

# The Effect of Narcissism on Attitude to Instagram Advertisements: Focusing on Generation MZ

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**Abstract:** This study tries, with the relationship between narcissism, attitude to Instagram advertisements, and attitude to products among those of Generation MZ who are high in narcissism. First, this study examines the effect of narcissism on susceptibility to informational influence, impulse buying tendency, and openness to experience, the effects of them on attitude to Instagram advertisements and attitude to products, finally, mediating effects of them. This study conducted an online survey to 248 Instagram users among those of Generation MZ and analyzed the data using SPSS 2.1. It was found that narcissism has positive (+) effect on susceptibility to informational influence, impulse buying tendency, and openness to experience, and that susceptibility to informational influence, impulse buying tendency, and openness to experience have positive (+) effects on attitude to Instagram advertisements and attitude to products. The mediating effects of susceptibility to informational influence and impulse buying tendency were also identified. However, openness to experience was found not to have such a mediating effect.

**Keywords:** Narcissism, Susceptibility to Informational Influence, Impulse Buying Tendency, And Openness to Experience, Attitude to Instagram Advertisements, Attitude to Products

## 1. INTRODUCTION

The number of Meta Platforms users of Instagram and Facebook is about 2.93 billion, 4% increase from last year. On the other hand, its sales have decreased. Accordingly, to raise its sales, Meta Platforms decided to insert its advertisement on the homepage of Instagram and profiles of influencers, and, using AI, add customized advertisements on messengers. In Addition, Meta is testing to insert AR advertisements on the Instagram main page and is preparing to add advertisements on short video reels.

In such ways, Meta tries various marketing strategies to raise sales. By posting writings, photos, and videos about themselves, SNS users reveal themselves to others, forming closeness with them and acquiring positive feelings and social support from them [1,2]. Instagram can be called a typical SNS for self-exposure. Main users of Instagram are those belonging to Generation MZ. Generation MZ is combination of M or 'Millennials' who were born from 1981 to 1996 and Generation Z for those born from 1997 onward. Generation MZ, adroit in using digital devices, is leading 'flex' culture where they pursue new trends and novel experiences focusing on today's happiness and satisfaction. The generation pursues current happiness rather than long-term success or goal-oriented life. Based on existing research that, for Generation MZ, the motive of using SNS is related with their narcissistic tendency rather than frequency of using SNS and time [3], this study wanted to examine the relationship between narcissism and Instagram advertisements for Generation MZ.

Accordingly, the goals of this study are as follows. First, by analyzing the effect of narcissism on Instagram advertisements, it wants to establish marketing strategies to raise attitude to products for Generation MZ. Second, it wants to find out Instagram advertisement strategies to raise advertisement effects. Specifically, it wants to examine the effect of narcissism on susceptibility to informational influence, impulse buying tendency, and openness to experience; the effect of other people's information, impulse buying tendency, and openness to experience on narcissism; the effect of attitudes toward Instagram advertisements on product attitude; finally, the mediating effects of susceptibility to informational influence, impulse buying tendency, and openness to experience.

## **2. THEORETICAL BACKGROUND**

### **2.1 Theoretical Background and Hypotheses**

#### **2.1.1 Generation MZ and Narcissism**

Narcissism can be described as external self-love, tendency to positively look at oneself, love oneself, and externally express it [4, 5, 6] The characteristics of narcissistic tendency are self-enlargement, power endowment, and dominant and operational orientation. Among them, core characteristics are low sympathy, surging feeling of grandeur and entitlement of oneself [7, 8, 9] In contemporary society, individualism prevails, making narcissism a tendency commonly found among people. Many researchers have found that, in recent 15 years, narcissism has continuously risen among college students who can be considered as representing Generation MZ. Generation MZ is the combination of Generation- M or the millennial generation born from 1981 to 1996 and Generation Z born in 1997 onward, it is a common designation for those in their 20s and 30s as of now. This generation has such a technical tendency that posting text messages, instant messaging, and tweets to content and videos on social media are considered a life routine behavior as natural as breathing, doing conversation, eating and sleeping [10].

Those of Generation MZ who can freely use new digital technology like Internet and mobile phone tend to express themselves through SNS, and openly upload their lifestyles. They have strong individualistic tendency, and strong consumers leading consumption and trend.

