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The Effects of Social Media on Mental Health: A Proposed Study

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Abstract

There are about 3.8 billion social media users around the world (How Many People…, 2020). How does social media use affect the mental health of its users? Excessive social media use has the potential to increase vulnerability to the development of psychological disorders, specifically increasing psychological distress, decreasing self-esteem, and increasing depressive symptoms. With social media use on the rise among people of all ages, it is important to understand the potential adverse effects so that usage guidelines and interventions can be developed. This is a proposed study to determine what the effects of using Instagram, Facebook, or no social media for a week will have on mental health. Specifically, this proposed study will examine the effects of using Instagram, Facebook, or no social media for a week on the Patient Health Questionnaire-9, Rosenberg's Self-Esteem Scale, and the Kessler Psychological Distress Scale. These scales measure depressive symptoms, self-esteem, and psychological distress. Taken together, results from this proposed study will contribute to understanding the potential deleterious effects of social media use and provide information to help shape the development of social media usage standards and interventions for individuals adversely affected by social media usage.

Keywords: social media, mental health, self-esteem, psychological distress, depressive symptoms

INTRODUCTION

The purpose of this project is to review the literature on different social media platforms and their respective influences whether positive or negative on mental health, and to propose a study to investigate the effects of social media use on mental health. First, I will describe two social media platforms, Facebook and Instagram, by examining important variables within each platform that correlate with effects on mental health. I will then summarize what the research tells us about these social media platforms and their effects on mental health. Finally, I will bring together all of the important information the literature has revealed and then develop novel, testable hypotheses for a proposed study.

Social Media Background

Social media use has soared since it was first invented and there are many different platforms in which to socialize online (Smith, K., 2019). Facebook is arguably one of the biggest, if not the biggest, social media platforms today (Smith, K., 2019). Some recent research has claimed Facebook reaches about 60.6% of internet users and about 69% of adults in the U.S. claim they use Facebook (Mohsin, M., 2020), or approximately 147.38 million adults. With these statistics in mind, in addition to the fact that the average Facebook user spends almost one hour on the site per day, it is imperative to determine how this particular social media platform affects the mental health of its users, if it does indeed affect mental health (Mohsin, M., 2020.) Aside

from Facebook, it is important to determine how all types of social media affect an individual's mental health. If we can understand how social media affects mental health, we can begin to understand the role social media plays into an individual's mental health and begin to change social media behavior to minimize or eliminate any adverse effects.

It is important to distinguish typical social media users from those who may have an internet and/or social media addiction. The DSM-V does not define either social media addiction or internet addiction. For the purposes of this project and based on existing literature (Hawi, N., & Samaha, M., 2019), I will define social media addiction as a psychological or behavioral dependence on social media that results in excessive amounts of time spent on social media, a loss of interest in other areas of life (e.g., work, hobbies, family), and disruptions to other areas of life. The two social media platforms I will be focusing on are Facebook and Instagram. I had originally intended to include Twitter as well, but my literature searches yielded no research between Twitter and mental health.

Facebook and Instagram Statistics

It is important to understand a typical users' behavior with each platform. Statistics related to each social media platform characterize the typical way individuals interact with each of the two platforms. As of this year, it is estimated that there are 2.6 billion Facebook users worldwide, making it the leader in social media platforms for the amount of users (Mohsin, M.,

2020). The average time an individual spends on Facebook is estimated to be 58.5 minutes per day (Mohsin, M., 2020). Regarding Instagram, it is estimated that about 1 billion people use Instagram worldwide, with each individual spending an average of 28 minutes per day on the site (Aslam, S., 2020). These statistics are important because they tell us, generally,

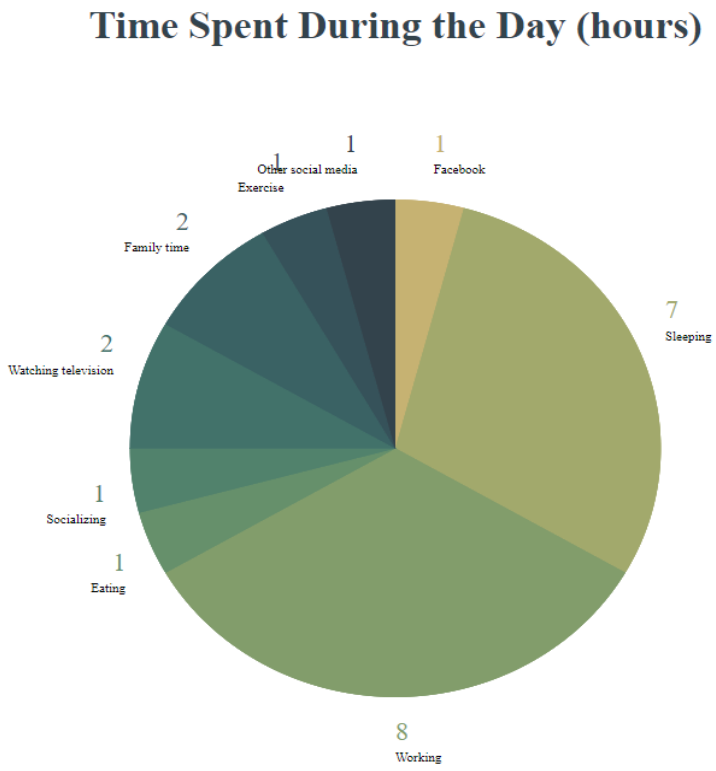


Figure 1. Average breakdown of time spent during the day.

how many people use each social media platform and, on average, how many minutes per day an individual spends on each social media platform (see Figure 1). Figure 1 shows that the average individual spends about 2 hours on social media during an average day. In the following sections, I will begin to outline what kinds of effects the two different social media platforms outlined above have on an individual's mental health.

LITERATURE REVIEW

Chen, and Lee, in (2013) determined how Facebook interactions and psychological distress interact with each other in two main areas: communication overload and personal self-esteem. The authors of the research defined communication overload as, "When too much information is flowing into an individual's brain - emails, texts, phone calls, instant messages, posts, and status updates - an individual can become overwhelmed**."** This research was drawn from an online survey given to 513 college students and only students with valid answers to all questions on the survey were utilized in the research.

Psychological distress was measured by using six items adapted from the Kessler Psychological Distress Scale and Facebook interaction was measured by eight items that indicated the frequency of Facebook activities in the past 30 days through a 7-point Likert-scale. The researchers had numerous hypotheses about this study, one of them being that "The frequency of Facebook interaction is positively related to psychological distress" (Chen, W., and

Lee, K. H., 2013). This study found out that frequent interaction with Facebook is associated with greater psychological distress through a two-step pathway that reduces self-esteem and increases communication overload. The results of this research are important to help us begin to understand the effects social media have on mental health, specifically Facebook. Since psychological distress was positively correlated with the frequency of Facebook interaction, it can be inferred that the more an individual interacts with Facebook, the more psychological distress that individual will deal with (as a result of an increase in communication overload and reduced self-esteem).

An earlier study that investigated social media and mental health comes from Hawi, N., & Samaha, M. in 2019. These researchers sought to find out the relationship between social media, self-esteem, and self-construal. The researchers defined self-construal as "one's definition of one's self, independent of others' opinions and views". Some of the assessment tools utilized in this research were the Rosenberg's Self-Esteem Scale (RSES), the Satisfaction with Life Scale (SwLS), and the Self-Construal Scale (SCS). The researchers did not specify any hypotheses but the results showed that, among other variables, a lower sense of self-esteem and emotional stability were significantly correlated with both internet addiction and social media addiction. That is, the less self-esteem and/or less emotional stability an individual has, the higher the chances the individual develops an internet addition and/or social media addiction. Age, satisfaction with life, and self-construal were neither correlated with internet addiction nor social media addiction.

