my phone during conversations." The second dimension, *interpersonal conflict*, measures the extent to which phubbing leads to disagreements or tensions in relationships due to excessive mobile phone use. For instance: "My phone use has caused arguments with people I talk to." The third dimension, *self-isolation*, evaluates how much an individual isolates themselves socially, preferring to engage with their phone rather than interact face-to-face. An example item is: "I prefer checking my phone over engaging with people around me." Lastly, the *problem acknowledgment* dimension assesses the extent to which an individual recognizes that their mobile phone use may be problematic or excessive, as reflected in the item: "I realize that I use my phone too much during conversations." The reliability of this scale, as measured by Cronbach's alpha, was 0.76, indicating acceptable internal consistency for this sample. Participants rated each item on a 5-point Likert scale, ranging from 1 (Never) to 5 (Very Often), with higher scores indicating more frequent phubbing behavior.

Fear of Missing Out (FoMO): The Online Fear of Missing Out (ON-FoMO) Scale, developed by Sette et al. (2020), was used in this study to assess participants' fear of missing out on social experiences, particularly in an online context. This scale was adapted into Indonesian by Kurniawan and Utami (2022) using a translation and validation process to ensure its applicability within the local cultural context. The ON-FoMO scale consists of 20 items designed to measure four key dimensions of FoMO. The first dimension, anxiety, refers to the emotional distress or worry experienced when individuals are unable to stay connected to social networks or events. An example item is: "I worry when I miss important updates from friends on social media." The second dimension, need to belong, captures the strong desire to fit in or be included in social groups or online communities. For instance: "I feel the need to be constantly informed about my friends' activities." The third dimension, addiction, relates to the compulsive behavior of frequently checking social media to avoid missing out on events or updates, as demonstrated by the item: "I often feel compelled to check social media to see what others are doing." Lastly, need for popularity measures the urge to maintain a certain image or level of popularity by staying active and visible on social media platforms. An example of this is: "I fear losing followers if I don't regularly post on social media." The reliability coefficient for this scale was 0.89, indicating strong internal consistency. Participants responded to items on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), with higher scores indicating greater levels of FoMO.

Social Media Addiction: To measure social media addiction, this study used the Bergen Social Media Addiction Scale (BSMAS), developed by Andreassen et al. (2016). The BSMAS has been widely employed to assess problematic social media use and was adapted into Indonesian following Beaton et al.'s (2000) guidelines for cross-cultural adaptation. This process included translation from English to Indonesian, back-translation to ensure consistency with the original version, expert review to confirm conceptual alignment, and pilot testing to ensure the scale's relevance and accuracy in the Indonesian context.

The BSMAS consists of six items, each corresponding to a key dimension of social media addiction. The first dimension, salience, measures the extent to which social media use dominates a person's thoughts and behaviors, as illustrated by the item: "I spend a lot of time thinking about social media or planning how to use it." The second dimension, tolerance, assesses the increasing amount of time spent on social media to achieve the same level of satisfaction, as reflected in the item: "I feel the need to use social media more and more to feel satisfied." Mood modification, the third dimension, captures the use of social media as a tool to improve mood or escape negative feelings, as shown by the item: "I use social media to feel better when I'm down." The fourth dimension, relapse, refers to the tendency to revert to excessive social media use after attempting to cut down, with the item: "I've tried to reduce the time I spend on social media but have failed." Withdrawal symptoms, the fifth dimension, assess the emotional or physical discomfort experienced when unable to access social media, demonstrated by the item: "I feel anxious when I can't access social media." The final dimension, conflict, examines the negative impact of social media use on other areas of life, such as work, relationships, or school, as reflected in the item: "I have problems due to my excessive use of social media." The reliability of the BSMAS in this study was measured using Cronbach's alpha, yielding a value of 0.88, indicating a high level of internal consistency. Participants rated each item on a 5-point Likert scale, ranging from 1 (Very Rare) to 5 (Very Frequent), with higher scores indicating greater levels of social media addiction.

Scale Adaptation Procedure

The adaptation process for the social media addiction scale was carried out meticulously, following a multi-step procedure to ensure both linguistic and cultural relevance for the Indonesian context. Initially, two bilingual experts, proficient in both English and Indonesian, were tasked with translating the original English version of the scale into Indonesian. This step ensured that the translation captured the nuances of the original items while adapting them to the cultural context of the participants. After the initial translation, the two versions were synthesized to create a single cohesive translated version.

Following this, two linguists performed a back-translation of the Indonesian version back into English. The purpose of this step was to ensure that the translated items retained the meaning and intent of the original scale. By comparing the back-translated version to the original, any discrepancies or potential shifts in meaning were identified and corrected.

Once the back-translation was completed, the next step involved a thorough review by a panel of three psychology experts. These experts were responsible for evaluating the conceptual accuracy of the translated items in relation to the psychological constructs measured by the scale. Using Aiken's V coefficient as a measure of content validity, the review process resulted in a coefficient range of 0.92 to 1.00, indicating a strong level of agreement among the experts that the scale items were valid and appropriate for the intended purpose (Aiken, 1985).

