

COVID-19: Forced Social Isolation and Social Media on Adolescent Mental Health

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ABSTRACT

The pandemic's forced social isolation has caused unique symptoms to emerge in adolescents. In an especially vulnerable stage of development, teenagers require more socialization with their peers. Researchers evaluated the effect of physical isolation on adolescents' mental health through surveys and animal modeling. The main findings of the surveys included a decline in general mental health over the pandemic. Through the animal-based experimental model, researchers found that social isolation correlated with anxiety-related, depression-like, and addictive behaviors. The added factor of social media should also be considered when applying these experimental conclusions to the real world. In this literature review, the effects of social deprivation on adolescent development and mental health and Mental Health and the COVID-19 Pandemic were considered. Some limitations of these studies include lack of surveying diverse demographics, and not modeling outside factors such as social media.

Introduction

Beginning in March 2020, the coronavirus pandemic has caused mental disarray to people of all ages, but adolescents were particularly affected by it. The COVID-19 pandemic has forced adolescents worldwide into social isolation, preventing them from experiencing typical interaction. At school, adolescents are constantly surrounded by peers, which allows them to communicate. Studies deem that adolescents aged 10-24 require a heightened sense of social belonging and lacking this affects their mental health detrimentally (Orben et al., 2020). Many people reported a decline in their mental health following the lockdown order.

The pandemic forced governments to make abrupt lockdown orders to combat the contagious virus. During the pandemic, face-to-face interaction was severely limited, therefore teenagers looked to social media for communication. Social media, itself, is not inherently harmful, but research suggests that prolonged social media use has a negative impact on adolescents. Some of the negative effects include lowered self-esteem, depression, and higher chance of developing an eating disorder. The social isolation caused by the pandemic, coupled with high levels of social media usage, overall seemed to have negative effects on adolescents' mental health.

An additional finding was that women who are on social media attach their self-esteem to positive feedback on social media. For example, their mental health would be positively impacted by gaining many likes or followers. However, they would face a mental health decline if they lost followers or got a low number of likes (*Social media 'likes' Impact TEENS' brains and behavior* 2016). In addition, elements of peer pressure were found when adolescents were scrolling through social media. Posts that already had many likes were more likely to get liked by the average adolescent.

Methodology

Conclusions regarding social media usage and physical isolation during the pandemic were drawn through the assessment of two studies. In the World Happiness Report, surveying was used to assess the damage to mental health caused

by the pandemic. Researchers issued surveys regarding this study beginning from April 2020, when the lockdown first started in many provinces. The surveys asked questions about happiness levels, such as how happy they felt that day on a scale of 1-10. The respondents additionally evaluated whether their happiness had increased or decreased since the pandemic. One struggle that researchers faced was the burden of being unable to collect evidence directly, as lockdown did not allow for interpersonal evaluation. For this reason, they issued the surveys online to a wide demographic of people. In the other study, “*The effects of social deprivation on adolescent development and mental health*” researchers used animal models to study the effects of social deprivation on adolescents. In this experiment, rodents were placed under isolation, and their brain activity was monitored. These rodents were at a physiological stage equivalent to adolescence in human teenagers.

Since social isolation is a stressor, some of its experimental effects can be characterized as general stress. However, other findings suggested that social isolation can be detrimental to normal neurological function and development. For instance, it was found that adolescent rodents who were placed in social isolation experienced anxiety, sensitivity, and hyperactivity. These animals responded to food and drink rewards in an unusual fashion, suggesting that there may be a correlation between isolation and addiction. Rodents that were isolated during their entire adolescence showed hypersensitivity and increased aggression when returned to a normal environment. An additional study (Orben et al., 2020) recorded rodents’ behavior after being isolated during play time, instead of during the entire adolescent years. The effects of this experiment were not as extreme, but still uphold the notion that isolation causes behavioral changes. Rodents who were isolated during play time showed anxiety-like behavior, depressive-like behavior, and increased sense of reward-seeking. This once again hints at the correlation between isolation and addiction.

To determine the momentary effects of social media usage, an experiment was conducted on children in the middle adolescence period. 63 adolescents between the ages 14-15 answered a survey on their phone using the Experience Sampling Method (ESM). To draw conclusions from the data, scientists used fixed effects models to determine whether the subjects had moments in time that were better with or without social media. In other words, it was concluded whether social media was productive or not at that moment. In addition, they examined the average dose-association models using the fixed effects models to gauge whether social media had affected them positively or negatively. The conclusions of the data show that overall social media use is not marked by a positive or negative effect on adolescents’ well-being. This encompasses both active and passive social media use.

However, other studies (Ferguson et al., 2013) suggested that social media has negative effects. For example, a survey done regarding adolescents showed a strong correlation between having an eating disorder and owning a social media account. In addition, subjects who were present on social media showed signs of over-evaluating physical appearance. Adolescents may also feel peer pressure when on social media. For instance, a study showed that adolescents who see a post with a high number of likes are more likely to like the post than a post with very few likes (*Social media 'likes' Impact TEENS' brains and behavior* 2016).

Evaluation of Quality of Study

The surveys given in the World Happiness Report had relatively large sample sizes, so the conclusions drawn from them provide a lower percentage of error. However, the surveys failed to ask questions about the demographics of their respondents. This prevents the study from having additional data to contextualize and draw further conclusions about how certain demographics were affected differently than others. This type of data would have provided another useful angle to the data conclusions.

In the study where animal models were used, the literature describes all the similarities that human and rodent adolescents share. However, it is important to note that the human mind is far more complex than that of a rodent. An additional factor to consider when looking at the social isolation caused by the pandemic is social media. Several different studies have shown that social media either provides negative effects on mental health, or it does not have any significant effects. However, there is no way to assess the additional factor of social media on animal models. In other words, this model is relatively simple and fails to include a variety of important factors.

In the *The effect of social media on well-being differs from adolescent to adolescent*, the notion that teens remain relatively unaffected by social media was upheld, but this may be at the fault of researcher bias. The study failed to assess more vulnerable demographics, such as low-income or minorities. In addition, the art of conducting ESM studies should be perfected. Follow-up meetings should be done with the subjects, in order to confirm that the information previously given still holds true. The study regarding the correlation between social media and disordered eating failed to provide specific information regarding the subjects of the experiment. When taking demographics, it is impertinent to note the race, socioeconomic status, and other extenuating factors. This is because some conditions make a certain group more vulnerable, which may skew the data sample. In summary, the research surrounding this topic is lacking in precise experiments that cover all factors contributing to the study. In order to improve the literature, studies should focus on eliminating error through carefully controlling the environment the experiments are held in.

Conclusion

Overall, the general conclusion drawn from the literature surrounding social media's effect on mental health during the pandemic is that it did not necessarily cause a decline. In fact, social media use had some positives. It allowed adolescents to stay connected during the uncertain times of lockdown. However, certain facets of social media use had negative effects on the mental welfare of adolescents. For instance, the forces of peer pressure were extended to social media. This may influence teens to make negative decisions, just because they see online that their peers are doing it too. In addition, adolescents may struggle with lower self-esteem and poor body image, due to constantly comparing themselves to others on social media. This type of harmful behavior may eventually blossom into disordered eating, which has a data-proven correlation with social media. Typically, eating disorders are motivated by one's self-insecurity, which social media does plenty to exemplify. Featuring the most liked posts, social media places young adolescents, especially girls, under their self-scrutiny. Research suggests that the best thing to do is limit the time that adolescents spend on social media. Adolescents should claim the advantages of staying connected to peers, but refrain from being active on social media long enough to experience the negative side of it.

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