Narcissism affects using SNS and expressing oneself on SNS [11]. To those who have strong tendency of narcissism that they believe that they are superior to others, SNS is a good tool to express themselves to the outside world. Those high in narcissistic tendency put high value to enhance their images and express their uniqueness. Thus, they pursue products and brands which can make them attractive and allow them to express their personalities.

#### **2.1.2 Narcissism and Susceptibility to Informational Influence**

Depending on their tastes and preferences, Instagram users check what others post, and freely follow them, and check and compare the numbers of 'like' on their own posts and those of others. Such a high interaction is a characteristic of Instagram. Such platforms of Instagram make users be conscious of information posted by others and responses of others. When a consumer tries to purchase a product, susceptibility to informational influence means the tendency of him or her to get and use information about it from people who are meaningful to him or her or who have much information on it [12]. In the SNS and Internet environment where users tend to interact with others, users are very susceptible to informational influence. Those who are high in narcissistic tendency like to interact with others, check what are updated in SNSs of others and what others share [13].

Those of Generation MZ higher in narcissistic tendency than other generations respond sensitively to information shared by an unspecified large number of people. According to KISDI (Korea Information Society Development Institute), Generation MZ is adroit in using digital devices, and like to communicate with others and express themselves through SNS, and the generation is more likely than other generations to acquire information from SNS posts of other users, and, based on such information, make online purchase. Thus, this study sets the first hypothesis as follows.

Hypothesis 1: Narcissism will have positive (+) effect on susceptibility to informational influence.

#### **2.1.3 Narcissism and Impulse Buying Tendency**

Impulse buying is the behavior of buying something in response to an external stimulus and can be defined as decision-making to buy something impulsively at the site without a previous buying plan. In particular, Kollat & Willett defined impulse buying as impulsive buying or simply unplanned buying of shoppers [14]. Recently, it has been known that, in the shopping environment dominated by Internet and other online devices, the characteristics like playfulness, usefulness, personalization, and ubiquity have significant effects on impulse buying. Kacen and Lee (2002) defined self-identity as independence and mutual interdependence, and found out that the higher self-identity is, the more likely one

is buy impulsively. They compared the difference of impulse buying between independent consumers who buy goods on their own judgements and interdependent ones who are conscious of what others buy and found out that the former group of consumers are more likely to buy impulsively than the latter group of consumers.

Those of Generation MZ, high in narcissism and strong in individualism tend to post happy and joyful features and positive aspects in Instagram. It is an ostentatious attitude to highlight their merits, and Instagram is a platform where users can easily express ostentatious tendency. Observing advertisements on Instagram, they are likely to impulsively buy products suitable to express themselves. Therefore, this study sets the 2nd hypothesis as follows.

Hypothesis 2: Narcissism will have positive (+) effect on impulse buying tendency.

#### **2.1.4 Narcissism and Openness to Experience**

While there is some difference in opinions among scholars, five elements of personality are generally considered to be composed of openness to experience, agreeableness, conscientiousness, extraversion, and neuroticism [15, 16]. Openness to Experience is the tendency to enjoy new ideas and experiences, and the will to accept change and complexity without refusing them [17]. It is related with intellectual curiosity, interest in esthetic matters, preference to new experiences, pursuit of variety, and tolerance of meeting strangers, etc.

Those of Generation MZ actively share goods they like on SNS and find happiness in buying them. Behaviors and motives to generate contents in social media have been found to related with expression of social desire or love among narcissistic people [18]. Those high in narcissistic tendency tend to express their experiences ostentatiously in SNS more than other types of people. Thus, this study sets the following hypothesis.

Hypothesis 3: Narcissism will have positive (+) effect on openness to experience.

#### **2.1.5 Susceptibility to Informational Influence and Attitude to Instagram Advertisements**

There are various reasons why people use SNS: sharing of special knowledge and information, sharing of personal interests, hobby and leisure activities, expansion of friendliness, self-expression, and public relations, etc. Among those reasons, information sharing is informational value acquired by acquiring and sharing information on external environment and identifying opinions of others [19]. While using SNS, users face various kinds of advertisements. It was found that informational motive has significant effect on pursuit of reliable advertisements and willingness to buy [20]. Reliable advertisements and information on SNS advertisements have positive effects on susceptibility to informational influence of users. It was found that in the SNS environment where users frequently interact with others, the above relationship is significant. Thus, this study sets the following hypothesis.

Hypothesis 4: susceptibility to informational influence will have positive (+) effect on attitude to Instagram advertisements.