To ensure that the translated items were clear and understandable to the target population, a readability test was conducted with five participants. These individuals provided feedback on the clarity of the items and their comprehension. Based on their feedback, one item was revised to improve clarity and eliminate potential ambiguity.

Finally, the adapted scale was piloted with a sample of 40 participants. The pilot test aimed to assess the psychometric properties of the scale in the Indonesian context. Specifically, item-total correlations were calculated to evaluate the contribution of each item to the overall scale score. The item-total correlation coefficients ranged from 0.359 to 0.767, indicating that the items were appropriately related to the underlying construct of social media addiction. The overall reliability of the scale, as measured by Cronbach's alpha, was 0.657, confirming that the adapted scale possessed acceptable reliability for use in further research.

Data Collection Procedure

The data collection procedure for this study was conducted through an online survey platform, which provided an efficient and accessible means of reaching a large and geographically diverse sample. This method was chosen to maximize participant engagement and reduce logistical challenges, such as travel and face-to-face interactions, especially given the need to target a specific population—adolescent K-Pop fans. The survey platform allowed for the secure distribution of the questionnaires and enabled participants to respond at their convenience, ensuring flexibility and potentially increasing the response rate.

To effectively recruit participants, the survey was shared through various K-Pop fan communities and groups on social media platforms such as Twitter, Instagram, and Facebook. These platforms were identified as the most popular social networks among the target demographic, providing access to a wide pool of potential respondents who were actively engaged in K-Pop-related activities. By leveraging these fan communities, the researchers were able to tap into a pre-existing network of individuals who fit the study's inclusion criteria: adolescents aged 10-21, active on social media, and self-identified K-Pop fans.

Prior to the survey's distribution, a brief introduction was provided to explain the purpose of the study, the voluntary nature of participation, and the measures in place to ensure the confidentiality and anonymity of the respondents' data. Consent was obtained electronically from each participant before they could proceed with the survey. The questionnaire itself was designed to be user-friendly, with clear instructions and logical sequencing of items to minimize the cognitive load on respondents. To further enhance the data collection process, reminders were periodically posted in the fan communities to encourage participation and ensure a sufficient sample size was reached.

This method of distribution via social media fan groups not only facilitated rapid and widespread dissemination of the survey but also ensured that the participants were genuinely interested in K-Pop culture, thus aligning with the study's target population. Moreover, the online format allowed the researchers to monitor responses in real-time, providing the flexibility to close the survey once the required number of responses was obtained. Overall, this approach optimized the data collection process, making it both time-efficient and tailored to the specific characteristics of the study population.

Assumption Tests

Before conducting regression analyses, several statistical assumption tests were performed to ensure the validity and reliability of the results. These tests included assessments for normality, linearity, multicollinearity, and

heteroscedasticity, which are critical to confirming that the data meet the necessary conditions for regression analysis.

The normality of the data was evaluated using the Kolmogorov-Smirnov test, which tests whether the distribution of the data significantly deviates from a normal distribution. The test yielded a significance value of 0.055, which is above the typical threshold of 0.05, indicating that the data were normally distributed. This result suggests that the residuals from the regression analysis are approximately normally distributed, meeting one of the core assumptions for regression.

Next, a linearity test was conducted to examine the relationship between the independent variables (FoMO and social media addiction) and the dependent variable (phubbing behavior). Linearity is essential to ensure that the relationship between the predictor variables and the outcome is appropriately modeled using linear regression. The results for the linearity test showed that both independent variables had a linear relationship with phubbing behavior. For FoMO, the F-test yielded a result of $F(2,190) = 1.238$, $p > 0.160$, while for social media addiction, the F-test result was $F(2,190) = 1.628$, $p > 0.054$. Since both p-values were greater than 0.05, the assumption of linearity was satisfied.

To assess the potential issue of multicollinearity, which occurs when independent variables are highly correlated, tolerance and variance inflation factor (VIF) values were calculated. Multicollinearity can distort the regression coefficients, leading to unreliable estimates. In this study, tolerance values were above 0.10, and VIF values were below 10 for both FoMO and social media addiction, indicating that there was no significant multicollinearity present in the data. This suggests that the independent variables were sufficiently independent of each other to be included in the regression model.

Finally, heteroscedasticity was tested using Spearman's rho test to determine whether the variance of the residuals was constant across different levels of the independent variables. Heteroscedasticity can affect the efficiency of the regression estimates and lead to biased standard errors. The results of the test showed no evidence of heteroscedasticity, with Spearman's rho values for FoMO being $r(191) = 0.03$, $p = 0.649$, and for social media addiction, $r(191) = 0.01$, $p = 0.940$. Since both p-values were greater than 0.05, the assumption of homoscedasticity was met, indicating that the variance of the residuals was constant.