The results of this research are important because they give us an idea for what variables are significantly correlated with internet addiction and social media addiction (see Table 1). Self-esteem and emotional stability are both negatively correlated with both internet addiction and social media addiction. This means that the less emotionally stable an individual is and/or the less self-esteem an individual has, the more likely that individual is going to develop an internet addiction and social media addiction. However, age, satisfaction with life, and self-construal were all not correlated with either internet addiction or social media addiction. These findings are important because we can begin to understand what traits people with internet addiction and/or social media addiction generally carry- less emotional stability and less self-esteem than the average person. This research is able to help us understand the previous research stated in this paper. If an individual is less emotionally stable and/or has a low self-esteem, that individual is more likely to develop an internet and/or social media addiction. If an individual carries an internet and/or social media addiction, what are the chances that individual interacts more than the average individual with Facebook? If it is the case that an individual with a social media or internet addiction interacts with Facebook more than the average person, because they have an addiction to either the internet or social media, previous literature has stated that individual will have a higher chance of developing psychological distress. This research is important not only because we can gather the fact that more interactions with Facebook generally causes more psychological distress in an individual, but we can begin to

understand how internet addictions and social media addictions also play into the role of psychological distress.

Variable	**Correlation Type**	**2nd Variable**
Self-esteem	Negative Correlation	Internet and Social Media Addictions
Emotional Stability	Negative Correlation	Internet and Social Media Addictions
Age	No Correlation	Internet or Social Media Addictions
Satisfaction with Life	No Correlation	Internet or Social Media Addictions
Self-construal	No Correlation	Internet or Social Media Addictions

Table 1. Measures and their correlation to Internet and/or Social Media Addictions.

We now know frequent interactions with Facebook may cause greater psychological distress via a two-step pathway (Chen, W., and Lee, K. H., 2013) containing reduced self-esteem and increased communication overload (see Figure 2) but what would happen if someone decides to quit using Facebook? In a study conducted by Morten Tromholt in 2016, the effects of quitting Facebook were analyzed. 1,095 Danish participants were recruited via Facebook in 2016 for this research. It is notable, though, that eighty-six percent of the sample were women and the average age of participants was thirty-four-years-old. The two hypotheses from Morten suggest

that “Facebook use affects life satisfaction negatively” and “Facebook use affects emotions negatively”. After completing a fifteen-minute online questionnaire, the participants were randomly assigned to one of two groups. One group was told not to use Facebook for a week and the other group was told to continue using Facebook for a week. The results of this study showed that the participants who did not use Facebook for a week reported significantly higher levels of life satisfaction than participants who did use Facebook for a week- which confirms the hypothesis that “Facebook use affects life satisfaction negatively”. This research also found that Facebook users gained aspects of well-being based on how they used Facebook. Heavy users of Facebook who quit the social media site for a week reported greater well-being than light users of Facebook who quit the social media site for a week. This result means an individual does not necessarily have to quit Facebook altogether to gain a higher sense of well-being, but change the behavior in which the individual uses Facebook. Using Facebook less-heavily results in a greater sense of well-being than using Facebook heavily.

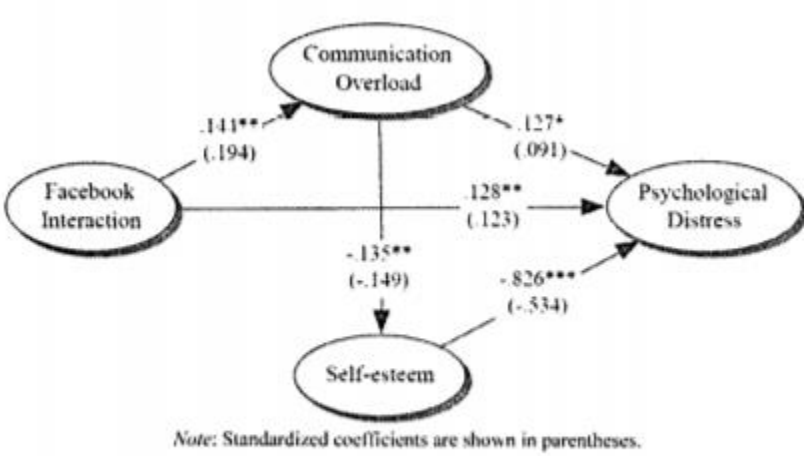


FIG. 3. Results for the test of the revised model: model (c)

Figure 2. The relationships between communication overload, Facebook interaction, psychological distress, and self-esteem (Chen, W., and Lee, K. H., 2013).

This research by Morten Tromholt in 2016 shows the effects of quitting Facebook for a week versus not quitting Facebook for a week. This research is important because it shows that quitting Facebook for only a week increases an individual's sense of life satisfaction and well-being. Now that we know using Facebook less or quitting the site altogether produces an increase in life satisfaction and personal well-being, we can add that to the previous finding that Facebook produces a greater psychological distress through diminished self-esteem and increased communication overload to make general finding that Facebook, one of many social media sites, is negative for one's mental health in a few different aspects. Adding to this fact that, among other variables, a lower sense of self-esteem and emotional stability were significantly correlated with both internet addiction and social media addiction, we can start to see the

negative effects of social media use altogether. If an individual has a lower sense of self-esteem and emotional stability, that individual is more likely to develop an internet addiction and social media addiction. If an individual develops these addictions, we can conclude, based on prior research, that the addictions will, generally, only lessen life satisfaction and well-being while increasing psychological distress if the individual uses Facebook.

In a recent study by Sherlock and Wagstaff (2019), Instagram use was looked at in order to try and establish a link between Instagram use and various psychological variables. The participants of this study were 129 women between the ages of 18 and 35. First, the participants completed a series of questionnaires that showed Instagram use is correlated with self-esteem, depressive symptoms, general and physical appearance anxiety, and body dissatisfaction. The research showed that these correlations were mediated by social comparison. That is, if an individual uses Instagram and consciously or subconsciously compares themselves to the people they are looking at or interacting with on Instagram, then Instagram use is correlated with the variables listed above (Sherlock, M., & Wagstaff, D. L., 2019). In another portion of this study, participants were exposed to a collection of either beauty, fitness, or travel Instagram images to see how interpretation and interaction with the images correlated with various psychological variables. The results of this portion of the study showed that fitness and beauty images significantly decreased self-rated attractiveness of the participants, and the size of this decrease in self-rated attractiveness was correlated with depressive symptoms, anxiety, body dissatisfaction, and a decrease in self-esteem (Sherlock, M., & Wagstaff, D. L., 2019).

As the previous study regarding Instagram use and various psychological variables showed (Sherlock, M., & Wagstaff, D. L., 2019), Instagram use and the way individuals interact with the social media site are associated with negative mental health outcomes such as depressive symptoms, decreased self-esteem, general and physical appearance anxiety, and body dissatisfaction. These correlations were mediated by social comparison, so if an individual were to consciously or subconsciously compare themselves socially to the people or images seen on the site, then the negative outcomes would appear. Additionally, when exposed to fitness and beauty images on Instagram, participants showed significantly decreased self-rated attractiveness. The size of the decrease in self-rated attractiveness was correlated with depressive symptoms, anxiety, body-dissatisfaction, and a decrease in self-esteem (Sherlock, M., & Wagstaff, D. L., 2019). These results are important because they begin to help us understand what Instagram use and looking at either fitness or beauty images on Instagram can do to a person's mental health.

STUDY RATIONALE

In order to obtain baseline Internet Use information, I will ask participants to complete a 3-question Internet Use Questionnaire (see Appendix A). This questionnaire asks participants to list the social media sites they have accounts for, list the average amount of time, per day, they spend on each social media site, and name the number of friends they have. Given the above research, I have generated seven hypotheses for my proposed experiment regarding Facebook and Instagram that will be tested in the proposed studies.