#### **2.1.6 Impulse Buying Tendency and Attitude to Instagram Advertisements**

Impulse buying can be described as unplanned buying. Some previous research described impulse buying as the result of being exposed to stimuli at store. however recent studies have argued that impulse buying occurs when a consumer suddenly or continuously experiences impulse to buy something. They have also pointed out that it is consumption behavior which instantaneously takes place caused by irresistible strong desire for a certain product [21].

Such an impulse buying can occur more frequently in online shopping environment than in offline shopping environment, because, in online environment, there are elements like cheap information-searching cost, convenience to buy, and price benefits, etc. In addition, modern consumers who live in the online environment of stimulating

Internet marketing strategies are very likely to do impulse buying. Various ways of expressing contents only Internet can enjoy work as factors of buying for consumers, because they have positive attitudes to online advertisements. Thus, this study sets the following hypothesis.

Hypothesis 5: Impulse buying tendency will have positive (+) effect on attitude to Instagram advertisements.

### **2.1.7 Openness to Experience and Attitude To Instagram Advertisements**

The five-element model (Big Five), the most widely used personality classification model in psychology, is not a theoretical model, but a description of personality characteristics, and it was empirically developed by analyzing correlation patterns among respondents [22]. Openness to experience is one of the five basic dimensions, it is genetic, stable, and general in overall culture. Openness can be identified in the scope and depth of consciousness, permeability, and continuous search for new experiences and ideas. It is different from intelligence but related with various thoughts and creativity [23].

Uses and gratification theory was developed by Elihu Katz, Denis McQuail, and Karl Rosengren in the 1940s. The theory focuses on how people use media. The relationship between mass media and the audience is that the audience actively uses media contents rather than passively accepts control of media [24]. That is, the motive of using media affects activities of users, and the satisfaction from such activities are related with fulfillment of what they pursue through media [25]. It was found that users high in openness to experience are active and positive to new advertisements as well as new environment [26, 27]. Thus, this study sets the following hypothesis.

Hypothesis 6: Openness to experience will have positive (+) effect on attitude to Instagram advertisements.

### **2.1.8 Attitude to Instagram Advertisements and Attitude To Products**

Due to development of mobile technology and spread of smartphone, Instagram has grown to be an influential marketing platform displaying various kinds of products and services among young consumers. With the emergence of smartphone, those in marketing area increasingly put advertisements of products on social media platforms like Instagram. In particular, Instagram is in the limelight, as it has high immersion rate among users due to its visual superiority [28]. Most Americans use YouTube and Facebook, but young generations usually use Snapchat and Instagram a lot. In addition, 60% of individuals between the ages of 16 and 74 in the EU-28

in 2018 ordered or purchased products or services for personal use over the Internet [29]. Those who watch an advertisement on Instagram tend frequently to follow the brand or visit brand home page and procure it [30]. Consumers who are favorable to social media advertisements are highly likely to seek more information, spread positive evaluations on those products and buy them [31, 32, 33] Thus, this study sets the following hypothesis.

Hypothesis 7: Attitude to Instagram advertisements will have positive (+) effect on attitude to products.

### **2.1.9 Mediating Effects of Susceptibility to Informational Influence, Impulse Buying Tendency, And Openness to Experience**

In the Instagram platform, one of the online shopping environments, susceptibility to informational influence, impulse buying tendency, and openness to experience are used as variables to predict attitudes of consumers.

Among those of Generation MZ, 39% of those in their 20s and 35% of those in their 30s use social media to search for information on products they are interested in. Increasing number of them use online shopping. Among social media, Instagram is the platform the largest number of them use for such a purpose. So, it is necessary to pay attention to Instagram as advertisement media. It was found that narcissistic tendency is one of the elements affecting characteristics and desire of social media users, and that narcissistic tendency affects social media uses and motives of using them and behaviors of information provision and acceptance of it [34, 35, 36,37].

Therefore, In the relationship between narcissism and attitudes to Instagram advertisements, susceptibility to informational influence, impulse buying tendency, and openness to experience may have the mediating effects.

Hypothesis 8: In the relationship between narcissism and attitudes to Instagram advertisements, susceptibility to informational influence, impulse buying tendency, and openness to experience will have the mediating effects.