Data Analysis

The assumption tests confirmed that the data were suitable for regression analysis, the data were analyzed using descriptive statistics to provide an initial overview of the key variables: FoMO, social media addiction, and phubbing behavior. Descriptive statistics summarized the central tendencies, variability, and overall distribution of these variables, providing insight into the sample's characteristics.

Following this, multiple linear regression analysis was performed to explore the relationships between the independent variables (FoMO and social media addiction) and the dependent variable (phubbing behavior). Multiple regression allows for the assessment of both the individual effects of each predictor and their combined influence on the outcome variable. This technique was particularly appropriate for the study's objectives, as it enabled the examination of how both FoMO and social media addiction contribute to variations in phubbing behavior.

Hypothesis testing was conducted using the t-test and F-test, facilitated by the IBM SPSS Statistics 25 software. The t-test was used to assess the significance of the individual predictors (FoMO and social media addiction) in explaining phubbing behavior, while the F-test evaluated the overall fit of the regression model. These tests helped determine whether FoMO and social media addiction had statistically significant effects on phubbing behavior, both independently and when considered together. The use of multiple regression provided a robust framework for understanding the dynamics between these variables and offered valuable insights into how FoMO and social media addiction drive phubbing behavior in the context of adolescent K-Pop fans.

RESULTS

Descriptive Analysis

Table 1 show that The majority of participants in this study were aged 18-21 years (85%), indicating that the phenomenon of phubbing, social media addiction, and Fear of Missing Out (FoMO) is more prevalent among late adolescents and young adults. At this developmental stage, individuals are more engaged in online social interactions and face greater social pressures, aligning with the theory that FoMO and social media addiction are more common in individuals who frequently use technology. Most participants were female (92.2%), consistent with research suggesting that females are more susceptible to social media addiction and FoMO. In the context of K-Pop fans, this dominance of female participants further supports the assumption that phubbing behavior is more frequent in this demographic.

Participants were fairly evenly distributed across major regions of Indonesia, with the largest concentration in West Java (29.5%) and East Java (24.4%). This distribution reflects the widespread nature of K-Pop fans in Indonesia, particularly in densely populated areas such as Java. The high duration of social media use—45.1% of participants reported using social media for 4-6 hours per day, and 29% reported using it for 7-9 hours per day—indicates a tendency toward excessive usage. This supports the hypothesis that intensive social media use is closely linked to addiction and phubbing behavior. Instagram was the most dominant (18.2%), followed by WhatsApp (16.6%) and Twitter (16%). These three platforms are commonly used for real-time communication, which can amplify FoMO and trigger phubbing behavior. For example, Instagram allows K-Pop fans to constantly monitor their idols’ activities, while WhatsApp and Twitter facilitate fast-paced interactions, increasing the pressure to stay connected and avoid missing important moments.

The descriptive statistics in Table 2 reveal that while social media addiction is high among K-Pop fans, with

46.1% categorized as "high" and 23.3% as "very high," FoMO and phubbing behavior remain relatively low for many participants. The mean FoMO score of 60.93 shows that nearly half (48.7%) fall into the "low" category, suggesting that despite frequent social media use, most participants are not highly anxious about missing out on social interactions. This may indicate a balance between online engagement and offline social life.

Phubbing behavior, with a mean score of 43.63, also shows that 53.4% of participants exhibit "low" levels of phubbing, implying that while many are active on social media, they maintain focus during in-person interactions. However, a significant minority (27.5%) experience "high" levels of phubbing, suggesting challenges in managing social media use without it disrupting face-to-face communication. Overall, despite high social media addiction, many participants manage to avoid extreme FoMO and phubbing, reflecting an ability to balance online and offline interactions.

Table 1. Description of Participant based on Age, gender, domicile, duration and types of social media (N=193)

Demografi Partisipan	Amount	Percentage
Age		
10-13	5	2,6%
14-17	24	12,4 %
18-21	164	85%
Gender		
Male	15	7,8%
Female	178	92,2%
Domicile		
West Java	57	29,5%
East Java	47	24,4%
DKI Jakarta	29	15%
Banten	12	6,2%
Central Java	12	6,2%
D.I Yogyakarta	11	5,7%
South Kalimantan	5	2,6%
North Sumatera	4	2,1%
Lampung	3	1,6%
South Sumatera	3	1,6%
Other Regions	10	5%
Duration of Social Media Use		
1-3 hours/day	19	9,8%
4-6 hours/day	87	45,1%
7-9 hours/day	56	29%
>10 hours/day	31	16,1%
Types of Social Media Used		
Instagram	183	18,2%
WhatsApp	167	16,6%
Twitter	161	16%
YouTube	147	14,6%
Tiktok	142	14,1%
Telegram	91	9%
Line	81	8%
Facebook	32	3,2%
Other	4	0,4%

