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THE EFFECTS OF SOCIAL MEDIA SITES ON SELF-ESTEEM

by
Kristine E. Raymer

A Thesis

Submitted to the
Department of Psychology
College of Science and Mathematics
In partial fulfillment of the requirement
For the degree of
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Thesis Chair: Roberta Dihoff, Ph.D.

Dedications

I dedicate this manuscript to my family, friends, and mentors. I am truly grateful for your support in all of my endeavors. Your guidance, understanding, and humor have been a true inspiration to me.

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Abstract

Kristine E. Raymer
THE EFFECTS OF SOCIAL MEDIA SITES ON SELF-ESTEEM
2014-2015
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Master of Arts in School Psychology

With the advent of the Internet over a decade ago came the introduction of a new form of communication referred to as social networking. On-line social networking sites, such as Facebook, Myspace, and Twitter, have become increasingly popular and almost an integral part of everyday life, especially for college students. Approximately ninety percent of college students have a Facebook account, and it is estimated that the average amount of time spent on this social networking site ranges from thirty minutes to over two hours on a daily basis. The purpose of this study is to explore the relationship between on-line social networking sites, particularly Facebook, and the self-esteem levels of college students. According to past research, there appears to be a connection between more time spent online and a decline in face-to-face communication with family and peers, which leads to feelings of loneliness and depression (Chen & Lee, 2013).

To test the effect Facebook interaction has on self-esteem, undergraduate students were asked to participate in an online, anonymous survey that consisted of the Rosenberg Self-Esteem Scale, the Body Esteem Scale, the Facebook Intensity Scale, and the Eating Attitudes Test-26. Data was analyzed using the bivariate correlation test and the independent samples T-test. The results of the data collection suggest that females spend more time on Facebook than males and have a larger amount of friends on Facebook than males. Results also indicated that females have lower body image satisfaction and a greater drive for thinness than males.

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Chapter 1

Introduction

Need for Study

With the advent of the Internet over a decade ago came the introduction of a new form of communication referred to as social networking. On-line social networking sites, such as Facebook, Myspace, and Twitter, have become increasingly popular and almost an integral part of everyday life, especially for college students. Launched in 2004, Facebook is now the predominant social networking site with over one billion active users, and it is estimated that this number will increase significantly as Facebook is introduced in developing countries. Approximately ninety percent of college students have a Facebook account, and it is estimated that the average amount of time spent on this social networking site ranges from thirty minutes to over two hours on a daily basis. With all this time spent on a networking site that allows users to create a profile, upload pictures, and share information about the self with others, one must wonder what the implications are on an individual's feelings of self-worth and self-esteem.

The importance of this study was to explore the relationship between on-line social networking sites, particularly Facebook, and the self-esteem of college students. Research has indicated that more time spent on Facebook is related to low self-esteem. It appears that the more time that is spent online leads to a decline in face-to-face communication with family and peers which can lead to feelings of loneliness and depression.

Another goal of this study was to examine the impact social networking sites have on the perception of body image among the female population. Recent studies have

indicated a positive correlation between the time spent on the internet and body image avoidance, both of which are predictors for eating disorders. Social media plays a significant role in body dissatisfaction, with elevated “appearance exposure” on sites such as Facebook playing a key role in this drive for thinness.

Purpose

The goal of this study was to determine the significance social networking sites like Facebook have on the self-esteem of undergraduate students. This study examined the correlation between Facebook and self-esteem among college students by measuring the collective amount of time spent on Facebook, the amount of time spent on one’s own profile and other’s profiles, how often one posts statuses and uploads pictures, and measuring feelings of self-esteem and body image.

Hypotheses

A prediction of this study is that more time spent on social networking sites, such as Facebook, will negatively affect one’s self-esteem. More specifically, more time spent viewing other’s profiles, including their statuses and pictures, increases the risk for body image avoidance and developing low self-esteem, especially among females. The hypotheses for this study, first, is that more frequent Facebook use and interaction is negatively related to self-esteem. Second, females spend more time on Facebook compared to male students. Third, more exposure on Facebook leads to lower body image satisfaction and a greater drive for thinness. Finally, self-esteem influences Facebook interaction and psychological well-being.