### 3. RESEARCH METHOD

#### 3.1 Research Model

This study examines whether, among those of Generation MZ, those high in narcissistic tendency tend to expose themselves in SNS, observe posts uploaded by others, obtain information, impulsively buy products which are good to improve their images, and post opinions after using the products. This study expects that narcissism will have positive (+) effect on susceptibility to informational influence, impulse buying tendency, and openness to experience. Now, those of Generation MZ increasingly use Instagram. While using Instagram, they face various advertisements, and this study expects that their susceptibility to informational influence, impulse buying tendency, and openness to experience will have positive effect on preference to such advertisements. It also expects that positive preference to such advertisements will have positive effect on preference to such products. Based on such expectations, this study expects that in the relationship between narcissism and attitude to Instagram advertisements, susceptibility to informational influence, impulse buying tendency, and openness to experience will have mediating effects.

#### 3.2 Research Procedure and Analytical Method

This study conducted an online survey to 248 respondents of Generation MZ from October 17 to November 10, 2022. This study used the survey questions frequently used by existing research, and properly revised them to suit the aims of this research. The questions were composed of those on demographic characteristics, and on narcissism, susceptibility to informational influence, impulse buying tendency, and openness to experience, and on attitudes to Instagram advertisements and attitudes on products. Respondents were asked to choose answers from 7-point Likert scales. To test hypotheses, this study used SPSS 21.0 statistical program.

First, to figure out demographic characteristics of respondents, this study did frequency analysis. Second, to test reliability and validity of variables, this study did exploratory factor analysis and reliability test. Third, to examine directionality and relationship among variables, this study is correlation analysis. Finally, to test hypotheses, it did regression analyses.



Figure 1 Final research model

#### 3.3 Manipulation Check

Researchers conducted by pilot test and Focus group interview (FGI) in GBC lab at Kumoh National Institute of Technology and age group between the 20s and 50s citizen of Gumi city in South Korea. The Study stimulus as age generations' difference of MZ and 40-50s and across the two stimuli's narcissism of (MMZ = 5.58, M40-50s = 2.43,  $p < 0.00$ ) with the mean value being statistically significant. Thus, manipulated variables was whole of usable meaning in this research.

### **3.4 Measurement of Variables**

#### **3.4.1 Narcissism**

Narcissism is individual character. The question to measure narcissism was the one used in Ames, D, R., Rose, P., & Anderson, C, P. (2006). This study revised it to suit the purpose of this study, and respondents were asked to choose from 7-point Likert scale.

#### **3.4.2 Susceptibility to Informational Influence**

Susceptibility to informational influence is tendency to seek and accept information about a product from others. The question on it was what Jae-mi Yu (2010) used. This study revised it to suit the purpose of this study, and respondents were asked to choose from 7-point Likert scale.

#### **3.4.3 Impulse Buying Tendency**

Impulse buying tendency is the tendency of buying goods without plan. This study revised the questions used by Dong-seop Im (2017) and Jin-woo Park (2018) to suit the purpose of this study. There were three questions, and respondents were asked to choose from the 7-point Likert scale.

#### **3.4.4 Openness to Experience**

Openness to experience is the tendency of enjoying new and creative experiences. This study revised three questions used by Bong-cheol Kim (2007) for the purpose of this study. Respondents were asked to choose from the 7-point Likert scale.

#### **3.4.5 Attitude to Instagram Advertisements**

Attitude to Instagram advertisements is preference to advertisements on Instagram. This study revised and used what Lillian (2010) had developed. There were two questions, and respondents were asked to choose from the 7-point Likert scale.

#### **3.4.6 Attitude to Product**

Attitude to product is preference to products advertised on Instagram. This study revised and used what Ajzen (1975) had developed. There were three questions, and respondents were asked to choose from the 7-point Likert scale.

## **4. RESULTS**

### **4.1 Demographic Characteristics**

The number of respondents was 248, and, among them, the number of females (192, 77.4%) was much larger than that of males (56, 22.6%). In age distribution, the number of teenagers was 4 (1.6%), that of the 20s was 190 (76.6%); that of the 30s was 16 (6.5%); that of early 40s was 38 (15.3%). Job distribution among them is as follows: students 100 (40.3%); office workers 106 (42.7%); self-employed ones 16 (6.5%); housewives 8 (3.2%); others 18 (7.3%). To the question of whether one had ever bought a product after seeing Instagram advertisement, 220 (88.7%) said, 'Yes', and 28 (11.3%) said, 'No'.

