

# Fear of Missing Out and Consumer Happiness on Instagram: A Serial Mediation of Social Media Influencer-Related Activities

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## Abstract

Mounting research shows negative psychological effects for social media and recognizes fear of missing out (FoMO) as a key driver of social media use. This article focuses on social media influencers (SMIs) and investigates potentially positive forms of usage on psychological well-being (i.e., happiness), including how FoMO impacts consumer response to SMIs. A serial mediation model using survey data ( $N=604$ ) indicates SMI-related activities are positively associated with a consumer's happiness. Furthermore, SMI-related activities jointly and positively mediate the relationship between FoMO and happiness. Individuals higher in FoMO more frequently visited SMIs' account profiles leading to more frequent purchasing of products recommended by SMIs, which in turn positively influenced happiness. Implications of the findings are discussed with suggestions for future research.

**Keywords:** social media influencers, fear of missing out, Instagram, consumer behavior, happiness

## Introduction

ACCORDING TO SNAPCHAT,<sup>1</sup> 64 percent of Gen Z consumers (i.e., born after 1996, also referred to as *digital natives*)<sup>2</sup> indicate that they are constantly on social media. Part of what drives this behavior is fear of missing out (FoMO) or the "pervasive apprehension that others might be having rewarding experiences from which one is absent."<sup>3</sup> This is a global phenomenon along with growing rates of unhappiness among consumers and, therefore, warrants further investigation.<sup>4,5</sup> From the vantage point of self-determination theory, FoMO arises from deficits in essential psychological needs that lead to preoccupation with constantly knowing what others are doing.<sup>3</sup> The association between FoMO, frequent use of social media, and negative well-being is widely known.<sup>5-8</sup> However, studies that fall within this stream almost always focus on general social media use without acknowledging the fact that different online activities have distinct psychological effects.<sup>9-11</sup> Meaning, certain uses of social media may contribute positively to subjective well-being.<sup>12,13</sup>

A noteworthy and relatively new social media activity that warrants attention is the consumption of content created by

social media influencers (SMIs), who are "a new type of independent third party endorser who shape audience attitudes through blogs, tweets, and other social media."<sup>14</sup> Instagram has sparked the rise of SMIs who are valuable sources of information to learn about the latest trends, news, and brands, as well as figures consumers aspire to be like.<sup>15,16</sup> The success of SMIs does not solely stem from delivering timely information, but also from parasocial relationships.<sup>17</sup> Young consumers relate to SMIs on a personal level and perceive them as close friends.<sup>18-20</sup>

The Absorption-Addiction model of celebrity worship<sup>21</sup> is a useful framework for delineating the role SMIs play for those who frequently experience FoMO. The model suggests that individuals marked with psychological deficiencies rely on celebrity figures to fulfill their inadequacies.<sup>22</sup> By closely associating with their favorite celebrities, these individuals seek to enhance their self-concept and construct a more stable identity. For example, celebrity worshippers actively seek for more intimate information about the celebrity and even purchase goods related to them.<sup>22</sup> Meaning, heightened attention to and engagement in activities related to celebrities serves as an "external gratification."<sup>23</sup> Research has shown that characteristics related to poorly defined self-concepts

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such as materialism, compulsive buying,<sup>23</sup> and poor mental health<sup>24</sup> are highly correlated with being absorbed into a celebrity's life.

Applying this conceptual framework to SMIs, it is predicted that SMI-related activities will similarly satisfy the deficiencies of FoMO consumers and, as a result, enhance psychological well-being (i.e., happiness). Following the lives of SMIs and purchasing products they recommend should not only fulfill the need for interpersonal relationships but also facilitate opportunities to identify with influencers. For example, a study by Kim and Kim<sup>25</sup> demonstrates that users' sense of friendship and self-congruity with a celebrity they follow on social media positively influence users' well-being and life quality. In addition, upward comparison with SMIs increases self-improvement motivation, thus having a positive effect on various aspects of life, including health, fashion, leisure, and more.<sup>26</sup> In sum, SMIs gratify various psychological needs, including informational needs, social needs, and self-actualization needs.<sup>3,27</sup>

This study predicts that SMI-related activities will function as a link between FoMO and happiness. Individuals higher in FoMO will frequently visit SMIs' account pages, which will lead to more frequent consumption of products they recommend. Furthermore, such SMI-related activities will enhance happiness as it allows individuals to experience a sense of fulfillment by connecting with SMIs.<sup>28</sup> In addition, the direct effect of FoMO on happiness will be negative in line with prior research.<sup>5-7</sup> The following summarizes the hypotheses:

**H1. FoMO is negatively related to happiness.**

**H2. FoMO is positively related to the frequency of visiting SMIs' pages.**

**H3. FoMO is positively related to the frequency of purchasing SMI-recommended products.**

**H4. Frequency of visiting SMIs' pages is positively related to happiness.**

**H5. Frequency of purchasing SMI-recommended products is positively related to happiness.**

**H6. Frequency of visiting SMIs' page is positively related to frequency of purchasing SMI-recommended products.**

**H7. SMI-related activities jointly mediate the relationship between FoMO and happiness.**

## Procedure and Respondents

This study used secondary data that were originally collected by an advertising agency located in the southwest region of the United States. Data were specifically gathered to understand current media use of Generation Z consumers. All respondents were recruited online using the Pollfish U.S. subject pool during a 1-week period in August 2019. To partake in this research, respondents were required to be part of the Gen Z population (18–24 years). To this end, of the 2,788 participants who had accessed the survey, 1,129 participants completed. Those who failed at least one attention check question or had missing data were eliminated to ensure data quality. Of the remaining 930 participants, 66 percent ( $n=617$ ) indicated they were following at least one influencer on Instagram.<sup>29</sup> And participants who identified as being nonbinary ( $n=13$ ) were further dropped from the final

TABLE 1. SAMPLE CHARACTERISTICS ( $N=604$ )

<i>Sample profile</i>	
Age, mean (minimum–maximum)	20.29 (18–24)
Female, percent	55
Male, percent	45
Ethnicity, percent	
White or Caucasian	52
Black or African American	16.7
Hispanic, Latino, or of Spanish origin	12.7
Multiracial	9.8
Asian	4.6
American Indian or Alaska Native	0.7
Native Hawaiian or other Pacific Islander	0.7
Other	2.8

data set due to insufficient sample size, resulting in a total of 604 respondents for subsequent analysis. Table 1 summarizes the sample characteristics.

## Measures

### Independent variable

*Fear of missing out. FoMO* was measured using the Przybylski et al.<sup>3</sup> 10-item scale with items ranging from *Not at all true to me* (1) to *Extremely true of me* (5) ( $M=2.68$ ,  $SD=0.86$ ,  $\alpha=0.86$ ). Sample items include “I get anxious when I don't know what my friends are up to.”

### Mediating variables

*SMI page visit frequency.* SMI page visit frequency assessed how often each participant visits SMIs' profile page. This scale was measured with a single item ranging from less than once a month (1) to several times an hour (13). See Table 2 for descriptive statistics.

*Frequency of purchases from SMI accounts.* Frequency of purchases from SMI accounts was measured with a single item asking participants “How frequently have you purchased something recommended by a social media influencer.” Responses ranged from *Never* (1) to *Frequently* (5) ( $M=2.03$ ,  $SD=1.02$ ).

TABLE 2. SOCIAL MEDIA INFLUENCER PAGE VISIT FREQUENCY DESCRIPTIVE STATISTIC

	<i>Percent (Frequency)</i>
Less than once a month	9.3 (56)
Monthly	2.8 (17)
Couple times a month	6.5 (39)
Several times a month	3.3 (20)
Weekly	7.1 (43)
Couple times a week	11.8 (71)
Several times a week	10.6 (64)
Daily	16.1 (97)
Couple times a day	10.4 (63)
Several times a day	8.8 (53)
Hourly	5.0 (30)
Couple times an hour	4.5 (27)
Several times an hour	4.0 (24)

TABLE 3. BIVARIATE RELATIONSHIPS AMONG VARIABLES (N=604)

	FoMO	Visit frequency	Purchase frequency	Happiness
FoMO	—	0.14***	0.18***	-0.15***
Visit frequency		—	0.23***	0.10*
Purchase frequency			—	0.07
Happiness				—

Note: Spearman's correlations. \* $p < 0.05$ ; \*\*\* $p < 0.001$ .  
FoMO, fear of missing out.

#### Dependent variable

**Happiness.** Happiness was measured using Lyubomirsky and Lepper's 4-item scale<sup>30</sup> ( $M = 3.21$ ,  $SD = 0.87$ ,  $\alpha = 0.74$ ). Items assessed the extent participants consider themselves to be generally (*Not a happy person* = 1 to *A very happy person* = 5) and relatively happy compared with friends (*Less happy* = 1 to *More happy* = 5), if they are getting the most out of life (*Not at all* = 1 to *A great deal* = 5), and if they never seem as happy as they might be (*Not at all* = 1 to *A great deal* = 5).