Operational Definitions

Self-esteem: One's appraisal of the value or worth of the self.

Social networking site: In the case of this study, Facebook.

Status updates: A special feature of Facebook, these are short posts regarding the user's current thoughts, activities, or state of mind.

Body image disturbance: Weight dissatisfaction, drive for thinness, appearance comparison, self-objectification, and thin ideal internalization.

Rumination: A focus on symptoms, causes, and consequences of personal distress through repetitive thoughts and behaviors.

Limitations

One of the main limitations of this study was that it relied on the honesty and integrity of the participants. Rather than monitoring time spent on Facebook, the participants were asked to report how many hours they spent on this site on a daily basis. Another limitation of this study was that it focused only on undergraduate students and the research cannot be generalized. Further, the students asked to participate were from one university in the northeastern United States, and the results may differ depending on demographics.

Assumptions

The current study surveyed an anonymous undergraduate pool of students. It was assumed that the student's responses were accurate in reporting the amount of time spent interacting on Facebook. It was also assumed that the students were honest in responding to the questions regarding feelings of self-esteem since the survey is anonymous.

Summary

Data was collected using a survey designed to gather information regarding time spent on Facebook and one's feelings of self-worth and self-esteem. An anonymous pool of undergraduate students were asked to participate in this study. Previous research and data of internet use and its effect on self-esteem and body image was collected in order to formulate hypotheses for this study.

Hypothesis 1: More frequent Facebook use and interaction is negatively related to self-esteem.

Hypothesis 2: Female students spend more time on Facebook compared to male students.

Hypothesis 3: More exposure on Facebook leads to lower body image satisfaction and a greater drive for thinness.

Hypothesis 4: Self-esteem influences Facebook interaction and psychological well-being.

Chapter 2

Literature Review

Facebook and Media Sharing

The way human beings interact has rapidly changed over the last decade due to online social networking sites such as Facebook. These Web-based systems allow members to connect with other members electronically, while also allowing them to make these connections and interactions publicly. The most popular social networking site is Facebook. Launched in 2004 at Harvard, Facebook originally was designed for university students, but now is accessible to anyone with an email address. Between 2007 and 2008, time spent on social networking sites increased eighteen percent, with Facebook users reporting a 566-percent increase in time spent on the site (Kittinger, Correia, & Irons, 2012).

Media sharing and self-disclosure through Facebook posts and pictures are two of the predominant online activities of social networking sites. Facebook users are able to post information about themselves through pictures and status updates, and they can create their own profiles that reveal personal information, such as school and work affiliations as well as favorite books, movies, and quotes (Tazghini & Siedlecki, 2013). Reports indicate that Facebook users upload over two billion photos per month and fourteen million videos per week (Stefanone, Lackaff, & Rosen, 2011). Other studies have revealed that Facebook users upload over four billion pieces of content on a daily basis, including 250 million photos (Wilson, Gosling, & Graham, 2012).

Newer digital media has made it even more possible to instantaneously upload numerous pictures of oneself and one's friends, and Facebook provides unlimited space

to do so (Pempek, Yermolayeva, & Calvert, 2009). On average, Facebook sites display around eighty-eight pictures per user, and the number of users who share pictures, profile photos, and wall posts is above ninety-percent. Most users are happy to share this content, especially if the photos are with friends and expressing happiness and joy (Amichai-Hamburger & Vinitzky, 2010).

Even further, studies indicate that people tend to self-disclose much more on internet sites than in the real, physical world. Facebook elicits greater levels of disclosures of personal or sensitive information. Disclosure of such information seems to be predicted by one's need for popularity and their self-esteem level, either high or low. People with low self-esteem use disclosure as a tool to gain acceptance, whereas those with high self-esteem are only concerned with their popularity among their chosen circle of Facebook friends (Anderson, Fagan, Woodnutt & Chamorr-Premuzic, 2012).