To the question on how long they spent on Instagram, 52 (21%) responded they spent less than 30 minutes; 40 (16.1%) said they spent from 30 minutes to one hour; 84 (33.9%) from 1 hour to 2 hours; 72 (29%) over 2 hours. That is, among those in Generation MZ, 63% spent one hour or over on Instagram.

## 4.2 Factor Analysis and Reliability Analysis

To test validity of this study, this study did exploratory factor analysis. To extract components of all measurement variables, this study did principal component analysis. To simplify factor loading, this study adopted varimax method. This study set acceptable factor loading of questions as 0.40 or over. Analysis showed that all the factor loadings were 0.72 or over, satisfying the criteria of 0.40 or over. Reliability test showed that Cronbach alpha coefficient was 0.87 or over, over 0.7, the recommended value. Accordingly, the model of this study proved that it was suitable to test hypotheses.

## 4.3 Correlation Analysis

Correlation analysis is used to identify whether the variables are correlated, and, if they are correlated, how much they are. Correlation analysis of variables showed that all the variables are correlated at 0.01 significance level. Specifically, correlation coefficient between narcissism and narcissism is 1. Correlation coefficient of a variable with the same variable is always 1 and shown on diagonal line in matrix. Correlation coefficient between narcissism and impulse buying tendency is 0.75, proving that they are highly and positively (+) correlated.

## 4.4 Hypothesis Test

### 4.4.1 The effect of Narcissism on Susceptibility to Informational Influence

Hypothesis 1 is that narcissism will have positive (+) effect on susceptibility to informational influence. To test the hypothesis, this study did regression analysis using narcissism as independent variable and susceptibility to informational influence as dependent variable. The result is summarized in Table 1. It shows that narcissism has positive (+) effect on susceptibility to informational influence ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 1. narcissism and susceptibility to informational influence**

	Non-standardized coefficient		t	p
	B	SE		
constant	2.99	.22	13.61	.00
Narcissism	.46	.04	10.37	.00

### 4.4.2 The effect of narcissism on impulse buying tendency

Hypothesis 2 is that narcissism will have positive (+) effect on impulse buying tendency. To test the hypothesis, this study did regression analysis using narcissism as independent variable and impulse buying tendency as dependent variable. The result is summarized in Table 2. It shows that narcissism has positive (+) effect on impulse buying tendency ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 2. narcissism and impulse buying tendency**

	Non-standardized coefficient		t	p
	B	SE		
constant	.78	.21	3.61	.00
Narcissism	.77	.04	17.61	.00

### 4.4.3 The Effect of Narcissism on Openness To Experience

Hypothesis 3 is that narcissism will have positive (+) effect on openness to experience. To test the hypothesis, this study did regression analysis using narcissism as independent variable and openness to experience as dependent variable. The result is summarized in Table 3. It shows that narcissism has positive (+) effect on impulse buying tendency ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 3. narcissism and openness to experience**

	Non-standardized coefficient		t	p
	B	SE		
constant	1.80	.21	8.44	.00
Narcissism	.71	.04	16.54	.00

#### 4.4.4 The Effect of Susceptibility to Informational Influence on Attitude to Instagram Advertisements

Hypothesis 4 is that susceptibility to informational influence will have positive (+) effect on attitude to Instagram advertisements. To test the hypothesis, this study did regression analysis using susceptibility to informational influence as independent variable and attitude to Instagram advertisements as dependent variable. The result is summarized in Table 4. It shows that susceptibility to informational influence has positive (+) effect on attitude to Instagram advertisements ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 4. susceptibility to informational influence and attitude to Instagram advertisements**

	Non-standardized coefficient		t	p
	B	SE		
constant	1.05	.37	2.79	.00
STI	.62	.07	8.90	.00

#### 4.4.5 The Effect of Impulse Buying Tendency on Attitude to Instagram Advertisements

Hypothesis 5 is that impulse buying tendency will have positive (+) effect on attitude to Instagram advertisements. To test the hypothesis, this study did regression analysis using impulse buying tendency as independent variable and attitude to Instagram advertisements as dependent variable. The result is summarized in Table 5. It shows that impulse buying tendency has positive (+) effect on attitude to Instagram advertisements ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 5. impulse buying tendency and attitude to Instagram advertisements**

	Non-standardized coefficient		t	p
	B	SE		
constant	1.91	.26	7.28	.00
IBT	.53	.05	9.66	.00

#### 4.4.6 The Effect of Openness to Experience on Attitude to Instagram Advertisements.

Hypothesis 6 is that openness to experience will have positive (+) effect on attitude to Instagram advertisements. To test the hypothesis, this study did regression analysis using openness to experience as independent variable and attitude to Instagram advertisements as dependent variable. The result is summarized in Table 6. It shows that openness to experience has positive (+) effect on attitude to Instagram advertisements ( $p=0.00$ ). Accordingly, this hypothesis was supported.

