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Is social media worth it? Investigating the relationship between social media use and exposure and eating attitudes and behaviors.

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Abstract

The aim of this study was to investigate whether exposure and usage of social media sites (Instagram and Pinterest) were related to eating disorder behaviors and attitudes. A sample of female undergraduate students at La Salle University completed an online survey which measured social media exposure, media manipulation, and thoughts and behaviors related to eating disorders.

Introduction

Social media networking sites have been in the hands of young women for over a decade. While its original use was to stay connected to those across the globe, it now serves as platforms that idealize lifestyles beyond the ordinary. Photo manipulation allows for users to modify their image to appeal to different groups and conceal what they perceive to be flaws. Also, in the age of social media influencers, young women are constantly being exposed to unrealistic body expectations, if following fitness and social media influencer accounts (Clay, Vignoles, & Dittmar, 2005). According to Statista (2021), 14.5% of Instagram users worldwide were females between the ages of 18 and 24.

Social Media Influencers

Social media influencers play a key role in the lives of college-aged females. Statistics released by Digital Marketing Institute (2018) show that 86% of women take in account social media when making a purchase and 49% of consumers rely on influencer recommendations. Influencers prey on social media users' insecurities and profit off of them. Influencers correlate happiness with body perfection. By showcasing themselves intaking diet supplements and wearing body conforming clothing, influencers seem to be promising that changing one's appearance is the main key to happiness and success (Pilgrim & Bohnet-Joschko, 2019). By creating a sense of dependency on the social media influencer, they are ensuring that the user will return to them in the future for additional information regarding body and eating ideals.

Social Comparison

Social comparison is a social psychology term that has been studied for decades. It is best utilized to showcase the level to which one will compare themselves to others in a variety of ways. One wants to assess their surroundings in order to best determine whether they are in the norm or not (Festinger, 1954). When this to social media use, users follow influencers that they believe best represent the norm in society and essentially try to shape their lifestyle in a way that replicates the influencer. Social comparisons also deal with the ideas of upward comparisons and downward comparisons. Festinger (1954) explains that sometimes one makes comparisons to those who are in a better position than us (upwards) which usually leaves one feeling negatively about themselves and in other scenarios, one will compare themselves to those in a less important position (downwards) which allows for one to feel better about themselves and their standing in society. When a user sees an influencer showcasing their wealth and beauty, they are more likely to feel envy as they do not get to experience the same things. However, when they see content of those with less than them, they may feel better about the lifestyle they live as they are doing better than that particular individual.

Social comparison, particularly comparing one's body to another, has been linked to eating disorder behaviors and attitudes (Arigo, Schumacher, & Martin, 2014). In addition, eating and exercise comparisons to those they follow on a multitude of platforms has been linked to disordered eating in research samples performed on college-aged females (Fitzsimmons-Craft, 2017). To most, it is an unconscious process to compare themselves to others that they see, to feel envious of the things that they possess. In the generation that praises social media influencers, we are seeing a rise in social comparison, and therefore eating disorder attitudes and behaviors.

Research has demonstrated that there are trust-inducing effects of eating the same food as those around us and that encourages us to partake in similar actions (Polivy, 2017). When exposed to the eating habits of social media influencers, users are therefore exposed to eating standards. They feel as though they will be perceived better within society if they act in a similar fashion and mimic future actions after the influencer.

There are other ways that females, in particular, compare themselves (and their food consumptions) to those around them within society (or online). Research by Mori, Chaiken, and Pliner (1987) suggests that when a woman wants to make a positive impression on someone, they eat less than when they are not trying or caring to make an impression. Women care highly about the judgment they receive from those around them and will adapt their behaviors to fit in with societal standards within the environment.

In the world of social media, one does not have to physically be around others to engage with social comparison. Females rely on social comparison when being alone while eating, by comparing one's intake to a social norm of what is appropriate to eat (Polivy, 2017). Being able to access social media from any place and at any time allows females to be readily available to be exposed to thin ideals on social media platforms and interact with social comparison.