Effect of Facebook Use on Psychological Distress

The first hypothesis, regarding Facebook usage is that "Facebook use will result in increased psychological distress". Based on previous studies, Facebook use should result in high psychological distress because Facebook use creates psychological distress through communication overload and decreased self-esteem (Chen, W., and Lee, K. H., 2013).

Effect of Facebook Use on Self-Esteem

The second hypothesis, also regarding Facebook use is that "Facebook use will result in decreased self-esteem". Based on previous studies, Facebook use should result in decreased self-esteem because it has been found that frequent Facebook interaction results in reduced self-esteem (Chen, W., and Lee, K. H., 2013).

Effects of Instagram Use on Self-Esteem

The third hypothesis, regarding Instagram use is that "Instagram use will result in reduced self-esteem". Based on previous studies, Instagram use should result in reduced self-esteem because a correlation has been found between Instagram use and self-esteem, especially if a user is exposed to fitness and/or beauty images on Instagram (Sherlock, M., & Wagstaff, D. L., 2019).

Effects of Instagram Use on Depressive Symptoms

The fourth hypothesis, again regarding Instagram use, is that "Instagram use will result in increased depressive symptoms". Based on previous studies, Instagram use should result in increased depressive symptoms because a correlation has previously been found between Instagram use and depressive symptoms (Sherlock, M., & Wagstaff, D. L., 2019).

Effects of Not Using Facebook and Instagram on Self-Esteem

The fifth hypothesis regarding both platforms is that "Not using Facebook and Instagram results in increased self-esteem when compared to those individuals who use Instagram and Facebook". Based on previous studies, it has been shown that Facebook (Chen, W., and Lee, K. H., 2013) and Instagram (Sherlock, M., & Wagstaff, D. L., 2019) both reduce self-esteem. Therefore, not using Facebook and Instagram should result in an increase in self-esteem.

Effects of Not Using Facebook and Instagram on Depressive Symptoms

The sixth hypothesis is that "Not using Facebook and Instagram results in decreased depressive symptoms when compared to those individuals who use Instagram and Facebook". Based on previous studies, not using Facebook (Chen, W., and Lee, K. H., 2013) and Instagram (Sherlock, M., & Wagstaff, D. L., 2019) should result in decreased depressive symptoms because of a decrease in psychological distress and self-esteem

Effects of Not Using Facebook and Instagram on Psychological Distress

Finally, the seventh and final hypothesis states that "Not using Facebook and Instagram will result in decreased psychological distress when compared to those individuals who use Instagram and Facebook." Based on previous studies, not using Facebook (Chen, W., and Lee, K. H., 2013) and Instagram (Sherlock, M., & Wagstaff, D. L., 2019) should result in decreased psychological distress because this finding has been previously reported.

It is important to test these hypotheses because as if they are supported by the research, the information on how these two types of social media can impact mental health should be made known to the general public in order for people to make informed decisions about based on what the research shows. If the first hypothesis is supported by the data, then this will demonstrate that the average Facebook user has increased psychological distress compared to an average individual who does not use Facebook. If the second hypothesis is supported by the data, then this will demonstrate that the average Facebook user has decreased self-esteem compared to an average individual who does not use Facebook. If the third hypothesis is supported by the data, then this will demonstrate that the average Instagram user has increased body dissatisfaction compared to an average individual who does not use Instagram. If the fourth hypothesis is supported by the data, then this will demonstrate that the average Instagram user has reduced

self-esteem when compared to an average individual who does not use Instagram. If the fifth hypothesis is supported by the data, then this will demonstrate that the average Instagram user has increased depressive symptoms when compared to an average individual who does not use Instagram. If the sixth hypothesis is supported by the data, then this will demonstrate that the average individual who does not use Facebook and Instagram will result in decreased body dissatisfaction when compared to an average individual who does use Facebook and Instagram. If the seventh hypothesis is supported by the data, then this will demonstrate that the average individual who does not use Facebook and Instagram will have increased self-esteem when compared to an average individual who does use Facebook and Instagram. If the eighth hypothesis is supported by the data, then this will demonstrate that the average individual who uses Facebook and Instagram will have decreased depressive symptoms when compared to an average individual who does use Facebook and Instagram. Finally, if the ninth hypothesis is supported by the data, then this will demonstrate that the average individual who does not use Facebook and Instagram will have decreased psychological distress when compared to an average individual who does use Facebook and Instagram.

METHODS

Participants

The participants for this proposed research will be all genders between the ages of 18 and 25. I chose this age bracket because age 18 is when someone becomes a legal adult and age 25 is when brain development is complete (Arain, M. et al., 2013). 200 participants will be recruited via posting fliers on college campuses in and around the Dutchess County area in New York. Additionally, the participants will be compensated with $5 each for participation in this study. Application for approval to conduct this study will be obtained from the Bard College Institutional Review Board (see Appendix E).

Procedure

Part 1 Collection of Internet Use Data

Participants will complete an online questionnaire (see Appendix A) regarding individual social media activity. The questionnaire will be presented to the participants via Mechanical Turk (MTurk). Social media activity will be defined as what social media sites the participants have an account for. The questionnaire will ask for an estimate of time spent, per day, on each social media site. Additionally, the online questionnaire will ask participants about their number of friends. Friends will be defined as someone who an individual talks to in person or online at least

once per week during a typical week. I have limited the definition of “friend” to someone an individual talks to in person or online at least once per week during a typical week because, in my experience, it is typical for friends to talk at least once per week on a normal basis. All baseline data will be collected and used as a starting point to see how many friends each participant has and to see participants’ general social media activity.

Measures

There will be six different measures utilized in this research. The first measure is the Kessler Psychological Distress Scale (Chen, W., and Lee, K. H., 2013) (See Appendix B), which will be used in order to gain insight into participants’ psychological distress. The second measure that will be utilized in this study is Rosenberg's Self-Esteem Scale (RSES) (Hawi, N., & Samaha, M., 2019) (See Appendix C) , which will be used to measure self-esteem. The final measure to be utilized in this study is the Patient Health Questionnaire-9 (PHQ-9) (See Appendix D). The PHQ-9 will be used to determine if participants have depressive symptoms. All of these measures will be used for this research in order to gain insight into participants’ psychological distress, self-esteem, satisfaction with life, depressive symptoms, and anxieties.

Data Analysis

Part 1 Baseline Internet Use Information

Part 1 of the data analysis will include scoring the baseline questionnaire given to participants. This questionnaire includes how many social media sites the participant has an account for, the average amount of time spent, per day, on each social media site, and how many friends each participant has. Descriptive statistics will be used to characterize baseline levels of social media usage.

Part 2 Social Media or Non-Social Media Use on Effective Measures

Individual scores on each of the scales listed under the “Measures” will be analyzed. All data will be analyzed using one-way-ANOVA methods to determine if the type of social media (SM) affects the outcome measures on the five surveys. A one-way ANOVA will be used for each of the 7 hypotheses to determine if the analyses will yield statistically significant data. If the omnibus F is significant, I will run a Bonferroni post-hoc test to determine if groups differ from each other.

PREDICTED RESULTS

For hypothesis 1, I predict that the Facebook group will show a higher score on the Kessler Psychological Distress Scale when compared to the scores on the same scale by the Instagram and no social media groups.