#### Control variables

**Daily social media usage time.** Daily social media usage time was controlled based on the wealth of literature that suggests social media usage time influences psychological well-being.<sup>9</sup> Participants were asked to indicate how much time they spend on social media daily ( $M = 281$  minutes,  $SD = 194.20$ ).

**Gender.** Gender was controlled given that males and females differ on social media use<sup>8,31,32</sup> (*Male* = 1, *Female* = 2).

#### Data analysis

IBM SPSS Statistics 22 was used to analyze the data. Bivariate relationships among variables are reported in Table 3; Spearman's correlation was performed given the presence of an ordinal variable (i.e., SMI page visit frequency). For hypotheses testing, a serial mediation model was examined with PROCESS Macro 3.5 in which manifest variables were used (bootstrapping  $m = 5,000$ ; Model 6; mean centered for construction of products).<sup>33</sup>

### Results

#### Descriptive statistics

Given the nature of the study, SMI-following status was assessed. Participants followed an average of 15 ( $SD = 17.25$ ) SMIs on Instagram. Beauty influencers were the most popular type of influencer (51 percent), followed by gaming (49 percent), fashion (42 percent), food (41 percent), fitness (35 percent), travel (28 percent), tech and business (23 percent), home decor (22 percent), and parenting (15 percent).

#### Hypothesis testing

The direct effect of FoMO and happiness was consistent with H1 as data indicate a negative association between FoMO and happiness ( $\beta = -0.18$ , standard error [ $SE$ ] = 0.04,  $t = -4.38$ ,  $p < 0.001$ ). FoMO was positively associated with SMI page visit frequency ( $\beta = 0.14$ ,  $SE = 0.15$ ,  $t = 3.60$ ,  $p < 0.01$ ) and purchase frequency ( $\beta = 0.17$ ,  $SE = 0.05$ ,

$t = 4.21$ ,  $p < 0.001$ ), supporting H2 and H3. Both visit frequency ( $\beta = 0.12$ ,  $SE = 0.01$ ,  $t = 2.77$ ,  $p < 0.01$ ) and purchase frequency ( $\beta = 0.09$ ,  $SE = 0.04$ ,  $t = 2.21$ ,  $p < 0.05$ ) were positively associated with happiness, supporting H4 and H5. Furthermore, both visit frequency and purchase frequency served as individual mediators between FoMO and happiness (visit frequency: confidence interval [CI] from 0.004 to 0.03; purchase frequency: CI from 0.002 to 0.03). Supporting H6, visit frequency was positively associated with purchase frequency ( $\beta = 0.23$ ,  $SE = 0.01$ ,  $t = 5.76$ ,  $p < 0.001$ ). H7 is also supported as visit frequency and purchase frequency together link the effects of FoMO on happiness. The bootstrapped estimate of the serial mediation model was statistically significant (CI from 0.0004 to 0.01). The total effect was still negative due to the strong negative effect of FoMO on happiness ( $\beta = -0.15$ ,  $SE = 0.04$ ,  $t = -3.57$ ,  $p < 0.001$ , CI from -0.23 to -0.07). Table 4 summarizes the indirect effects. See Figure 1 for summary of results.

#### Effects of control variables

Daily social media usage time significantly predicted SMI page visit frequency ( $\beta = 0.10$ ,  $SE = 0.001$ ,  $t = 2.42$ ,  $p < 0.05$ ) and happiness ( $\beta = -0.12$ ,  $SE = 0.0002$ ,  $t = -3.10$ ,  $p < 0.01$ ). Gender significantly predicted SMI page visit frequency ( $\beta = -0.16$ ,  $SE = 0.26$ ,  $t = -4.02$ ,  $p < 0.001$ ).