**Table 6. openness to experience and attitude to Instagram advertisements**

	Non-standardized coefficient		t	p
	B	SE		
constant	2.57	.35	7.28	.00
OPE	.33	.06	5.09	.00

#### 4.4.7 The effect of Attitude to Instagram Advertisements on Attitude to Product

Hypothesis 7 is that attitude to Instagram advertisements will have positive (+) effect on attitude to product. To test the hypothesis, this study did regression analysis using attitude to Instagram advertisements as independent variable



and attitude to product as dependent variable. The result is summarized in Table 7. It shows that oattitude to Instagram advertisements has positive (+) effect on attitude to product (p=0.00). Accordingly, this hypothesis was supported.

**Table 7. attitude to Instagram advertisements and attitude to product**

	Non-standardized coefficient		t	p
	B	SE		
constant	1.24	.15	7.95	.00
PA	.77	.03	22.87	.00

**4.4.8 Mediating Effects of Susceptibility to Informational Influence, Impulse Buying Tendency, And Openness to Experience**

Hypothesis 8 is that in the relationship between narcissism and attitudes to Instagram advertisements, susceptibility to informational influence, impulse buying tendency, and openness to experience will have the mediating effects. To test the hypothesis, this study did mediate regression analysis by using narcissism as independent variable, susceptibility to informational influence, impulse buying tendency, and openness to experience as mediating variables, and attitudes to Instagram advertisements as dependent variable. The results are shown in Table 8. As the table shows, in the first step, narcissism has significant effect on susceptibility to informational influence, impulse buying tendency, and openness to experience. In the second step, as well, narcissism has significant effect on susceptibility to informational influence, impulse buying tendency, and openness to experience. In the third step, mediating variables — susceptibility to informational influence, impulse buying tendency, and openness to experience — have significant effect on attitudes to Instagram advertisements at the 95% confidence level, satisfying the requirements of step 3. Here, in the mediating effect analysis of susceptibility to informational influence, standardized regression coefficient value ( $\beta = .39$ ) of narcissism — independent variable in step 3 — is smaller than the standardized regression coefficient value ( $\beta = .54$ ) of narcissism — independent variable in step 2, which proves the mediating effect of those variables. More specifically, in step 3, narcissism has significant effect on impulse buying tendency, showing partial mediating effect of it. Finally, in the mediating effect of openness to experience, standardized regression coefficient value ( $\beta = .67$ ) of narcissism — independent variable in step 3 — is larger than standardized regression coefficient value ( $\beta = .54$ ) of narcissism — independent variable in step 2, which shows that it does not have mediating effect

**Table 8. Mediating effects of susceptibility to informational influence**

Model		S.E	$\beta$	t	p
Nar	SII	0.06	0.55	7.31	0.00
Nar	AIA	0.08	0.55	7.33	0.00
Nar	AIA	0.10	0.44	4.90	0.00
SII		0.12	0.21	2.42	0.02

Nar: narcissism  
 SII: susceptibility to informational influence  
 AIA: attitude to Instagram advertisements

**Table 9. Mediating effects of impulse buying tendency**

Model		S.E	$\beta$	t	p
Nar	IBT	0.31	0.75	12.40	0.00
Nar	AIA	0.08	0.55	7.33	0.00
Nar	AIA	0.12	0.40	3.52	0.00
IBT		0.12	0.21	1.88	0.06

Nar: narcissism  
 IBT: impulse buying tendency  
 AIA: attitude to Instagram advertisements

## 5. DISCUSSION

### 5.1 Theoretical Implications and Managerial Implications

This study examined the effect of narcissism on susceptibility to informational influence, impulse buying tendency, and openness to experience, and the effects of susceptibility to informational influence, impulse buying tendency, and openness to experience on attitude to Instagram advertisements and attitude to product, and, finally, in the relationship between narcissism and attitudes to Instagram advertisements, mediating effects of susceptibility to informational influence, impulse buying tendency, and openness to experience.