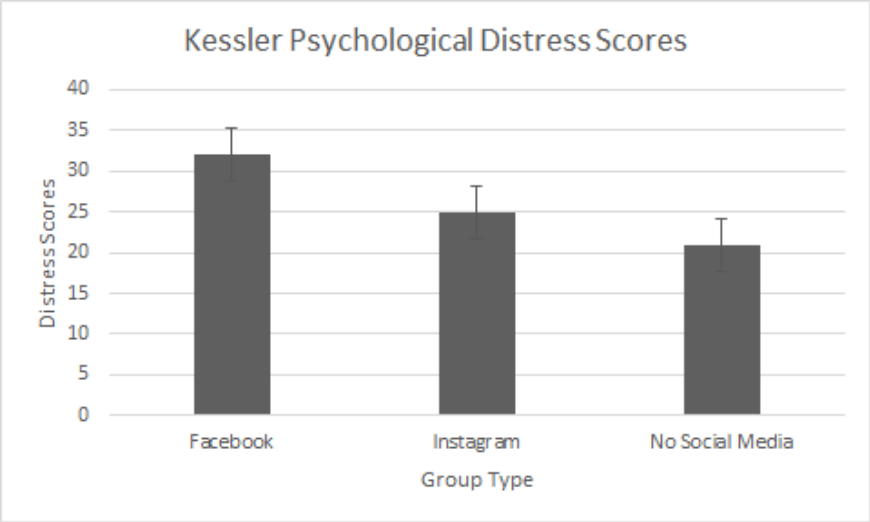


Figure 4. Predicted scores for each of the social media groups on the Kessler Psychological Distress Scale. A higher score indicates higher distress. The no social media (NSM) group has the lowest score and the Facebook Group (FG) has the highest score.

For hypothesis 2, I predict that the NSM group will have a higher score on the Rosenberg's Self-Esteem Scale when compared to the scores on the same scale of the Facebook group, but the Instagram group's scores will be lower than the scores on the RSES for the Facebook group. This is the case because I believe Instagram reduces self-esteem more than Facebook.

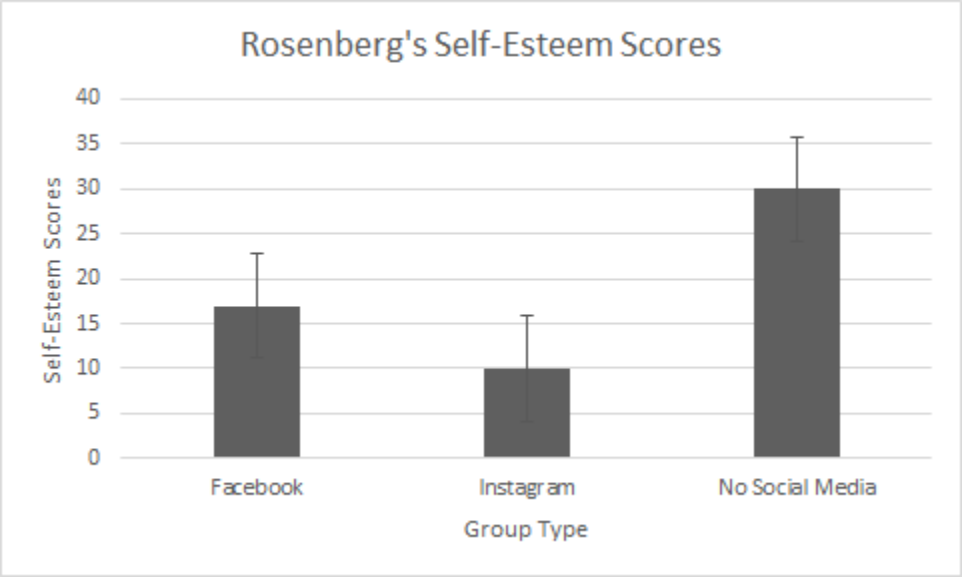


Figure 5. Predicted scores for each of the social media groups on the Rosenberg's Self-Esteem Scale. A higher score indicates a higher self-esteem, The NSM group has the highest score and the Instagram group (IG) has the lowest score.

For hypothesis 3, I predict that the Instagram group will have the highest scores on the RSES when compared to the Facebook group's scores and no social media group's scores. See figure 5 for the proposed scores of each group on the RSES.

For hypothesis 4, I predict that the Instagram group will exhibit higher scores on the PHQ-9 when compared to the scores of the Facebook group and no social media group.

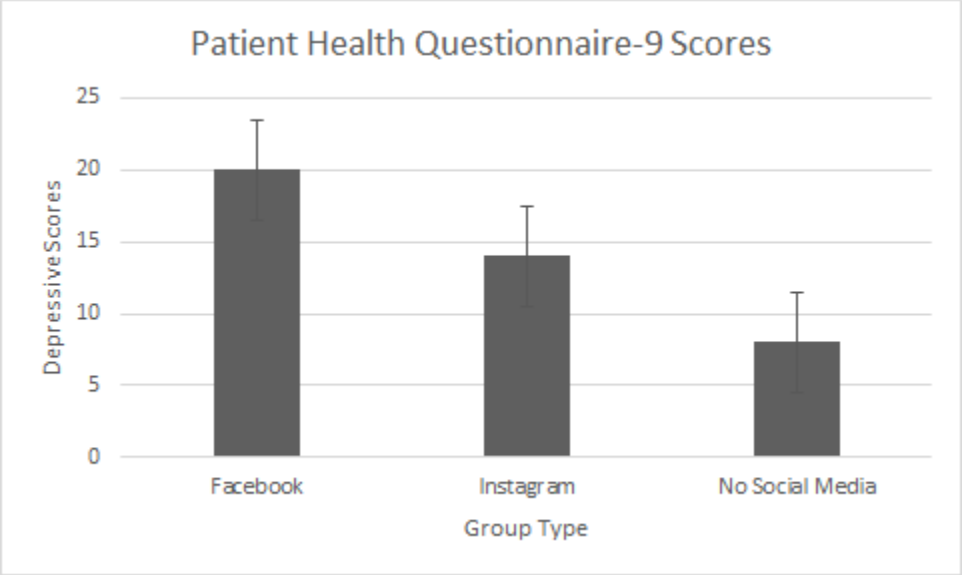


Figure 6. Predicted scores for each of the social media groups on the Patient Health Questionnaire-9. A higher score indicates a higher depression severity. The no social media (NSM) group has the lowest score and the Facebook group (FG) has the highest score.

For hypothesis 5, I predict that the NSM group will show the highest scores on the RSES when compared to the scores of the Facebook group and Instagram group on the same scale because using no social media for a week should increase participants' self-esteem. See figure 5 for the predicted scores on the RSES.

For hypothesis 6, I predict that the NSMG will show the lowest scores on the PHQ-9 when compared to the scores of the Facebook group and Instagram group on the same scale because not using social media for a week should decrease depressive symptoms. See figure 6 for the predicted scores on the PHQ-9.

For the last hypothesis, number 7, I predict that the NSM scores will show the lowest scores on the Kessler Psychological Distress Scale when compared to the scores of the Facebook group and Instagram group on the same scale because not using social media for a week should decrease participants' psychological distress. See Figure 4 for the predicted scores between each group and their scores on the Kessler Psychological Distress Scale.

DISCUSSION

The current study sought to identify significant relationships between Facebook use, Instagram use, and the mental health markers: self-esteem, depressive symptoms, and psychological distress. If the predictions from this proposed study are accurate, Facebook and/or Instagram use will be found to produce greater negative mental health symptoms compared to no use. For example, if hypothesis 1 is supported and the Facebook group shows higher scores on the Kessler Psychological Distress Scale, then we know that frequent interaction with Facebook causes psychological distress. Additionally, Instagram also would cause psychological distress, but possibly not a significant amount. This is important because psychological distress can cause

disruptions to everyday life such as the inability to focus on certain tasks, anxiety, fatigue, and sadness. It is important for this study to reach the general public because it is critical to inform people of the possible negative side effects of using social media, specifically Facebook and Instagram.

As hypothesis 1 states the Facebook group will show higher scores on the Kessler Psychological Distress Scale, this hypothesis is supported by previous literature. It has been found that frequent interactions with Facebook generates more psychological distress than not having frequent interactions with Facebook, via a two-step pathway that reduces self-esteem and increases communication overload (Chen, W., and Lee, K. H., 2013). Additionally, in 2016, Morten Tromholt found that quitting Facebook for a week led to significantly higher levels of life satisfaction compared to not quitting Facebook for a week. Also, when heavy users of Facebook quit the social media site for a week, it led to a greater sense of well-being compared to when light users of Facebook quit the social media site for a week.