Table 2. Descriptive Statistics and Category of partisipants

	N	Min	Max	Mean	Std. Deviation	Categorization			
						Very Low f (%)	Low f (%)	High f (%)	Very High f (%)
FoMO	193	30	97	60,93	13,737	11 (5.7)	94 (48.7)	68 (35.2)	20 (10.4)
Social Media Addiction	193	9	30	20,92	4,346	6 (3.1)	53 (27.5)	89 (46.1)	45 (23.3)
Phubbing Behavior	193	16	75	43,63	11,325	19 (9.8)	103 (53.4)	53 (27.5)	18 (9.3)
Valid N (listwise)	193								

Assumptions Test

Table 3 show that test the assumptions using the test Kolmogorov-Smirnov obtained a significance value of $0.055 > 0.05$. For this reason, it can be concluded that FoMO and social media addiction affect phubbing behavior ($D(193) = 0,06; p = 0.055$) normally distributed. The linearity test results show that the FoMO variable has a value $F(2, 190) = 1.238, p > 0.160$ and the social media addiction variable has a value $F(2, 190) = 1.628, p > 0.054$ on the line Deviation from Linearity, so it can be interpreted that there is a linear relationship between each independent variable and the dependent variable. The results of the multicollinearity test show that the two independent variables have values tolerance > 0.10 and $VIF < 10$. So, it can be concluded that there are no symptoms of multicollinearity (FoMO, Tolerance = 0.50, VIF = 1.98; Social Media Addiction, Tolerance = 0.50, VIF = 1.98). The results of the heteroscedasticity test using the method Spearman rho and for the FoMO variable, $r(191) = 0.03, p = 0.649 > 0.05$, while for social media addiction, $r(191) = 0.01, p = 0.940 > 0.05$. It can be concluded that no symptoms of heteroscedasticity were found in the data obtained.

Hypothesis Test

Table 4 presents the results of a partial T-test for the influence of Fear of Missing Out (FoMO) and social media addiction on phubbing behavior among adolescent K-Pop fans. The unstandardized coefficients indicate that both FoMO and social media addiction have a significant positive effect on phubbing behavior. Specifically, the unstandardized coefficient (B) for FoMO is 0.409, meaning that for every one-unit increase in FoMO, phubbing behavior increases by 0.409 units, with a confidence interval between 0.303 and 0.515. This relationship is highly significant ($t = 7.612, p < 0.001$). Similarly, social media addiction has a positive unstandardized coefficient of 0.876, meaning that an increase of one unit in social

media addiction leads to a 0.876 increase in phubbing behavior, with a confidence interval ranging from 0.542 to 1.211 ($t = 5.163, p < 0.001$).

The constant (a) is 0.394, indicating that when both FoMO and social media addiction are at zero, the predicted value of phubbing behavior is 0.394. The standardized coefficients (Beta) show that FoMO (Beta = 0.496) has a stronger relative impact on phubbing behavior compared to social media addiction (Beta = 0.336), highlighting that FoMO plays a more significant role in driving phubbing behavior. The regression equation obtained is as follows.

$$Y = a + b_1 X_1 + b_2 X_2$$

$$Y = 0.394 + 0.409 + 0.876$$

This equation demonstrates that increases in both FoMO and social media addiction lead to higher levels of phubbing behavior. Given the significant coefficients for both variables, it can be concluded that both FoMO and social media addiction are substantial predictors of phubbing behavior among adolescent K-Pop fans.

Table 5 presents the effective contribution of Fear of Missing Out (FoMO) and social media addiction to phubbing behavior among adolescent K-Pop fans. The coefficient for FoMO ($b = 0.409$) shows that it contributes 36% to the variance in phubbing behavior, indicating that higher levels of FoMO significantly increase the likelihood of phubbing. Social media addiction, with a higher coefficient ($b = 0.876$), contributes 22.9% to the variance, reflecting its strong influence on phubbing behavior, though slightly less than FoMO.

FoMO and social media addiction explain 58.9% of the total variance in phubbing behavior, highlighting their substantial combined impact. The remaining 41.1% may be explained by other factors not addressed in this study. These findings suggest that while both factors are key predictors of phubbing, FoMO plays a slightly more prominent role in influencing this behavior among adolescent K-Pop fans.