First, it was found that, among those of Generation MZ, narcissism has positive (=) effect on susceptibility to informational influence, impulse buying tendency, and openness to experience. The fact that those of Generation MZ tend to pay attention to SNSs of others, especially Instagram posts, look carefully at what kinds of information others share and post, get information from such posts, impulsively buy posted products, and post their experiences of using those products more than other generations was confirmed by hypotheses 1, 2, and 3. Second, it was confirmed that susceptibility to informational influence, impulse buying tendency, and openness to experience have positive (+) effects on attitude to Instagram advertisements. It proves that those of Generation MZ, adroit in digital and mobile devices, are susceptible to informational influence, tend to buy impulsively, and open to experience, and positive to Instagram advertisements. Third, attitude to Instagram advertisements was found to have positive (+) effect on attitude to products. Those of Generation MZ not only spend longer time on Instagram, but also are positive to products advertised in Instagram.

Finally, susceptibility to informational influence and impulse buying tendency were found to have partial mediating effects on narcissism and attitude to Instagram advertisements. However, openness to experience does not have such an effect. Practical hints of this study might be the followings. First, those in marketing area need to establish marketing strategies to produce advertisements to lead those of Generation MZ to be highly conscious of narcissism, raising their attitudes to Instagram advertisements and products. Second, as susceptibility to informational influence and impulse buying tendency have mediating effects in the relationship between narcissism and attitudes to Instagram advertisements and products, marketing specialists need to establish marketing strategies to raise their consciousness on such variables.

Finally, as openness to experience does not have mediating effect in the relationship between narcissism and attitudes to Instagram advertisements and products, marketing specialists need to establish marketing strategies to produce Instagram advertisements linked to experience marketing to make openness to experience play mediating role.

### 5.2 Limitations and Further Research

This study was done based on existing research showing that those of Generation MZ have high narcissism. Thus, this study dealt only with those of Generation MZ. However, they are not the only group of people who are high in narcissism. So, it is necessary to expand this study to other generations.

In addition, while this study used fashion as stimulus of attention in survey to those of Generation MZ, Instagram provides advertisements on various other kinds of products. Thus, it is desirable in future studies to apply the method of this study on advertisements on other kinds of products.

## REFERENCE

- [1] Huang HY (2016) Examining the beneficial effects of individual's self-disclosure on the social network site. *Computers in human behavior* 57:122-132.
- [2] Pang H (2018) Microblogging, friendship maintenance, and life satisfaction among university students: The mediatory role of online self-disclosure. *Telematics and Informatics* 35 (8): 2232-2241.
- [3] Bergman SM, Fearington ME, Davenport SW, & Bergman, JZ (2011) Millennials, narcissism, and social networking: What narcissists do on social networking sites and why. *Personality and individual differences* 50 (5): 706-711.
- [4] Han JS, & Ji-Hwan Y (2015) Who Shares Travel Information on Social Media?: A Study of Travel Information Sharing Behaviors according to Narcissistic Propensity. *Journal of Tourism Sciences* 39 (10): 201-216.
- [5] Kohut H (2013) *The analysis of the self: A systematic approach to the psychoanalytic treatment of narcissistic personality disorders*: University of Chicago Press.
- [6] Wink P (1991) Two faces of narcissism. *Journal of personality and social psychology* 61 (4): 590.
- [7] Hart CM, Sedikides C, Wildschut T, Arndt J, Routledge C, & Vingerhoets AJ (2011) Nostalgic recollections of high and low narcissists. *Journal of Research in Personality* 45 (2): 238-242.
- [8] Horton RS, & Sedikides C (2009) Narcissistic responding to ego threat: When the status of the evaluator matters. *Journal of Personality* 77 (5): 1493-1526.

