

A Potential Cause and Treatment of Eating Disorder-- Social Media

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ABSTRACT

The present review paper examined literature related to eating disorder (ED) (dependent variable), and social media (independent variable) among both teenagers with ED and without this disorder from middle childhood (12 years old) to early adults (18 years old). The research topic--“did social media bring teenagers a negative influence of experiencing eating disorder” was inspired by a real case of a 14-year-old middle school girl that she was examined as anorexia eating disorder by psychiatrist since she used to believe she was too fat and eat few things everyday although her exact weight was under the normal weight. Also, the doctors suggested the reason she experienced this disorder is that she cared too much about the negative comments of her posts about her body figures on the social media. The present study reviewed eight articles in order to find the exact negative influence of social media on teenagers, especially in the field of ED.

Keywords: eating disorder(ED), social media, middle childhood, early adult, literature review

1. INTRODUCTION

According to Maslow's hierarchy of needs theory, with the development of society and economy, after the most basic physical needs are satisfied, people begin to pursue higher levels, such as spiritual satisfaction. As a result, in the 21st century, there is an increasing number of psychological disorders, including eating disorder, which is a prevalent disorder that its incidence increased from 3.5% to 7.8% between 2013-2018[1]. To be more specific, eating disorder is a group of conditions characterized by disordered eating patterns, preoccupation with body size and weight, and distorted body image, often involving biological, psychological, and societal factors. The accompanying symptoms includes intense preoccupation with food and weight, disordered eating, laxatives, depression and suicidal feelings, etc[1]. Besides, our independent variable, social media, means a computer-based technology that facilitates the sharing of ideas, thoughts, and information through virtual networks and communities [2]. Due to the prevalence of social media among teenagers, an increased number of juveniles post their photos in different social platforms, like Instagram, Tiktok, twitter, and so on. Besides, like the real case mentioned in the abstract, some youngsters have experienced verbal

violence since other peoples' comments under the posts of their body figure, even under some posts that don't relate to the body figure or weight. Because of these, many teenagers have been influenced, and even cause them to experience the Eating Disorders since they are more sensitive and sensual than adults, which means they will care more about the comments wrote by others. The data from Lonergan, bussey, and other researchers' paper also shows these – “adolescence is the most common age of onset for eating disorder” [3].

2. LITERATURE REVIEW

2.1. Effects of social media on eating disorder

In Lonergan et al' s study[3], they conducted an experiment to investigate the photo-based social media behaviors in adolescent boys and girls who meet or do not meet the criteria for eating disorders. To be more specific, they conducted a longitudinal survey of 4209 Australian adolescents (53% of the people are girls) on their eating disorders. What is more, the researchers asked participants to grade three behaviors -- their effort in choosing a selfie to post to social media, whether they edited their selfies prior to posting images on social media or not, and how they examined others' selfies.

According to the results, all social media behaviors were associated with the increased odds of meeting the adjusted criteria for clinical and subclinical bulimia nervosa and nighttime eating syndrome. Besides, teenagers may take many selfies without posting them due to factors such as negative reviews from others, which is strongly associated with weight and shape issues in teens with eating disorders. Nevertheless, the study still illustrates that social media have a direct relation to eating disorders among teenagers.

As Cavazos et al indicated[4], comments from others are a significant and crucial factor for eating disorders. In the experiment, they put an advertisement on social media (Facebook, Instagram, and Twitter) to find potential participants and selected suitable participants through their ages, personal preferences, and behavior on social media. Finally, they included 1055 participants and asked them the frequency they saw or posted posts that show being thin is important in a month. When asking participants the reason they do not like to post pictures, they found other people's comments are an influential factor. In detail, 61.31% of the participants think other people's negative comments will damage their self-esteem. 30.39% of the participants believe these comments would lead to several negative consequences, especially in the field of social relations, such as caring about others' reactions too much, fear of judgment, and so on. Then, 26.33% of participants assert it triggers a desire to engage in ED. 6.54% of people following say these cause people to experience anxiety and depression. The research also mentions that 57% of people would accept a review from someone they know, and 42% of people would accept a review from a health professional. At the same time, 38% of people would be willing to accept advice from someone they don't know or a review from a health professional they don't know (27% of people). Various data suggest that social media indeed have a negative influence on people to experience eating disorder, especially among teenagers.

In the manner of Wick and Keel's research[5], there is a direct relationship between eating disorders and social media. For the method used in the research, they conducted a two-phase experiment. The first phase examined concurrent associations between posting edited photos and mental health measures among 2,485 undergraduate students (76% female). Besides, phase 2 focused on the causal relationship between posting edited photos and eating disorder risk factors among 80 undergraduate students (93% women) who supported posting edited photos in Phase 1 and volunteered to participate in the experimental portion of the study. And according to the data, the undergraduates who participated in phase 2 experienced a sense of anxiety and some abnormal eating behavior. What's worse, when they post the same pictures again, these kinds of sense became stronger and it increases the urge to exercise, restrict food intake, and anxiety. The symptoms of eating

disorder also become more pronounced and serious. To make a conclusion, this study shows that posting pictures on social media will directly lead people to experience some symptoms of eating disorders.