If hypothesis 2 is supported and the no social media group has a higher mean score on the RSES than the Facebook group, then we know that frequent interactions with Facebook produces a lower self-esteem. If the Instagram Group (IG) has a lower mean score on the RSES than the FG, then we know that frequent interactions with Instagram produces a lower self-esteem than frequent interactions with Facebook. This is important because self-esteem can affect many areas of life, from how someone carries themselves to how much someone tries on a task for work. Hypothesis 2 is supported by previous literature in terms of Instagram affecting self-esteem, but

there has been no literature that says Facebook interacts with self-esteem in some way. Previous literature regarding Instagram and self-esteem showed that Instagram use is positively correlated with a decrease in self-esteem, among other psychological variables (Sherlock, M., & Wagstaff, D. L., 2019). So, the Instagram portion of hypothesis 2 would be replicating the effects of Instagram on self-esteem from Sherlock's research.

If hypothesis 3 is supported, then the Instagram group will show the lowest scores on the RSES, followed by the Facebook group's scores, and then followed by the no social media group. This distinction between the IG and the FG is important because it allows us to see Instagram use pertains to a lower self-esteem, in general, compared to Facebook use. I predict the Instagram group will show the lowest scores on the RSES because previous literature has shown that fitness and beauty images on Instagram further the association between Instagram use and self-esteem, and in my experience, Instagram shows more fitness and beauty images than Facebook does, therefore resulting in a lower self-esteem mean than the Facebook group (Sherlock, M., & Wagstaff, D. L., 2019).

If hypothesis 5 is supported, then the NSM will show the highest scores on the RSES when compared to both the IG and FB. Higher scores on the RSES indicates a higher sense of self-esteem, so people in the no social media group should exhibit a higher sense of self-esteem than those people in the FB and IG. There is no previous literature that specifically states not using social media will result in a higher score on the RSES, but because there has been literature that says Instagram use is related to decreased self-esteem, I believe this is the case.

If hypothesis 4 is supported, then the IG will show higher scores on the PHQ-9 compared to both the FB and no social media groups. This is an important finding because it tells us that Instagram use is associated with more depressive symptoms in the user as compared to Facebook use or no social media. Depressive symptoms can be feelings of sadness, hopelessness, irritability, loss of interest or pleasure in all or some of normal activities, disturbances to sleep, lack of energy, anxiety, and more (Depression, 2018). If both Instagram and Facebook use are associated with depressive symptoms, then, in general, the users of these social media sites will exhibit one or a few of the depressive symptoms listed above. If this is the case, then there will most-likely be disruptions to everyday life for users of Facebook or Instagram. It is important to note the relationships between Facebook, Instagram, and depressive symptoms because more people experiencing depressive symptoms as a result of social media use would not be beneficial for our world. Previous literature has shown that Instagram use is associated with an increase in depressive symptoms, among other variables (Sherlock, M., & Wagstaff, D. L., 2019). There has been no previous literature that states whether or not Facebook use is associated with an increase in depressive symptoms.

If hypothesis 6 is supported, then the no social media group will have the lowest scores on the PHQ-9 when compared to both the IG and FB. Low scores on the PHQ-9 indicate less depressive symptoms, so individuals in the NSM group should exhibit low depressive symptoms as indicated by the PHQ-9 as a result of not using social media.

If hypothesis 7 is supported, then the NSM group should show the lowest scores on the Kessler Psychological Distress Scale when compared to the FB and IG groups. Low scores on this scale indicate low psychological distress. If this hypothesis is supported, then it is likely that the FB and IG groups do exhibit some psychological distress as a result of using a social media platform. As does anxiety and depressive symptoms, psychological distress will also cause complications in daily life and further disrupt the lives of many people who use these social media sites. Previous literature has found that frequent interactions with Facebook generate psychological distress via a two-step pathway that reduces self-esteem and increases communication overload (Chen, W., and Lee, K. H., 2013).

CONCLUSION

Taken together the predicted outcomes of the proposed study show using Facebook or Instagram can have a negative effect on an individual's mental health by increasing psychological distress, reducing self-esteem, and increasing depressive symptoms. It is important that the general public is made aware of these negative impacts of social media in order for people to make a well-informed decision on whether or not to continue using these social media sites. Additionally, more research is needed in order to find out if other social media sites have the same effects on people's mental health as do these two social media sites.

The results of this study affect people between the ages of 18 and 25, as this age group is what the study is focused on. However, people younger than 18 and people older than 25 may also have the same negative mental health outcomes from using social media as people between the ages of 18 and 25 do. More research needs to be done in order to figure out how age affects the mental health symptoms that can be brought on by the use of Instagram and Facebook. I believe the usage of Facebook and Instagram can be changed in order to minimize the risk outcome. For example, in 2013, Chen and Lee found that 'frequent' interactions with Facebook cause greater psychological distress in individuals. So, if people can visit Facebook infrequently, maybe once a day or once every two days, then the risk of psychological distress will decrease. I believe this finding can be broadened to include both Facebook and Instagram for many psychological symptoms. For example, interacting with Instagram less than usual may result in a smaller reduction of self-esteem versus interacting with Instagram on a daily basis. There was a recent meta-analysis published in 2020 that found "Facebook-based social support had effects on three broad categories: general health, mental illness, and well-being" (Gilmour, J., Machin, T., Brownlow, C., & Jeffries, C., 2020). Unfortunately, the researchers did not define what they meant by 'Facebook-based social support', so we can only speculate about what kind of support this may be. However, this literature does bring to light the fact that Facebook, and possibly other social media platforms, can be used to improve mental health rather than worsen mental health. Another article published in 2020 examined the effects of an intervention through

Facebook in order to strengthen self-esteem in nursing undergraduates. The nursing undergraduates were involved in ten intervention sessions via a private Facebook page that posted positive messages, texts, and pictures. The results showed that there were significant increases in the scores on the RSES and self-efficacy tests, indicating that the nursing undergraduates did benefit from this intervention via Facebook (Ribeiro, R. M., et al., 2020). Based on this study, it can be inferred that if someone is solely viewing positive messages, texts, and pictures via Facebook, then that individual can have positive mental health outcomes as a result. To conclude, people may experience less negative mental health outcomes by visiting social media sites infrequently. Also, some variation of 'Facebook-based social support' may have a positive impact on one's sense of general health, mental illness, and well-being (Gilmour, J., Machin, T., Brownlow, C., & Jeffries, C., 2020). Finally, viewing solely positive texts, messages, and pictures via Facebook is possibly a way to increase self-esteem and self-efficacy (Ribeiro, R. M., et al., 2020).

Based on existing literature as described in the previous paragraph, I believe numerous age groups and populations would be able to benefit from social media use if the use of a positive intervention on Facebook or 'Facebook-based social support' were to be utilized. On the flip-side, I believe every population and age group could be at risk for experiencing negative mental health repercussions for using social media sites, such as Instagram or Facebook, too frequently. One broad implication of social media affecting people is that between 2009 and 2017, it was found that the rates of depression among children ages 14 to 17 increased by more

than 60% (Heid, M., 2019). Additionally, a study found that, in regards to young people, rates of suicidal thoughts, plans and attempts all increased significantly, and in some cases more than doubled, between 2008 and 2017 (Heid, M., 2019). Some believe these results are because of that fact that social media use also took-off in participant numbers during this same time period. In conclusion, social media has a large impact on the well-being and mental health of many people. I believe whether or not social media negatively affects one's well-being and/or mental health is binded to a case-by-case basis. By this I mean that every individual is different in many different ways, so the impact of social media on one's mental health may look different for different people. For example, important variables are the type of material viewed on social media sites, how often one views social media sites, and several other factors. I believe more research should be done on social media and mental health in order to determine what the exact implications of using social media platforms are on mental health in order to develop safe guidelines for use and interventions where needed.