- [9] Morf CC, Horvath S, & Torchetti L (2011) Narcissistic self-enhancement. *Handbook of self-enhancement and self-protection*: 399-424.
- [10] Ghouse SM, Duffett RG, & Chaudhary M (2022) How Twitter advertising influences the purchase intentions and purchase attitudes of Indian millennial consumers?. *International Journal of Internet Marketing and Advertising* 16 (1-2): 142-164.
- [11] Buffardi LE, & Campbell WK (2008) Narcissism and social networking web sites. *Personality and social psychology bulletin* 34 (10): 1303-1314.
- [12] Bearden WO, Shuptrine FK, & Teel JE (1989) Self-monitoring and reactions to image appeals and claims about product quality. *ACR North American Advances*.
- [13] Sheldon P, & Bryant K (2016) Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in human Behavior* 58: 89-97.
- [14] Kollat DT, & Willett RP (1967) Customer impulse purchasing behavior. *Journal of marketing research* 4 (1): 21-31.
- [15] Goldberg LR (1990) An alternative" description of personality": the big-five factor structure. *Journal of personality and social psychology* 59 (6): 1216.
- [16] Mowen JC (2000) *The 3M model of motivation and personality: Theory and empirical applications to consumer behavior* Springer Science & Business Media.
- [17] Myers SD, Sen S, & Alexandrov A (2010) The moderating effect of personality traits on attitudes toward advertisements: A contingency framework. *Management & Marketing* 5 (3)
- [18] Leung L (2013) Generational differences in content generation in social media: The roles of the gratifications sought and of narcissism. *Computers in human behavior* 29 (3): 997-1006.
- [19] Dholakia UM, Bagozzi RP, & Pearo LK (2004) A social influence model of consumer participation in network-and small-group-based virtual communities. *International journal of research in marketing* 21 (3): 241-263.
- [20] Eid M, Nusairat N, Alkailani M, & Al-Ghadeer H (2020) Internet users' attitudes towards social media advertisements: The role of advertisement design and users' motives. *Management Science Letters* 10 (10): 2361-2370.
- [21] Punj G (2011) Impulse buying and variety seeking: Similarities and differences. *Journal of Business Research* 64 (7): 745-748.
- [22] John OP, Naumann LP, & Soto CJ (2008) Paradigm shift to the integrative big five trait taxonomy. *Handbook of personality: Theory and research* 3 (2): 114-158.
- [23] DeYoung CG, Quilty LC, Peterson JB, & Gray JR (2014) Openness to experience, intellect, and cognitive ability. *Journal of personality assessment* 96 (1): 46-52.
- [24] Blumler JG, & Katz E (1974) The Uses of Mass Communications: Current Perspectives on Gratifications Research. Sage Annual Reviews of Communication Research Volume III.
- [25] Levy MR, & Windahl S (1984) Audience activity and gratifications: A conceptual clarification and exploration. *Communication research* 11 (1): 51-78.
- [26] Salgado JF (2002) The Big Five personality dimensions and counterproductive behaviors. *International journal of selection and assessment* 10 (1-2): 117-125.
- [27] Amichai-Hamburger Y, & Vinitzky G (2010) Social network use and personality. *Computers in human behavior* 26 (6): 1289-1295.
- [28] Ahmed T (2017). Instagram follower growth is now lagging behind Facebook page likes growth. Locowise Blog. URL <https://locowise.com/blog/instagram-follower-growth-is-now-laggingbehind-facebook-page-likes-growth> (accessed 12.20. 20).
- [29] Torabi M, & Bélanger CH (2022) Influence of social media and online reviews on university students' purchasing decisions. *International Journal of Internet Marketing and Advertising* 16 (1-2): 98-119.
- [30] Djafarova E, & Rushworth C (2017) Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in human behavior* 68: 1-7.
- [31] Dehghani M, Niaki MK, Ramezani I, & Sali R (2016) Evaluating the influence of YouTube advertising for attraction of young customers. *Computers in human behavior* 59: 165-172.
- [32] Gaber HR, Wright LT, & Kooli K (2019) Consumer attitudes towards Instagram advertisements in Egypt: The role of the perceived advertising value and personalization. *Cogent Business & Management* 6 (1): 1618431.
- [33] Gangadharbatla H, & Daugherty T (2013) Advertising versus product placements: How consumers assess the value of each. *Journal of Current Issues & Research in Advertising* 34 (1): 21-38.
- [34] Hwang YS (2011) Consumers' Type According to Narcissistic Orientation and Consumption Value of Apparel Products and Cosmetics. *Fashion & Textile Research Journal* 13 (3): 364-372.
- [35] Lee JW, Becker K, & Potluri RM (2016) Antecedents of corporate adoption of social media and the role of the technology acceptance model in the path. *Journal of Asian Finance, Economics and Business* 3 (2): 67-76.
- [36] Sheldon P, & Bryant K (2016) Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in human Behavior* 58: 89-97.
- [37] Nadkarni A, & Hofmann SG (2012) Why do people use Facebook?. *Personality and individual differences* 52 (3): 243-249.

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