Recent studies have indicated that more frequent exposure to other users' positive self-presentations on Facebook produce feelings of inadequacy and deprivation. Individuals tend to feel that others have better lives than themselves (Chen & Lee, 2013). Many Facebook users use the site as a surveillance tool to see what old contacts and friends are doing, how they look, and how they behave (Joinson, 2008). In a study by Chou and Edge, it was found that the longer people have used Facebook, the more they believe that others are living happier lives than themselves. By looking at happy photos of other Facebook users, people tended to formulate the opinion that others are always happy and living good lives in contrast to their own (Chou & Edge, 2012). Thus, frequent Facebook use is correlated to greater psychological distress, as communication overload is ever-increasing and in turn reducing self-esteem (Chen & Lee, 2013).

Facebook Use among Individuals with Low Self-Esteem

Chen and Lee's study indicates that communication overload links Facebook interaction with reduced self-esteem. However, some research suggests that self-esteem level is related to one's on-line social behavior. For example, one study discovered an association between Facebook use and social capital, which is the benefits or resources available through social relationships. It was found that those with lower levels of self-esteem benefited more and had greater social capital due to Facebook use than those with higher levels of self-esteem (Tazghini & Siedlecki, 2013).

Studies have found that individuals with low self-esteem try to compensate by becoming active in on-line activities, such as spending more time on Facebook, increasing the frequency of logging on to Facebook, and having more friends on Facebook. On the Internet, it seems, "the poor can get richer," meaning that introverts can compensate for the difficulties they experience in face-to-face interactions through on-line social networks (Amichai-Hamburger & Vinitzky, 2010). Those with lower self-esteem attempt to compensate by seeking more friends on social media in order to establish a sense of belonging and increase perception of popularity.

However, research indicates that those with low self-esteem tend to accept more friend requests from people they do not know very well (Tazghini & Siedlecki, 2013). For those with lower self-esteem, it is easier to connect with new friends and communicate through Facebook than having direct contact with peers. This can be to their benefit, though, as it helps new college students build social capital, as Facebook lowers the barriers of participation and allows users who may initially shy away from initiating communication to respond to others and forge ties with others online (Ellison,

Steinfeld, & Lampe, 2007).

In an interesting study by Lee, Moore, Park, and Park, it was found that the association between people with low self-esteem and the number of Facebook friends was presented only among people with higher levels of public self-consciousness. Those who tend to be more concerned with their public self-image may engage more in the act of friending other Facebook users to fulfill their need for social compensation. They may also view the number of Facebook friends as an indication of popularity and attempt to expand their Facebook connections to compensate for their lack of self-esteem (Lee, Moore, Park, & Park, 2012).

Further, Facebook allows users with lower self-esteem to create an image of themselves that they want others to perceive. They tend to frequently “un-tag” themselves from unflattering pictures in order to preserve this image (Tazghini & Siedlecki, 2013). Results from a study of one hundred Facebook users at York University implied that individuals with low self-esteem spend more time online and have more self-promotional content on their social networking profiles (Pantic, 2014). Also, socially anxious individuals seem to prefer those online settings because it allows them to control message construction and be prepared for interaction ahead of time (Valkenburg & Peter, 2009).

Additionally, research has indicated that individuals with low self-esteem tend to frequently log in to Facebook and spend more time on the social networking site than those with higher levels of self-esteem. This can be due to their attempt to compensate for their lack of self-esteem by increasing their number of online friends to feel a greater sense of belonging and heighten their perceived popularity. However, studies show that

excessive friending can lead to negative evaluation of these “friend-rich” users and can be detrimental to one’s well-being by being under the constant stress of being exposed to a large audience (Lee, Moore, Park & Park, 2012).