REFERENCES

Arain, M., Haque, M., Johal, L., Mathur, P., Nel, W., Rais, A., . . . Sharma, S. (2013). Maturation of the Adolescent Brain. *Neuropsychiatric Disease and Treatment, 9*, 449-461. doi:https://dx.doi.org/10.2147%2FNDT.S39776

Aslam, S. (2020, February 10). Instagram by the Numbers: Stats, Demographics, & Fun Facts. Retrieved September 30, 2020, from https://www.omnicoreagency.com/instagram-statistics/

Chen, W., & Lee, K.-H. (2013). Sharing, Liking, Commenting, and Distressed? The Pathway Between Facebook Interaction and Psychological Distress. Retrieved February 19, 2020, from https://bard.illiad.oclc.org/illiad/illiad.dll?Action=10&Form=75&Value=77372

Depression (major depressive disorder). (2018, February 03). Retrieved November 07, 2020, from https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007

Gilmour, J., Machin, T., Brownlow, C., & Jeffries, C. (2020). Facebook-Based Social Support and Health: A Systematic Review. *Psychology of Popular Media, 9*(3), 328-346. http://dx.doi.org/10.1037/ppm0000246

Hawi, N., & Samaha, M. (2019). Identifying commonalities and differences in personality characteristics of Internet and social media addiction profiles: Traits, self-esteem, and self-construal. *Behaviour and Information Technology, 38*(2), 110-119. doi:10.1080/0144929X.2018.1515984

Heid, M. (2019, March 14). Depression and Suicide Rates Are Rising Sharply in Young Americans, New Report Says. Retrieved November 17, 2020, from https://time.com/5550803/depression-suicide-rates-youth/

How Many People Use Social Media in 2020? (65+ Statistics). (2020, August 12). Retrieved November 24, 2020, from https://backlinko.com/social-media-users

Lin, Y. (2020, May 30). 10 Twitter Statistics Every Marketer Should Know In 2020. Retrieved September 30, 2020, from Aslam, S. (2020, February 10). Instagram by the Numbers: Stats, Demographics, & Fun Facts. Retrieved September 30, 2020, from https://www.omnicoreagency.com/instagram-statistics/

Mohsin, M. (2020, September 18). Top 10 Facebook Statistics You Need to Know in 2020. Retrieved September 25, 2020, from https://www.oberlo.com/blog/facebook-statistics

Ribeiro, R. M., Bragiola, J. B., Eid, L. P., Mendonca Ribeiro, R., Da Cruz Sequeira, C. A., & Pompeo, D. A. (2020). Impact of an intervention through Facebook to strengthen self-esteem in nursing students. *Revista Latino-Americana De Enfermagem, 28*. http://dx.doi.org/10.1590/1518-8345.3215.3237

Sherlock, M., & Wagstaff, D. L. (2019). Exploring the Relationship Between Frequency of Instagram Use, Exposure to Idealized Images, and Psychological Well-Being in Women. *American Psychological Association: Psychology of Popular Media Culture, 8*(4), 482-490. doi:10.1037/ppm0000182

Smith, K. (2019, December). 126 Amazing Social Media Statistics and Facts. Retrieved September 30, 2020, from https://www.brandwatch.com/blog/amazing-social-media-statistics-and-facts/

Tromholt, M. (2016). The Facebook Experiment: Quitting Facebook Leads to Higher Levels of Well-Being. *Cyberpsychology, Behavior, and Social Networking, 19*(11). doi:10.1089/cyber.2016.0259

Appendix

Appendix A

Social Media Activity Questionnaire

1. How many social media sites do you have an account for? Please state each social media site.
2. How much time do you spend, per day, on average, on each social media site? (Please list each social media site and the average amount of time you spend, per day, on each site.)
3. How many friends do you have? (Friends can be defined as someone you talk to in-person or online once per week.)

Appendix B

Kessler Psychological Distress Scale (K10)
Source: Kessler R. Professor of Health Care Policy, Harvard Medical School, Boston, USA.

This is a 10-item questionnaire intended to yield a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4 week period.

Why use the K10
The use of a consumer self-report measure is a desirable method of assessment because it is a genuine attempt on the part of the clinician to collect information on the patient's current condition and to establish a productive dialogue. When completing the K10 the consumer should be provided with privacy.
(Information sourced from the NSW Mental health Outcomes and Assessment Training (MH-OAT) facilitator's Manual, NSW Health Department 2001)

How to administer the questionnaire
As a general rule, patients who rate most commonly "Some of the time" or "All of the time" categories are in need of a more detailed assessment. Referral information should be provided to these individuals. Patients who rate most commonly "A little of the time" or "None of the time" may also benefit from early intervention and promotional information to assist raising awareness of the conditions of depression and anxiety as well as strategies to prevent future mental health issues.

(Information sourced from the NSW Mental health Outcomes and Assessment Training (MH-OAT) facilitator's Manual, NSW Health Department 2001)

K10 Test

These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been .

1. During the last 30 days, about how often did you feel tired out for no good reason?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

2. During the last 30 days, about how often did you feel nervous?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

4. During the last 30 days, about how often did you feel hopeless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

5. During the last 30 days, about how often did you feel restless or fidgety?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

6. During the last 30 days, about how often did you feel so restless you could not sit still?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

7. During the last 30 days, about how often did you feel depressed?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

8. During the last 30 days, about how often did you feel that everything was an effort?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

10. During the last 30 days, about how often did you feel worthless?				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

Scoring

FOR DOCTOR'S EYES ONLY

This is a questionnaire for patients to complete. It is a measure of psychological distress. The numbers attached to the patients 10 responses are added up and the total score is the score on the Kessler Psychological Distress Scale (K10). Scores will range from 10 to 50. People seen in primary care who

* score under 20 are likely to be well
* score 20-24 are likely to have a mild mental disorder
* score 25-29 are likely to have moderate mental disorder
* score 30 and over are likely to have a severe mental disorder

13% of the adult population will score 20 and over and about 1 in 4 patients seen in primary care will score 20 and over. This is a screening instrument and practitioners should make a clinical judgement as to whether a person needs treatment. Scores usually decline with effective treatment. Patients whose scores remain above 24 after treatment should be reviewed and specialist referral considered.

References:

Kessler, R.C., Andrews, G., Colpe, .et al (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. **Psychological Medicine, 32**, 959-956.

Andrews, G., Slade, T (2001). Interpreting scores on the Kessler Psychological Distress Scale (k10). **Australian and New Zealand Journal of Public Health, 25**, 494-497.

Appendix C

ROSENBERG SELF-ESTEEM SCALE

Reference:

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Description of Measure:

A 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be uni-dimensional. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree.

Abstracts of Selected Related Articles:

Gray-Little, B., Williams, V.S.L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 23,* 443-451.

The Rosenberg Self-Esteem Scale, a widely used self-report instrument for evaluating individual self-esteem, was investigated using item response theory. Factor analysis identified a single common factor, contrary to some previous studies that extracted separate Self-Confidence and Self-Depreciation factors. A unidimensional model for graded item responses was fit to the data. A model that constrained the 10 items to equal discrimination was contrasted with a model allowing the discriminations to be estimated freely. The test of significance indicated that the unconstrained model better fit the data-that is, the 10 items of the Rosenberg Self-Esteem Scale are not equally discriminating and are differentially related to self-esteem. The pattern of functioning of the items was examined with respect to their content, and observations are offered with implications for validating and developing future personality instruments.

Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest, 4,* 1-44.

Summary – Self-esteem has become a household word. Teachers, parents, therapists, and others have focused efforts on boosting self-esteem, on the assumption that high self-esteem will cause many positive outcomes and benefits—an assumption that is critically evaluated in this review.