### Discussion

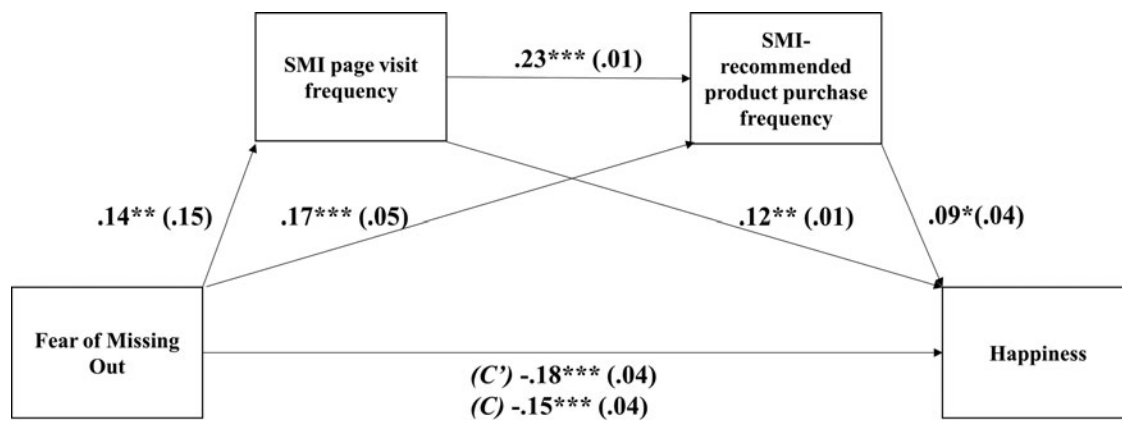
Findings in this study showed that SMI-related activities function as key mechanisms linking FoMO and happiness in Gen Z consumers. Although FoMO was negatively associated with happiness, corroborating previous studies,<sup>33</sup> SMI-related activities partially attenuated this effect. Based on the Absorption-Addiction model, following the lives of SMIs and purchasing products they recommend seem to allow young adults to identify with SMIs and satisfy some level of psychological deficiency.<sup>3</sup> This is in line with research that

TABLE 4. ANALYSIS OF INDIRECT EFFECTS

	$\beta$	Bootstrapping <sup>a</sup>			
		Bias corrected 95% CI			
		Boot	SE	Lower	Upper
Visit frequency	0.02	0.01		0.004	0.03
Purchase frequency	0.02	0.01		0.002	0.03
Visit $\rightarrow$ purchase	0.003	0.002		0.0004	0.01
					p
					0.004
					0.018
					0.018

<sup>a</sup>Bootstrapping based on 5,000 samples.

CI, confidence intervals; SE, standard error.



**FIG. 1.** Summary of standardized coefficients and standard errors. *Note:* \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . SMI, social media influencer.

have attributed the success and popularity of SMIs to the parasocial relationships they promote, which induce positive emotional consequences.<sup>18,25,34</sup> And, given that the main stage for SMIs are image-based platforms such as Instagram, their interactive content may attenuate the loneliness of followers due to the increased social presence.<sup>35</sup>

This study contributes to the growing literature that aims to understand the sociopsychological impact FoMO and social media use has on consumers.<sup>8</sup> Although most existing research dwell on FoMO as a negative construct,<sup>3,36</sup> this study goes a step further by demonstrating that it can be used as a positive motivator to get users to engage with SMI content and ultimately improve levels of happiness through SMI exposure. This study helps us better understand how consumers' desire to be knowledgeable and in the knowledge about SMI content can be a key driver in their behaviors on these platforms.

Findings are promising given the growing significance of SMIs in the social media ecosystem. Our study can expand into the domains of health communication as it suggests consumers benefit psychologically from SMIs. This is consistent with Pilgrim and Bohnet-Joschko's<sup>26</sup> study in which they demonstrate SMIs are effective means of promoting a healthy lifestyle, and ultimately well-being, by providing personal solutions for public health issues (e.g., eating disorders). Health organizations may benefit from partnering up with SMIs to communicate healthy behaviors in twofold: improve psychological well-being of consumers as well as encourage healthy behavior.

Although the findings in this study offer important insights, it is not without limitations. This study focuses on a very specific domain of social media usage. To better elucidate why usage related to SMIs have such a contrasting effect, future research should compare how influencer-focused activities differ from general social media use. To do so, subsequent studies can investigate whether there are gratifications that are unique to SMI usage and examine their psychological impact on consumers. In addition, single item measures were used to assess how frequently participants visit SMI accounts and purchase products recommended by them. Future research should try replicating the findings with stronger methodological approaches. To more accurately capture behavioral occurrences, longitudinal approaches such as e-tracking or diary studies where participants' everyday

experiences are recorded or experimental designs that could more rigorously test the psychological effects of influencers' content should be conducted to substantiate this study's findings.

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