Table 3. Assumption Tests: Normality, Linearity, Multicollinearity, and Heteroscedasticity

Test	Variable	Test Statistic	p-value	Result	Tolerance	VIF	R	p-value (R)
Normality Test (Kolmogorov-Smirnov)	Unstandardized Residuals	0.064	0.055	Normally Distributed				
Linearity Test	FoMO	1.238	0.160	Linear	0.504	1.983	0.033	0.649
	Social Media Addiction	1.628	0.054	Linear	0.504	1.983	0.005	0.940
Multicollinearity Test	FoMO				0.504	1.983		
	Social Media Addiction				0.504	1.983		
Heteroscedasticity Test	FoMO						0.033	0.649
	Social Media Addiction						0.005	0.940

Table 4. T-Test Results (Partial)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	0,394	2,689		0,147	0,884	-4,909	5,698
FoMO	0,409	0,054	0,496	7,612	0,000	0,303	0,515
Social Media Addiction	0,876	0,170	0,336	5,163	0,000	0,542	1,211

a. Dependent Variable: Phubbing Behavior

Table 5. Effective Contribution of Each Variable to Phubbing Behavior

Variable	b	Cross Product	Regression	Effective Contribution of Each Variable	Total Effective Contribution
FoMO	0,409	21878,850		36%	
Social Media Addiction	0,876	6475,482	14617,222	22,9%	58,9%

Table 6. F-Test Results

ANOVA ^a					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	14617.222	2	7308.611	138.730	.000 ^b
Residual	10009.659	190	52.682		
Total	24626.881	192			

a. Dependent Variable: Phubbing Behavior

b. Predictors: (Constant), Social Media Addiction, FoMO

Table 6 presents the F-test results from the ANOVA analysis, examining the combined effect of Fear of Missing Out (FoMO) and social media addiction on phubbing behavior among adolescent K-Pop fans. The regression model has a sum of squares of 14,617.222, with two degrees of freedom, yielding a mean square of 7,308.611. The residual sum of squares is 10,009.659 across 190 degrees of freedom, with a total sum of squares of 24,626.881.

The F-value of 138.730 with a significance level of $p < 0.001$ indicates that the model is statistically significant. This demonstrates that FoMO and social media addiction together significantly explain the variance in phubbing behavior. The low p-value confirms that the effect of these variables is unlikely due to chance, providing strong evidence that both FoMO and social media addiction are meaningful predictors of phubbing behavior in this population.

In conclusion, the regression equation shows that the combined influence of FoMO and social media addiction explains a substantial portion of the variance in phubbing behavior, validating the hypothesis that these factors play a critical role in shaping such behavior among adolescent K-Pop fans.

DISCUSSION

The results of the descriptive analysis revealed that the majority of the research subjects had low levels of Fear of Missing Out (FoMO) (48.7%). This low FoMO level can be attributed to individuals' high self-control, which enables them to manage their emotions, thoughts, and behaviors when they are connected or not connected with others through social media. As a result, these individuals do not experience anxiety or fear of missing out on events or losing out on other people's information on social media (Maza & Aprianty, 2022). Additionally, those who actively engage in activities with others tend to experience less FoMO compared to individuals who are not as socially involved (Milyavskaya et al., 2018). This suggests that engagement in social activities can act as a buffer against the development of FoMO.

On the contrary, the analysis showed that a significant portion of the subjects exhibited high levels of social media addiction (46.1%). Adolescence is a period characterized by heightened curiosity, and adolescents often use social media as a tool to fulfill their need for information (Bilgin

et al., 2020). Furthermore, social media plays a critical role in adolescent socialization by expanding their opportunities to build relationships with their peers. However, while social media offers many benefits, it also contributes to increased time spent accessing it. According to the study's findings, the majority of subjects reported using social media for 4-6 hours per day (45.1%), which aligns with Syamsoedin et al.'s (2015) definition of social media addiction as usage exceeding 4 hours per day.

The descriptive analysis also indicated that most subjects demonstrated low levels of phubbing behavior (53.4%). This low level of phubbing can be explained by individuals' preference for interacting with others face-to-face, rather than focusing on their phones during social interactions. Individuals with low phubbing behavior tend to listen actively, provide feedback, refrain from using their phones while conversing, and maintain eye contact with their conversation partners. Adolescents with high self-control are more likely to focus on their interlocutors during social gatherings, thus exhibiting less phubbing behavior (Kurnia & Sitasari, 2020).

The study further revealed a positive influence of FoMO on phubbing behavior. Higher levels of FoMO were associated with increased phubbing behavior, a finding consistent with previous research (Tandon et al., 2022; Hura et al., 2021). When individuals with high levels of FoMO gather with others, they tend to constantly check their social media to avoid missing updates or activities, which leads them to focus more on their smartphones and ignore those around them. K-Pop fans, in particular, often seek information about their idols' activities and K-Pop news, making them feel a constant need to stay informed about what is happening in their social circles or with their idols. This constant checking of social media, driven by FoMO, ultimately leads to phubbing behavior during social interactions. The Usability and Satisfaction Theory posits that individuals with high FoMO are more likely to rely on smartphones to satisfy their emotional and psychological needs, leading to increased phubbing behavior (Ryan et al., 2014; Chi et al., 2022). Social media provides the means for such individuals to fulfill these needs (Wang & Wang, 2013).

