

The Effect of Instagram on Appearance, Self-esteem, and Social Approval

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The purpose of the present study was to investigate the impact of Instagram use on self-esteem and social approval, and examine the relations between Instagram use effects and personality traits. Data were collected from 200 participants (average age 22.32 years) during the Fall 2019 and Spring 2020 semesters. Participants completed an anonymous questionnaire that included nine original items measuring the effects of Instagram use, and published measures of social media addiction, negative emotionality, and narcissism. Results indicated that males and females did not differ in the amount of time they spent using social media in general, including Instagram. Females reported significantly higher levels of self-esteem problems related to Instagram use. A different pattern of personality traits predicted self-esteem problems in males versus females. Higher levels of self-concept problems for males were associated with higher levels of negative emotionality components, namely emotional volatility and depression. Higher levels of self-concept problems for females were associated with higher levels of social media addiction. It may be that males who are prone to higher levels of these traits would be more concerned about their social media presence, and perhaps use Instagram in order to enhance their self-concept. Regarding females, social media addiction may contribute to an obsession with one's appearance and social media image, thus increasing the motivation to use Instagram to enhance one's presence. Future research should investigate self-image problems associated with Instagram use and other personality traits.

Background Information

Studies have been conducted across all types of cultures and throughout a multitude of different countries analyzing the effects that social media platforms such as Instagram has on self

esteem. Instagram has been a hot topic of analysis in countries outside of the United States, as around 80% of users reside in other countries (Instagram, 2016).

Researchers in the Middle East conducted a study in order to examine how Arab countries used Instagram. This research was significant in gender differences in that females living in Muslim and Arab cultures are assumed to present themselves in a modest way on social media platforms. This includes avoiding posting pictures of or about their physical appearances, and instead opting to post photos of experiences they have instead of photographing themselves. The researchers sampled 539 students (36% male, 64% female) from two separate universities in Kuwait with a questionnaire of items ranking Instagram uses (Al-Kandari, Al-Sumait & Al-Hunaiyyan, 2017). The data from the survey reported evidence of individuals altering their photos for Instagram when concerned about appearance and social approval (Al-Kandari, Al-Sumait & Al-Hunaiyyan, 2017). A similar study from Turkey found a correlation between Instagram use and problematic social media use, including creation of a false, more appealing presentation of oneself (Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2018). This study used the Turkish translation of the Social Media Use Questionnaire (SMUQ) and other inventories to document responses of 68 students. A second phase of data collection was conducted, sampling 1008 additional individuals with the mean age of 20 (Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2018). The findings of problematic social media use found a correlation between presentation of a more popular image of self and age, as well as scores of conscientiousness explaining 1% of variance (Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2018).

Multiple studies from other countries also noted a change in self-esteem among survey respondents (both positive and negative) with Instagram Use (Mullins, 2017) and general social

media use (Widjajanta, Hadi Senen, Masharyono, Lisnawati, & Putri Anggraeni, 2018). While studying social comparison on Instagram and its impact on self-esteem, as well as anxiety, Mullins sampled 169 individuals aged 18-30 prior to being assigned to a condition (Mullins, 2017). One condition exposed participants to a feed of celebrity photos, while the control group viewed a feed of non-celebrity photos. Mullins hypothesized that individuals who scored higher originally on the social comparison scales would then see a greater increase in reported levels of anxiety, and a decline in self-esteem. Original examination of the data concluded no such relationship, however a follow up of the study found a direct correlation between lower levels of self-esteem and higher levels of social comparison (Mullins, 2017). In different parts of the world, social media has different influences based upon how it is used, as shown in the study conducted by Wigajanta et al that found a positive relationship between social media use and self esteem (Widjajanta et al, 2018). This study was conducted through questionnaires via Google Docs, sampling 200 members of the Hijabers Community Bandung. Both studies found a different response of self-esteem (positive or negative) based upon how social media was used by the individual. As noted by the study conducted in Turkey, social media has the ability to increase self-esteem if used in a positive manner (Widjajanta et al, 2018).

Another study examining the effects of different types of Instagram use on attachment used labels to categorize the types of use. This study, conducted in South Korea, examined a population of 383 undergraduate students through surveys (Wallace & Soo-Hyun, 2019). The categories of Instagram use included “social interaction,” “identity seeking,” and the study also developed scales to measure “narcissistic personality,” “personal attachment to Instagram,” and “intention to post on Instagram” (Wallace & Soo-Hyun, 2019).