In Bennett and other researchers' study[6], they invited 30 college students to go through their phones five times per day for five days and asked to complete a bunch of measures that assessed social media use, body dissatisfaction, and negative effects. As a result, they found that the number of visiting social media sites is a significant predictor of body dissatisfaction while time spent using social media is not. However, both the frequency and time spend are predictors of general negative aftermath, like sadness and guilt. In other words, frequent browsing of social media can lead to anxiety, depression, and excessive weight loss. After all, in order to make their photos gain more attention on social media, they need to have a thinner and more perfect body than ordinary people despite the cameras always make people look fatter. In conclusion, this article shows that social media can cause people to pay too much attention to their bodies and even lead to some psychological or mental problems.

Aiming in discovering which factors post an influence on the recovery from eating disorder, Bohrer et al.[7] conducted a study that collected the comments people post on ED-related online forums. In this way, the research enabled the gaining of insight about influential factors toward the process of ED recovery. The experiment viewed three ED-related forums on Reddit, during a time period expanding from March to August in 2017. The method used in study was filtering posted comments and sorting out comments that conveyed aspects of recovery. Then, a conclusion was reached that cognitive, behavioral (physical) and social factors play correlates with patients' capability and efficiency of recovery. This study has a significance of finding and collecting factors involved during patients' recovery, which the researcher may develop a better understanding on what may place a positive/negative impact on patients' conditions. It is crucial for designing of treatment on eating disorder, as the researchers may find out some aspects relating to the recovery from patients' point of view.

In McLean et al. [8]'s study, the group of researchers launched a research on the effectiveness of social media on intervening eating disorder on teenage females. The experiment was conducted on 101 adolescent girls in average of age 13, in form of quasi-experiment comparing intervention and control condition. During the experiment, the participants reported self assessment of eating disorder risks at one week before&after the intervention/control. In intervention condition, the gaining of help from others has caused a decrease in figure anxiety. In conclusion, the research found a significant improvement on body-esteem, eating

behavior and media literacy. The research is useful for finding possible therapies on eating disorder. As it was found in the study that social media intervention can improve the condition of eating disorder, a conclusion of such way can help improve the symptom of ED can thus be drawn. Hence, in future designing of treatment, similar method can be used.

‘Cheat meals’ is prevalent way of solving one’s appetite without actually gaining calorie, usually believed as a harmless or even helpful for eating disorder patients. However, Pila et al[9]’s study revealed a totally controversy fact. The experiment analyzed the page of Instagram users account which have posted content relevant with cheat meals. The result shows that most food in cheat meals were high-calorie food, which achieved standard of bulimia. Those users also share the similarity of perfect body figure, which possibly suggest that they are also victims of figure anxiety who has high requirement of having a perfect figure. In conclusion, people who developed habit of cheat meals did not benefit from it(having a normal and healthy eating habit), instead it worsens their practice in diet and exercises to keep a perfect body. This research provided valuable evidence in contradicting this universally accepted eating habit, exposed its harm and revealed that it actually caused patients to further grow anxious on gaining any calorie (as this behavior itself also reflects such psychology), which worsens eating disorder.

Sugimoto et al[10] conducted a research on the impact of social media on the eating disorder of 10-year-old children. The purpose of this study is to discover the correlation between desire of slimness(DS)—which is an influential factor that may lead to eating disorder—and social media. The experiment used self-report questionnaires and interviews to assess variables influencing eating disorder in adolescents, participants mainly 10-year-old Japanese children(with no limitation in section). The result showed that frequency of using SNS has a positive correlation with the risk of DS, hence, it is obvious that social medias will increase the risk of eating disorder. Moreover, another thing worth paying attention on is the fact that such an influence is only limited in females but not male participants. The experiment provided valuable data proving the negative effect of social media on eating disorder, and may also lead to further discovery on the reason why males experience less influence from social media. For aspect of treatment method, intervention on use of social media should be also considered as a crucial ring in the therapy.

In McLean et al[11]’s study, in order to investigate the effect of the behavior of taking selfies and figure anxiety, which eventually leads to eating disorder. The participants of this experiment are 101 (in average) grade 7 girls. In the experiment, they were asked to fill a self-report questionnaires which indicate their use of social media and related concerns on their body figure and

eating. The result showed a positive correlation between the frequency of sharing selfies and concerns on figure&eating concerns. A conclusion can be drew that, girls who share their selfies on social platform more frequently have a higher risk of experiencing figure anxiety and thus eating disorder. More importantly, the study found that, higher investment of time and effort on the selfies(such as photo-editing)will experience higher influence. They have deeper concern on the body, over-evaluating the importance of a perfect figure and more practices of dieting and exercising. McLean et al’s study is crucial for learning the factors leading to eating disorder and intervention demanded, researchers can have a more clear mind on what can help the patients, which factors should be contained in order to release their figure anxiety.

3. CONCLUSION

To put it in a nutshell, this essay dressed out the relationship between eating disorders and social media. Current findings suggest that social media is a potential cause of social media and it can also be an effective solution to check and solve the disadvantages of the eating disorder. Yet, more complete and accurate documentation of this topic is needed since there isn’t any study directly suggesting the relationship between social media and eating disorders among such a huge age interval—from teenager (12 years old) to early adulthood (18 years old). To be more specific, a study that fits into the teenagers may not fit into adults since there is some physical difference. Once having a clearer understanding of this limitation, the conclusion that social media can be a potential cause but also a solution for people from 12 to 18 years old who are experiencing eating disorders can be conducted.

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