The study also showed that social media addiction positively influences phubbing behavior. The higher the level of social media addiction, the more pronounced the phubbing behavior. This finding supports previous research indicating a positive relationship between social media addiction and phubbing (Ratnasari & Oktaviani, 2020; Rachman, 2021). Individuals use social media to fulfill their

needs for information, interaction, and entertainment, which in turn leads them to engage in phubbing behavior during interpersonal communication. According to Rachman (2021), excessive social media use reduces face-to-face communication. In the case of K-Pop fans, who can spend 10 hours or more per day on social media, this addiction impacts their daily activities, often leading to reduced interaction with family or friends (Marseal et al., 2022). Consequently, reduced communication with others fosters more frequent phubbing behavior. Additionally, research by Karadag et al. (2015) shows that gender plays a role in phubbing behavior, with women experiencing more cell phone and social media addiction, which in turn leads to greater phubbing behavior compared to men.

In conclusion, this study demonstrates that both FoMO and social media addiction significantly influence phubbing behavior. These findings align with research conducted by Younas et al. (2022), which similarly found that FoMO and social media addiction positively affect phubbing behavior. Individuals with high FoMO are more likely to engage in excessive social media use, which in turn increases the likelihood of phubbing during social interactions (Franchina et al., 2018). Adolescents, particularly K-Pop fans, often use various social media platforms to satisfy different needs, from social connection to staying updated. These platforms provide access to diverse networks and information, increasing users' FoMO and driving more frequent social media use. As a result, adolescents with high FoMO, particularly those engaged in K-Pop fandom, tend to use social media more intensively, which ultimately leads to phubbing behavior (Ratnasari & Oktaviani, 2020; Rachman, 2021).

Research Limitations and Implications

This study has several limitations that should be noted. First, the use of convenience sampling limits the generalizability of the findings, as the participants were solely self-selected adolescent K-Pop fans. Future research is recommended to employ more representative sampling methods. Second, the cross-sectional design of the study does not allow for the determination of causal relationships between FoMO, social media addiction, and phubbing. Longitudinal studies are needed to understand the dynamics of these relationships over time.

Third, data collection was based on self-reports, which are susceptible to social desirability bias and recall bias. Future research could use more objective tools, such as mobile usage tracking apps, to reduce these biases. Finally, this study did not account for other factors, such as socioeconomic status or social environments, which may influence phubbing behavior. These factors should be considered in future research to provide a more comprehensive understanding.

The findings of this study have several important implications. First, the significant influence of FoMO and social media addiction on phubbing behavior among adolescent K-Pop fans highlights the need for interventions to manage social media addiction in adolescents. Parents, educators, and counselors can develop more effective strategies to help adolescents reduce their time spent on social media and promote healthier social interactions.

Second, the study provides insights into the importance of raising awareness about the negative impacts of FoMO, especially in the context of fandom culture, which may exacerbate phubbing behavior. Education on time management and self-control in using social media can help adolescents reduce the negative effects of FoMO. Finally, this study can contribute to the

development of prevention programs aimed at reducing excessive phubbing behavior through healthier approaches to social media use, ultimately improving the quality of social interactions among adolescents.

CONCLUSION

This study successfully demonstrated the significant positive influence of Fear of Missing Out (FoMO) and social media addiction on phubbing behavior among adolescent K-Pop fans. The findings indicated that the higher the level of FoMO and social media addiction, the more pronounced the phubbing behavior. FoMO contributed 36% to phubbing behavior, while social media addiction accounted for 22.9%. Together, these variables contributed to 58.9% of the variance in phubbing behavior, indicating that both factors play a substantial role in shaping this behavior among adolescents engaged in K-Pop fandom.

These results align with previous studies, reinforcing the idea that individuals with higher levels of FoMO are more likely to engage in excessive social media use, which in turn leads to increased phubbing behavior. This highlights the psychological mechanisms through which digital engagement affects face-to-face communication, particularly in the context of adolescent fans' interactions. Furthermore, the role of social media addiction in driving phubbing behavior emphasizes the need for interventions targeted at managing digital consumption, particularly for vulnerable adolescent groups.

Future research is recommended to explore other contributing factors, such as the influence of gender, duration of social media use, and the specific types of social media platforms used, to provide a more comprehensive understanding of phubbing behavior in different contexts. Additionally, longitudinal studies are necessary to assess the causal relationships between these variables over time, offering deeper insights into the long-term impacts of FoMO and social media addiction. The findings of this study offer practical implications for educators, parents, and mental health practitioners in helping adolescents manage their digital habits and foster healthier social interactions both online and offline.