Body, Eating, and Exercise-Related Social Comparisons
There have been a variety of studies performed to showcase the relationship between social comparison and eating disorder outcomes. Most research tends to focus on body (or appearance) related comparisons. According to Modica (2020), body-related comparisons are associated with greater levels of envy and less inspiration and pride. College-aged females consistently being exposed to thin ideal ideals allows for them to develop more body-related comparisons and engage more with eating disorder behaviors due to the exposure. In regard to exercise-related comparisons, they have been correlated with body dissatisfaction, dietary restraint, and disordered eating behaviors and cognitions in female, college-aged samples (Fitzsimmons-Craft, Bardone-Cone, et al., 2016).

In one experimental study performed by Wasilenko, Kulik, & Wanic (2007), the role of exercise-related social comparison showed that the presence of a peer in a campus gym, perceived as more fit than oneself, results in decrements in body dissatisfaction and exercise duration, whereas the presence of a peer perceived as less fit than oneself resulted in longer exercise duration.

Media is constantly exposing young women to thin ideals and the societal view of the "perfect body." When one does not meet these standards, they are more likely to feel body dissatisfaction. In a study performed by E. Henderson-King and D. Henderson-King (1997), they showed participants slides that depicted the "ideal" woman and gauged the reactions of the participants. Results indicated that thinner women positively evaluated their body in comparison to the images while heavier women reported more body dissatisfaction. Women of higher weights do not fit into societal standards of beauty and are subjected to higher susceptibility for body dissatisfaction and negative body image overall.

Current Study
The aim of this study is to determine whether a relationship is present between social media use and exposure and eating disorder attitudes and behaviors. Based on previous research and theory about social comparisons and eating behaviors, we hypothesize that greater social media use will be related to increased social comparison and increased eating disorder behavior (H1). In addition, we hypothesis that greater social media use will increase body

dissatisfaction ideals within college-aged females (H2). Those who participate in greater photo manipulation will have greater body dissatisfaction ideals than those who do not engage in photo manipulation (H3).

Methods

Participants and Procedure

A sample of La Salle University undergraduate females (18-22 years) were recruited by professors to participate in the study. Following approval from the La Salle University Institutional Review Board, the survey link was administered electronically to willing participants. All participants consented to participation before the survey could begin. Upon completion of the survey, participants were directed to a secure page where they could leave their name and email for a chance to receive extra credit.

Measures: Dependent Variables

Manipulation
The 10-Item Self Photo Manipulation Scale (Modica, 2020) was used to measure to what degree participants edit or manipulate photographs before uploading them to Instagram and Pinterest. Response options are scored on a 5-point Likert scale ranging from 1 (never) to 5 (always). Higher scores can indicate greater manipulation of photographs. A sample question is "I use filters to change the overall look (blurring, coloring, etc.) of the picture." In the current sample, Cronbach's Alpha was .79.

Eating Behaviors
The 26-Item Eating Attitudes Test (EAT-26) (Garner, Olmsted, Bohr, & Garfinkel, 1982) was used to measure self-reported eating behaviors that can correlate with eating disorder characteristics. Items were scored on a 5-point Likert scale from 1 (never) to 5 (always). A sample question is "I feel uncomfortable eating unhealthy foods." In the current sample, Cronbach's Alpha was .87.

Body and Exercise Behaviors
The Body, Eating, and Exercise Comparison Orientation Measure (BEECOM; Fitzsimmons-Craft et al., 2012) was used to assess attitudes and behaviors relating to body and exercises ideals expressed on social media. In order to see the impact social media influencers had on participants, some items were modified to include questions relating to influencers. Responses to each item were on a 5-point Likert scale from 1 (never) to 5 (always). Sample questions are "I

have constant urges to workout" and "I feel like my body needs to change." In the current sample, Cronbach's Alpha was .82 for food comparison and .91 for body comparison. When analyzing exercise comparison, only two items were present, and a negative covariance was found.