An example of research aimed at uncovering positive uses of Instagram studied Indonesian women who wear hijabs and used Instagram in positive ways to express four themes of self-expression (Pramiyanti, 2019). The in-depth interviews from the 26 women yielded a direct association between their Instagram posts/usage and self-love, exemplified as appreciating themselves and empowerment and listed as one of the themes (Pramiyanti, 2019).

As addictive use of social media has become a subject of increasing research interest, another study examined addictive social media use in over 23,500 participants from Norway. The purpose of this study was to examine the associations between addictive use of social media, narcissism, and self-esteem (Andreassen, 2017). Results indicated addictive use of social media was associated with being young, female and single. Additionally, addictive use of social media was related to higher narcissism and lower self-esteem (Andreassen, 2017).

Another study delving into the use of social media and self-esteem was conducted by surveying students attending Notre Dame University- Louaize, which is a private catholic university in Lebanon. The purpose of this study was to examine the relationships between addictive use of social media, self-esteem, and satisfaction with life (Hawi & Samaha, 2016). The results yielded that addictive use of social media had a negative association with self-esteem. Additionally, self-esteem had a positive association with life satisfaction (Hawi & Samaha, 2016).

A different study explored the relationship between Facebook addiction, narcissism, and self-esteem. A correlational study was conducted at a college in Pakistan using the Bergen Facebook Addiction Scale, Hypersensitive Narcissism Scale and Rosenberg's Self-esteem Scale. Results indicated Facebook addiction significantly predicted narcissistic behavior and low levels

of self esteem (Malik & Khan, 2015). To interpret this, students spending more time on Facebook may overcompensate for their low self-esteem by acting more narcissistic.

Lastly, a study conducted in Turkey aimed to determine the relationship between social media addiction and life satisfaction among university students, as well as the effect of social media addiction on predicting life satisfaction by using the Social Media Addiction Scale and Life Satisfaction Scale (Sahin, 2017). The results indicated that there is a negative relationship between life satisfaction and social media addiction. Furthermore, there is a significant relationship, according to the regression analysis, between life satisfaction and social media addiction (Sahin, 2017).

Research Methodology

Participants

The research was conducted through online surveys that were advertised on various social media platforms, including Facebook, Instagram, and Snapchat accounts of the researchers. Participants over the age of 18 were asked to respond to the questions in the Fall 2019, and a second round of data was collected in the Spring 2020 with additional participants to maximize the sample size. Ages ranged from 18 to 57, with the mean age being 22.32. 80.5% of participants were female, while 19.5% were male.

Questionnaire Components

The questionnaire consisted of several scales, including an original scale composed of nine items. Demographic questions recorded age, ethnicity, sex, and location of respondents, as well as average time spent using various social media platforms. The scales used included measures of social media addiction (Andreassen et al., 2016), negative emotionality (and its

components anxiety, depression, emotional volatility; Soto & John, 2017), narcissism (Jones & Paulhus, 2014) as well as nine original items measuring the effects of Instagram use on self-identified attractiveness, feelings, and likeability.

The original items (Questions 1-9) below used Likert scales to rank scores.

Attractiveness items:

1. Using Instagram makes me feel like other people are more attractive than I am.
2. Because of posts I see, I have changed my appearance in my Instagram posts.
3. After changing my appearance in my Instagram posts, I feel better about how I look.

Feelings items:

4. Using Instagram makes me feel dissatisfied or unhappy with myself.
5. Because of Instagram posts I see, I have changed my posts in order to feel better about myself.
6. After changing what I post on Instagram, I feel better about myself.

Likeability Items:

7. Using Instagram makes me feel like people don't like me as much as they like others.
8. Because of what I've seen on Instagram, I post things to gain more approval from others.
9. After changing what I post on Instagram, people seem to like me more.

Data & Analysis

Once our data were collected, independent-samples t-tests examined sex differences on our Instagram effects items, and regression analysis explored relations between Instagram use and social media addiction, negative emotionality, and narcissism.

Both males and females spent an average of 83 minutes per day using Instagram. Males and females also did not differ significantly on average daily use of Snapchat, Twitter, TikTok, Youtube, texting, or talking on their phone. Females reported significantly higher daily use of Facebook (45 minutes on average compared to 23 minutes on average for males).