REFERENCES

- Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45(1), 131-142. <https://doi.org/10.1177/0013164485451012>
- Aisafitri, L., & Yusrifah, K. (2020). Sindrom fear of missing out sebagai upaya gaya hidup generasi milenial di Kota Depok. *Jurnal Riset Mahasiswa Dakwah dan Komunikasi (JRMKD)*, 2(4), 1166-1177. <http://dx.doi.org/10.24014/jrmdk.v2i4.11177>
- Almaida, R., Gumelar, S., & Laksmiwati, A. (2021). Dinamika psikologis fangirl k-pop. *Cognicia*, 9(1), 17-24. <https://doi.org/10.22219/cognicia.v9i1.15059>
- Al-Saggaf, Y., & O'Donnell, S. B. (2019). The Role of State Boredom, State of Fear of Missing Out and State Loneliness in State Phubbing. *Proceedings of the 30th Australasian Conference on Information Systems* (pp. 214-221). Perth Western Australia: Australasian

- Conference on Information Systems. https://researchoutput.csu.edu.au/ws/portalfiles/portal/37002915/35753003_published_paper.pdf
- Amelia, T., Despitari, M., Sari, K., Putri, D. S., Oktami, P., & Agustina. (2019). Phubbing penyebab dan dampaknya pada mahasiswa Fakultas Kesehatan Masyarakat. *Jurnal Ekologi Kesehatan*, 18(2), 122-134. <https://doi.org/10.22435/jek.18.2.1060.122-134>
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252-262. <https://doi.org/10.1037/adb0000160>
- APJII. (2022, June). Hasil Survei Profil Internet Indonesia 2022. <https://apjii.or.id/content/read/39/559/Hasil-Survei-Profil-Internet-Indonesia-2022>
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186-3191. <https://doi.org/10.1097/00007632-200012150-00014>
- Bilgin, M., Sahin, I., & Togay, A. (2020). Social Media Addiction in Adolescents and Parent-Adolescent Relationship. *Education and Science*, 45(202), 263-281. <http://dx.doi.org/10.15390/EB.2020.8202>
- Chi, L., Tang, T., & Tang, E. (2022). The phubbing phenomenon: a cross-sectional study on the relationships among social media addiction, fear of missing out, personality traits, and phubbing behavior. *Current Psychology*, 41, 1112-1123. <https://doi.org/10.1007/s12144-021-02468-y>
- 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>
- CNN Indonesia. (2022, January 26). Indonesia jadi negara dengan K-Poper terbesar di Twitter. <https://www.cnnindonesia.com/hiburan/20220126202028-227-751687/indonesia-jadi-negara-dengan-k-poper-terbesar-di-twitter>
- Fariha, D. A. (2020). *Pengaruh fear of missing out terhadap phubbing dengan empati sebagai variabel moderator*. Fakultas Psikologi, UIN Sunan Gunung Djati Bandung. <https://etheses.uinsgd.ac.id/id/eprint/35061>
- Franchina, V., Abeele, M. V., Van Rooji, A. J., Coco, G. L., & Marez, L. D. (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), 1-18. <https://doi.org/10.3390/ijerph15102319>
- Hae-yeon, K. (2022, March 3). Hallyu fans exceed 156.6 million: KF report. <https://www.koreaherald.com/view.php?ud=20220303000739>
- Hasmi, F. (2022). *Pengaruh fear of missing out (FoMO) terhadap phubbing behavior pada remaja*. [skripsi] Psikologi Universitas Andalas. <http://scholar.unand.ac.id/id/eprint/102721>
- Hidayati, N., & Indriana, Y. (2022). Hubungan antara fanatisme dengan perilaku konsumtif pada remaja penggemar Kpop di Semarang. *Jurnal Empati*, 11(01), 56-60. <https://doi.org/10.14710/empati.2022.33361>
- Hura, M. S., Sitasari, N. W., & Rozali, Y. A. (2021). Pengaruh fear of missing out terhadap perilaku phubbing pada remaja. *Jurnal Psikologi: Media Ilmiah Psikologi*, 19(02), 34-45. <https://doi.org/10.47007/jpsi.v19i2.191>
- Isrofin, B. (2020). Validasi Generic Scale of Phubbing (GSP) Versi Bahasa Indonesia dengan Rasch Model. *Nusantara of Research: Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri*, 7(1), 9-18. <https://doi.org/10.29407/nor.v7i1.13883>
- Karadag, E., Tosuntas, S. B., Erzen, E., Duru, P., Bostan, N., Sahin, B. M., & Babadag, 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>
- Kurnia, S., & Sitasari, N. W. (2020). Kontrol Diri dan Perilaku Phubbing pada Remaja di Jakarta. *Jurnal Psikologi: Media Ilmiah Psikologi*, 18(1), 58-67. <https://doi.org/10.47007/jpsi.v18i01.81>
- Kurniawan, R., & Utami, R. H. (2022). Validation of Online Fear of Missing Out (ON-FoMO) Scale in Indonesian Version. *Jurnal Neo Konseling*, 4(3), 1-10. <http://dx.doi.org/10.24036/00651kons2022>
- Lameshow, S., Horner, D. W., Klas, J., & Lwanga, S. K. (1997). *Besar Sampel dalam Penelitian Kesehatan*. Yogyakarta: Gadjah Mada University Press.
- Marseal, A. P., Al Fatimah, A. D., Lestari, I. A., Christina, S., Wardono, T. S., & Cahyono, R. (2022). Fenomena Fear of Missing Out pada penggemar K-Pop. *Buletin Riset Psikologi Dan Kesehatan Mental (BRPKM)*, 2(1), 599-606. <https://doi.org/10.20473/brpkm.v2i1.32310>
- Maza, S., & Aprianty, R. A. (2022). Hubungan Kontrol Diri dengan Fear of Missing Out (FOMO) pada Remaja Pengguna Media Sosial. *Jurnal Mahasiswa BK An-Nur*, 8(3), 148-157. <http://dx.doi.org/10.31602/jmbkan.v8i3.9139>
- Milyavskaya, M., Saffran, M., Hope, N., & Koestner, R. (2018). Fear of missing out: Prevalence, dynamics, and consequences of experiencing FOMO. *Motivation and Emotion*, 42(5), 725-737. <https://doi.org/10.1007/s11031-018-9683-5>
- Pemayun, P. M. (2019). *Pengaruh Adiksi Smartphone, Fear of Missing Out (FoMO) dan Konformitas terhadap Phubbing*. [skripsi], Fakultas Psikologi, UIN Syarif Hidayatullah Jakarta. <http://repository.uinjkt.ac.id/dspace/handle/123456789/48122>
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral

- correlates of fear of missing out. *Computers in Human Behavior*, 29, 1841-1848.
- Putri, L. A. (2020). Dampak Korea Wave terhadap perilaku remaja di era globalisasi. *Al-Ittizaan: Jurnal Bimbingan Konseling Islam*, 3(1), 42-48. <http://dx.doi.org/10.24014/0.8710187>
- Rachman, A. (2021). The Effect of Social Media Addiction on Student Phubbing Behavior. *International Journal of Arts and Social Science*, 4(3), 113-117.
- Ratnasari, E., & Oktaviani, F. D. (2020). Perilaku Phubbing pada Generasi Muda (Hubungan antara Kecanduan Ponsel dan Media Sosial terhadap Perilaku Phubbing). *Metakom: Jurnal Kajian Komunikasi*, 4(1), 89-104. <https://doi.org/10.23960/metakom.v4i1.82>
- Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of Behavioral Addictions*, 3(3), 133-148. <https://doi.org/10.1556%2FJBA.3.2014.016>
- Santrock, J. W. (2012). *Life-Span Development* (13th ed.). Penerbit Erlangga.
- Sette, C. P., Lima, N. R., Queluz, F. N., Ferrari, B. L., & Hauck, N. (2020). The Online Fear of Missing Out Inventory (ON-FoMO): Development. *Journal of Technology in Behavioral Science and Validation of a New Tool*, 5, 20-29. <https://doi.org/10.1007/s41347-019-00110-0>
- Silmi, A., & Novita, E. (2022). Dampak psikologis perilaku phubbing dalam berinteraksi sosial pada mahasiswa. *JOUSKA: Jurnal Ilmiah Psikologi*, 1(1), 25-35. <https://doi.org/10.31289/jsa.v1i1.1096>
- Steinberg, L. (2013). *Adolescence* (Tenth Edition ed.). McGraw-Hill Higher Education.
- Syamsodin, W. K., Bidjuni, H., & Wowiling, F. (2015). Hubungan Durasi Penggunaan Media Sosial dengan Kejadian Insomnia pada Remaja di SMA Negeri 9 Manado. *Jurnal Keperawatan*, 3(1), 1-10. <https://doi.org/10.35790/jkp.v3i1.6691>
- Tandon, A., Dhir, A., Talwar, S., Kaur, P., & Mantymaki, M. (2022). Social media induced fear of missing out (FoMO) and phubbing: Behavioural, relational and psychological outcomes. *Technological Forecasting & Social Change*, 174, 1-15. <https://doi.org/10.1016/j.techfore.2021.121149>
- Wang, E. S., & Wang, M. C. (2013). Social support and social interaction ties on internet addiction: integrating online and offline contexts. *Cyberpsychology, behavior and social networking*, 16(11), 843-849. <https://doi.org/10.1089/cyber.2012.0557>
- Wiesner, L. (2017). *Fighting FoMO : a study on implications for solving the phenomenon of the Fear of Missing Out* [Essay (Master), University of Twente]. Netherlands. <http://essay.utwente.nl/73690/>
- Youarti, I. E., & Hidayah, N. (2018). Perilaku phubbing sebagai karakter remaja generasi Z. *Jurnal Fokus Konseling*, 4(1), 143-152. <https://doi.org/10.26638/jfk.553.2099>
- Younas, F., Amjad, S., & Qayyum, S. (2022). Fear of Missing Out and Phubbing in Young Adults: The Mediating Role of Social Media Addiction. *Pakistan Journal of Social Sciences*, 42(4), 867-878. <https://pjss.bzu.edu.pk/index.php/pjss/article/view/1170>