Measures: Independent Variables

Social Media Intake (Minute Usage)
Participants were asked to disclose the average number of minutes they spend on Instagram and Pinterest on a daily basis. In addition, participants were asked to disclose how often they posted on Instagram and Pinterest.

Number of Followers and Number Following
Participants were asked to disclose the number of followers they have on Instagram and Pinterest. They were also asked to disclose the number of accounts they were following on Instagram and Pinterest.

Results

Participants

Out of the available undergraduate female students at La Salle University eligible to participate in the study, 33 completed the survey.

A regression analysis was performed to evaluate whether independent variable (greater social media use) will create increased social comparison and increased eating disorder behaviors. For this hypothesis, no significant relationship was found.

A regression analysis was performed to evaluate whether independent variable (greater social media use) will increase body dissatisfaction within college-aged females. For this hypothesis, no significant correlations were found.

A regression analysis was performed to evaluate whether independent variable (greater photo manipulation) will increase body dissatisfaction in comparison to those who do not engage in photo manipulation. For this hypothesis, no significant correlations were discovered.

After preliminary examination of the results, several post-hoc analyses were run. Upon completion of these, it was found that photo manipulation, as an independent variable, seems to specifically impact items like body comparison and food comparison.

Discussion

The aim of this study was to investigate the relationship between social media use and exposure and eating disorder attitudes and behaviors. Results of this study suggest that photo manipulation may be the most consistent predictor of body dissatisfaction in college-aged females. However, it is difficult to accurately support this claim without more in-depth research in this area. These findings of this study encourage further investigation of the relationship between social media use and exposure and eating disorder attitudes and behaviors of college-aged females.

A post HOC analysis was conducted. For this analysis, photo manipulation (used as an independent variable) was related to body comparison (r=.42, p<.05) and food comparison (r=.43, p<.05). When analyzing body comparison and using photo manipulation as in independent variable, the regression is almost significant. When analyzing food comparison and using photo manipulation as an independent variable, there is a significant regression (F(5,27)=3.72, p<.05). Beta weights for minutes per day on Instagram is significant (B=.43, p<.01), as is photo manipulation (B=.47, p<.01). In addition, there is significant correlation between minutes per day spent on Instagram and food comparison (r=.39, p<05).
There could be a variety of explanations for photo manipulation seems to be having a more significant impact on college-aged women. In today's society, photo manipulation is a normalized action of those who participate in social media use. College-aged women may feel more obligated to utilize photo manipulation to be perceived higher and be accepted more by their peers. They could also just be following the trend that everyone else is by using photo manipulation before posting their content.

Another explanation for photo manipulation being utilized by college-aged women is the overall desire to "fix" themselves. Being constantly exposed to society's ideal body and beauty standards can cause women to become more aware of the differences in their body, leading to body dissatisfaction. Photo manipulation allows them to alter the parts of their body that they are insecure about and make it seem more appealing to both themselves and their followers.

Future research will need to be conducted on the impact photo manipulation has on college-aged women. An important aspect to focus on in future research would be to further analyze, on average, how much a college-aged woman manipulates her photographs and to what extent. Another focus of future studies could investigate whether college-aged women will share content that has not been manipulated and if not, why? This could suggest a deeper, more psychological entanglement with social media.

Findings should be understood in the context of a few limitations. The first limitation was the small N (33). Because of the small N, it was hard to distinguish the significance of multiple items. Future research on this topic should include a higher N in order to gather stronger data. Another limitation of this study was the COVID-19 pandemic. Due to the study being conducted remotely, recruitment was difficult. In the future, once the pandemic is more controlled, in-

person recruitment would be more ideal in order for participants to be more involved with the study.

In conclusion, this study examined the relationship between social media use and exposure and eating disorder attitudes and behaviors. Social media use and exposure may be linked to eating disorder behaviors and attitudes. Importantly, an emphasis on photo manipulation as an independent variable showed signs of significance when looking at body comparison and food comparison.

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