The highest scoring predictor(s) are listed for each question in Table I, derived from the subscales and separated by sex. Males who scored high on Question 1 also scored high on

Emotional Volatility, while females also scored high on Social Media Addiction and Anxiety. Males who scored high on Question 2 also scored high on Emotional Volatility, and females who scored high also scored high on Social Media Addiction and Emotional Volatility. High scores on Question 3 were associated with males who scored high on Social Media Addiction, and females who scored high on Social Media Addiction and Narcissism. High scores on Question 4 were associated with high scores of Depression for males, and Social Media Addiction and Depression for females. High scores on Question 5 were associated with males who scored high on Emotional Volatility, and females who scored high on Social Media Addiction and Anxiety. Question 6 had an association of high scores with Depression for males, and Social Media Addiction for females. High scores on Question 7 were associated with Depression for males, and Social Media Addiction and Depression for females. Question 8 found an association of high scores with males who scored high in Emotional Volatility, and females who scored high on Social Media Addiction. High scores on Question 9 were associated with Depression in males, and Social Media Addiction in females.

Females reported significantly higher levels on our original Instagram effects items 1 - 8. Further, females scored significantly higher on negative emotionality (and its subscales) and social media addiction, while males scored significantly higher on narcissism. Given these sex differences, regression analyses were run separately for males and females predicting Instagram effects items. Items are presented below with personality traits that significantly predicted the items, along with their standardized beta weights, coefficients that indicate the strength of association between the predictor and outcome variables.

Table I

Predictor Variable

		<i>SMA*</i>	<i>Anxiety</i>	<i>Depression</i>	<i>EV**</i>	<i>Narcissism</i>
<i>Q1</i>	<i>Males</i>				.60	
	<i>Females</i>	.25	.21			
<i>Q2</i>	<i>Males</i>				.41	
	<i>Females</i>	.35			.22	
<i>Q3</i>	<i>Males</i>	.36				
	<i>Females</i>	.35				.20
<i>Q4</i>	<i>Males</i>			.47		
	<i>Females</i>	.42		.18		
<i>Q5</i>	<i>Males</i>				.49	
	<i>Females</i>	.40	.19			
<i>Q6</i>	<i>Males</i>			.36		
	<i>Females</i>	.31				
<i>Q7</i>	<i>Males</i>			.61		
	<i>Females</i>	.27		.27		
<i>Q8</i>	<i>Males</i>				.34	
	<i>Females</i>	.39				
<i>Q9</i>	<i>Males</i>			.33		
	<i>Females</i>	.18				

Note: * = *Social Media Addiction* , ** = *Emotional Volatility*

Discussion

While males and females did not differ in average time spent using Instagram, females reported consistently stronger effects of Instagram use on their self-concept, as reflected in

scores on items 1-8. We believe this difference may be due to the fact that females may experience more criticism or scrutiny (on social media and in real life) regarding their appearance and therefore feel stronger pressure to alter their appearance. It may also be true that females are more sensitive to others' reactions to their Instagram posts and social media image. It is possible that females spend more time on Instagram focused on their own presence and feedback about themselves, related to not only physical appearance but also how they feel about themselves and whether others like them. In contrast, males may focus more on others' profiles rather than their own.

Females reported higher levels of all three facets of negative emotionality and social media addiction, and males reported higher levels of narcissism. These differences tend to concur with previous research on social media use, emotional difficulties, and personality traits. Instagram effects items were predicted in different ways by personality traits for males and females. There was a noticeable pattern for Instagram effects on self-concept to be explained by emotional volatility and depression for males, and by social media addiction for females.

Our data suggest that males who reported higher levels of concerns over their Instagram presence also had higher levels of emotional volatility and depression. It may be that males who are prone to higher levels of these traits would be more concerned about their social media presence, perhaps use Instagram in order to enhance their self-concept.

Females' levels of concern with their Instagram presence were strongly related to levels of social media addiction. We believe that social media addiction may contribute to an obsession with one's appearance and social media image, thus increasing the motivation to use Instagram to enhance one's presence. We believe that social media plays a key role in creating a context in

which physical flaws are magnified, and encourages comparison with others. Because of this, as well as the new technology available to change one's appearance, females who already have self-image concerns may spend more time on social media, specifically Instagram, to enhance their online persona.

Limitations

Following the completion of the study and analysis of results, we concluded that if the study were to be duplicated it would be beneficial to include more male participants in order to generate conclusions more generalizable to our intended population. We would also extend our sample size in general to increase reliability.

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