Appraisal of the effects of self-esteem is complicated by several factors. Because many people with high self-esteem exaggerate their successes and good traits, we emphasize objective measures of outcomes. High self-esteem is also a heterogeneous category, encompassing people who frankly accept their good qualities along with narcissistic, defensive, and conceited individuals.

Scale:

Instructions

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

Strongly Agree Agree Disagree Strongly Disagree

2. At times I think I am no good at all.

Strongly Agree Agree Disagree Strongly Disagree

3. I feel that I have a number of good qualities.

Strongly Agree Agree Disagree Strongly Disagree

4. I am able to do things as well as most other people.

Strongly Agree Agree Disagree Strongly Disagree

5. I feel I do not have much to be proud of.

Strongly Agree Agree Disagree Strongly Disagree

6. I certainly feel useless at times.

Self Report Measures for Love and Compassion Research: *Self-Esteem*

Fetzer Institute

Strongly Agree Agree Disagree Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others.

Strongly Agree Agree Disagree Strongly Disagree

8. I wish I could have more respect for myself.

Strongly Agree Agree Disagree Strongly Disagree

9. All in all, I am inclined to feel that I am a failure.

Strongly Agree Agree Disagree Strongly Disagree

10. I take a positive attitude toward myself.

Strongly Agree Agree Disagree Strongly Disagree

Scoring:

Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 1 point, "Disagree" 2 points, "Agree" 3 points, and "Strongly Agree" 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Appendix D

Patient Health Questionnaire (PHQ-9)

This article is for **Medical Professionals**

Professional Reference articles are designed for health professionals to use. They are written by UK doctors and based on research evidence, UK and European Guidelines, so you may find the language more technical than the **condition leaflets**.

This easy to use patient questionnaire is a self-administered version of the PRIME-MD diagnostic instrument for common mental disorders.[1] The PHQ-9 is the depression module, which scores each of the nine DSM-IV criteria as "0" (not at all) to "3" (nearly every day). It has been validated for use in primary care.[2]

It is not a screening tool for depression but it is used to monitor the severity of depression and response to treatment. However, it can be used to make a tentative diagnosis of depression in at-risk populations - eg, those with coronary heart disease or after stroke.[3, 4]

When screening for depression the Patient Health Questionnaire (PHQ-2) can be used first (it has a 97% sensitivity and a 67% specificity).[5] If this is positive, the PHQ-9 can then be used, which has 61% sensitivity and 94% specificity in adults.

Patient Health Questionnaire (PHQ-9)	
Over the last two weeks, how often have you been bothered by any of the following problems?	
Little interest or pleasure in doing things?	Not at all Several days More than half the days Nearly every day
Feeling down, depressed, or hopeless?	Not at all Several days More than half the days Nearly every day
Trouble falling or staying asleep, or sleeping too much?	Not at all Several days More than half the days Nearly every day
Feeling tired or having little energy?	Not at all Several days More than half the days Nearly every day

Poor appetite or overeating?	Not at all Several days More than half the days Nearly every day
Feeling bad about yourself - or that you are a failure or have let yourself or your family down?	Not at all Several days More than half the days Nearly every day
Trouble concentrating on things, such as reading the newspaper or watching television?	Not at all Several days More than half the days Nearly every day
Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual?	Not at all Several days More than half the days Nearly every day
Thoughts that you would be better off dead, or of hurting yourself in some way?	Not at all Several days More than half the days

Thoughts that you would be better off dead, or of hurting yourself in some way?	Not at all Several days More than half the days Nearly every day
Total = /27	
Depression Severity: 0-4 none, 5-9 mild, 10-14 moderate, 15-19 moderately severe, 20-27 severe.	

Validity has been assessed against an independent structured mental health professional (MHP) interview. PHQ-9 score ≥10 had a sensitivity of 88% and a specificity of 88% for major depression.[1] It can even be used over the telephone.[6]

Note about credits

The copyright for the PHQ-9 was formerly held with Pfizer, who provided the educational grant for Drs Spitzer, Williams and Kroenke who originally designed it.[1] This is no longer the case and no permission is required to reproduce, translate, display or distribute the PHQ-9.

Appendix E

IRB PROPOSAL FORM

Please note: You will receive a response about the status of your proposal approximately three weeks after submission. Please be sure to e-mail all attachments and supplemental materials to irb@bard.edu.

IRB New Proposal Form 2020

Section 1

Please enter the following information about yourself:

Today's date: *

11 / 30 / 2020

MM DD YYYY

Name: *

Grant Bossard

First Last

Email: *

gb7322@bard.edu

Your Academic Program/Department/Office: *

Bard Psychology Program

Your status (faculty, staff, graduate or undergraduate student): *

Undergraduate Student

Adviser or Faculty Sponsor (if applicable):

Adviser or Faculty Sponsor (if applicable):

Frank Scalzo

If you are a graduate or undergraduate student, has your Adviser or Faculty Sponsor seen and approved your application?

- ○ Yes
- ◉ No

Your Adviser's or Faculty Sponsor's email address (if applicable):

Scalzo@bard.edu

Please list all individuals (full name and status, i.e. faculty, staff, student) involved in this project that will be working with human subjects. Note: Everyone listed must have completed Human Subject Research Training within the past three years. *

Grant Bossard
Frank Scalzo

Do you have external funding for this research? *

- ○ Yes
- ◉ No

If so, state the name of the sponsor and the title of the project as it was submitted to that sponsor.

Section 2

Section 2

Please enter the following information about your project.

What is the title of your project? *

The Effects of Social Media on Mental Health: A Proposed Study

When do you plan to begin this project? (Start date): *

12 / 7 / 2020

MM DD YYYY

Describe your research question(s): *

How does Facebook use affect psychological distress? How does Facebook use affect self-esteem? How does Instagram use affect self-esteem? How does Instagram use affect depressive symptoms? How does not using Facebook or Instagram affect self-esteem? How does not using Facebook or Instagram affect depressive symptoms? How does not using Facebook or Instagram affect psychological distress?

Describe the population(s) you plan to recruit and how you plan to recruit participants. Please submit all recruitment material, emails and scripts to IRB@bard.edu *

The population I plan to recruit are females and males between the ages of 18 and 25. I plan to recruit them by posting fliers on college campuses in and around the Dutchess County area in New York.

Will your participants include individuals from vulnerable or protected populations (e.g., children, pregnant women, prisoners, or the cognitively

Will your participants include individuals from vulnerable or protected populations (e.g., children, pregnant women, prisoners, or the cognitively impaired)? *

- ○ Yes
- ◉ no

If your participants will include individuals from the above populations, please specify the population(s) and describe any special precautions you will use to recruit and consent.

Approximately how many individuals do you expect to participate in your study? *

200

Describe the procedures you will be using to conduct your research. Include descriptions of what tasks your participants will be asked to do, and about how much time will be expected of each individual. NOTE: If you have supporting materials (printed surveys, questionnaires, interview questions, etc.), email these documents separately as attachments to IRB@bard.edu. Name your attachments with your last name and a brief description (e.g., "WatsonSurvey.doc"). *

Participants will be asked to fill out an online questionnaire regarding social media activity. The questionnaire will ask for average time spent, per day, on each social media site. Additionally, the questionnaire will ask participants about their number of friends. The questionnaire will also ask participants how many social media sites they have an account for. After the questionnaire, participants will participate in a week while using only Instagram as a form of social media, only Facebook as a form of social media, or no social media for the week. Then, participants will fill out 3 questionnaires: the Rosenberg's Self-Esteem Scale, the Kessler Psychological Distress Scale, and the Patient Health Questionnaire-9. Filling out all questionnaires will take participants around 15 minutes. Lastly, participants will be compensated for participating in the study with $5.

Describe any risks and/or benefits your research may have for your participants. *

Describe any risks and/or benefits your research may have for your participants. *

The risks participants face for this experiment include facing increased depressive symptoms, decreased self-esteem, and increased psychological distress for a short period of time after the study ends. The benefits some participants may see from participating in this study are decreased depressive symptoms, increased self-esteem, and decreased psychological distress from not using social media for a week. The last benefit includes gaining $5 for participation in this study.

Describe how you plan to mitigate (if possible) any risks the participants may encounter. *

I plan to mitigate any risks the participants may encounter by letting them know any negative mental health outcomes that came form using social media (Facebook or Instagram) may be discarded in a short period of time by not using those same social media sites.

Describe the consent process (i.e., how you will explain the consent form and the consent process to your participants): *

I will let the participants know that at any time during the study they can leave freely without any repercussions. I will explain to the participants that there may be some negative mental health repercussions as a result of using Instagram or Facebook for a week, but the mental health outcomes shouldn't be anything near severe.

Have you prepared a consent form(s) and emailed it as an attachment to IRB@bard.edu?
Note: You must submit all necessary consent forms before your proposal is considered complete. *

- ○ Yes
- ◉ No

If you are collecting data via media capture (video, audio, photos), have you included a section requesting consent for this procedure(s) in your consent form(s)?

- ○ Yes
- ○ No
- ◉ Not applicable

For all projects, please include your debriefing statement. (This is information you provide to the participant at the end of your study to explain your research question more fully than you may have been able to do at the beginning of the study.) All studies must include a debriefing statement. Be sure to give participants the opportunity to ask any additional questions they may have about the study. *

Debriefing Statement: The purpose of this study is to determine what mental health outcomes arise from the use of Facebook and Instagram for a week or not using social media at all for a week. You had a very important role in this study and I want to thank you for participating. If you have any follow up questions, you can ask them now or feel free to email me at gb7322@bard.edu.

If you will be conducting interviews in a language other than English, will you conduct all of the interviews yourself, or will you have the assistance of a translator? If you will be using the assistance of a translator, that individual must also certify that he or she is familiar with the human subject protocol and has completed the online training course.

- ○ Myself
- ○ Translator
- ◉ Not applicable

If your recruitment materials or consent forms will be presented in languages other than English, please translate these documents and email copies to IRB@bard.edu. I have submitted all of my translated materials.

- ○ Yes
- ○ No
- ○ Not applicable

Section 3

To finalize and submit your application. Please verify that you have completed this form fully and accurately.

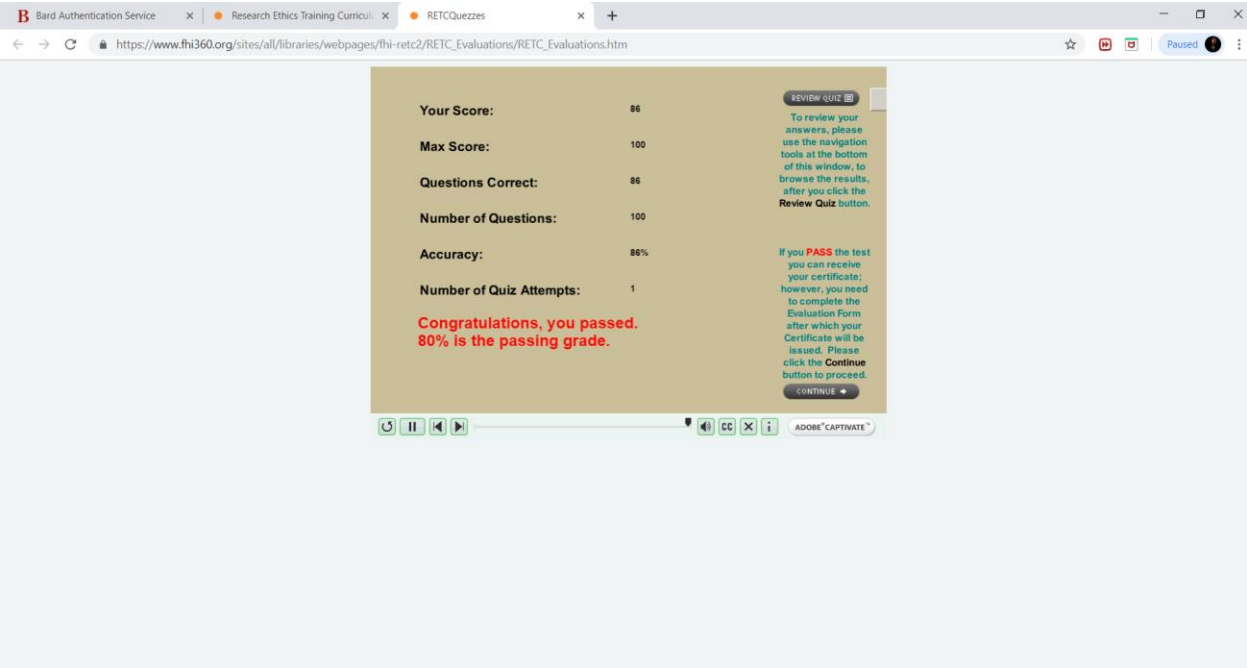
Finalize and Submit

I agree to obtain IRB approval prior to beginning my work with human subject participants. I agree to only perform the research as described in the above application. I agree to seek IRB approval for any modifications in the approved study. I agree to inform the IRB if I receive any complaints from research participants within two days of receiving a compliant. I certify that all of the information contained in this proposal is accurate and truthful.

Submitting this form means that you affirm the statement above and will comply with the content. This counts as your legally binding signature

Submit

Appendix F


Bard Authentication Service
Research Ethics Training Curricul
RETCQuezzes
https://www.fhi360.org/sites/all/libraries/webpages/fhi-retc2/RETC_Evaluations/RETC_Evaluations.htm
Paused
Your Score: 86
Max Score: 100
Questions Correct: 86
Number of Questions: 100
Accuracy: 86%
Number of Quiz Attempts: 1
Congratulations, you passed.
80% is the passing grade.
REVIEW QUIZ
To review your answers, please use the navigation tools at the bottom of this window, to browse the results, after you click the Review Quiz button.
If you PASS the test you can receive your certificate; however, you need to complete the Evaluation Form after which your Certificate will be issued. Please click the Continue button to proceed.
CONTINUE
ADOBE CAPTIVATE

Appendix G

The Effects of Social Media on Mental Health: Consent Form

I,_____ , consent to participating in the "Effects of Social Media on Mental Health" study for one week. I also know that I have the ability to drop out of the study at any time without any repercussions for doing so. You will be asked to use one specific social media platform for one week or use no social media platforms for one week. You will also fill out a number of different questionnaires, all of which will take about 15-20 minutes. All of your data collected will only be seen by myself, Grant Bossard, and my advisor, Frank Scalzo.

Possible risks for participating in this study include a decrease in self-esteem, an increase in depressive symptoms, and an increase in psychological distress if you are assigned to a group that uses social media for a week. Possible benefits for participating in this study includes $5 compensation for completion of the study and a possible increase in self-esteem, decrease in depressive symptoms, and decrease in psychological distress if you are assigned to a group that doesn't use social media for a week.

If you have any questions prior to the study, during the study, or after completion of the study, you may email Grant Bossard at gb7322@bard.edu.

Participant's Signature:

Date:

Appendix H

The Effects of Social Media on Mental Health: Debriefing Statement

Thank you for participating in this study and congratulations for completing the study! You will be compensated with $5.

The purpose of the study was to determine a relationship between social media use and mental health. Specifically, the research wants to see if using a social media platform for a week (Facebook or Instagram) increases psychological distress, increases depressive symptoms, and reduces self-esteem. Also, the study wants to see if not using any social media platforms during a week will decrease psychological distress, decrease depressive symptoms, and increase self-esteem.

If you have any questions or concerns, please contact Grant Bossard at gb7322@bard.edu.