Facebook Use among Individuals with High Self-Esteem

On the other hand, in a study by Valerie Barker, it was discovered that people with reportedly high self-esteem use Facebook more as a means to communicate with peer group members and pass time (Barker, 2009). In a similar study by Skues, Williams, and Wise, it was discovered that extroverts tend to engage more in social activities on Facebook and use the site to enhance and maintain social ties. Extroverts do not use the site as an alternate to social activities but as a means to enhance their social relationships (Skues, Williams, & Wise, 2012). Findings by Kraut et al. indicate that introverts using the Internet experienced decreased involvement in the community and increased levels of loneliness, whereas extroverts experience decreased loneliness and more community involvement (Kalpidou, Costin, & Morris, 2011).

In a study by Amichai-Hamburger and Vinitzky, it was discovered that introverts tend to disclose more information about themselves on their Facebook profiles than extroverts. It seems that extroverts rely more on their social skills and do not feel the need to promote themselves the way introverts do in order to make friends on social networking sites (Amichai-Hamburger and Vinitzky, 2010).

It appears that people with high levels of self-esteem use Facebook for different purposes than people with low self-esteem. They also tend to have a more positive experience with Facebook than people with low self-esteem, using the site more as a tool to enhance the relationships they already have rather than using the site to build social

capital. According to a study by Papacharissi, Rubin, Ellison, et al., people who are more secure in face-to-face interaction, such as extroverts, tend to use Facebook more for social interaction, in comparison to those who do not feel connected to their peer group and use the site to seek social compensation (Barker, 2009).

This was reinforced by a study conducted by Ellison, Steinfield, and Lampe. They found that Facebook is much less useful for creating social capital among those with high self-esteem and life satisfaction. However, Facebook is useful for maintaining pre-existing friendships or close relationships (Ellison, Steinfield, & Lampe, 2007).

In addition, in a study by Tazghini and Siedlecki, people with high self-esteem reported that they like the ability to share pictures, thoughts, and ideas with others compared to individuals with low self-esteem. Furthermore, individuals with high self-esteem tend to find that what others post becomes annoying. Tazghini and Siedlecki posited that this may be that those with higher self-esteem place less importance on Facebook interaction (Tazghini & Seidlecki, 2013).

The Effect of Personality Traits on Facebook Use

In a study by Nadkarni and Hofmann, it was found that the use of Facebook was motivated by two factors: the need to belong and the need for self-presentation. The need for belonging stems from demographic and cultural factors, whereas the need for self-presentation is influenced by personality traits such as neuroticism, narcissism, shyness, self-esteem, and self-worth (Nadkarni & Hofmann, 2012). This was further affirmed in a study by Chen and Marcus. It was discovered that people do tend to disclose differently online than in person and that culture and personality influence this behavior. For example, it was discovered that people who score low on extraversion tend

to be less honest and more audience-friendly in self-disclosure online (Chen & Marcus, 2012).

Several studies have delved into the influence personality traits have on social networking. Most of this research has used the Five Factor Model, or “Big Five” model of personality, to compare the mean time spent on sites such as Facebook and higher or lower scores for particular trait groups. The Five Factor Model suggests that most of the variety in personality can be broken down into five key personality traits: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Skues, Williams, & Wise, 2012).

One study found that highly neurotic individuals are more inclined to post more photos on their Facebook profile. Further, it was discovered that people with high or low neuroticism tend to share more basic information on Facebook than those with moderate levels of neuroticism, indicating different motives of behavior, specifically the need for self-assurance (Amichai-Hamburger and Vinitzky, 2010). These results were affirmed in another study that found that the motivation to express ideal and hidden self-aspects was what mediated self-disclosure for those who scored high for neuroticism (Seidman, 2013). Additional studies have shown that impression management is also strongly related to the number of virtual friends, the level of profile detail, and the presentation of personal photos, especially for those who scored high in extraversion (Kramer & Winter, 2008).

In a study by Buffardi and Campbell in 2008, it was found that people with higher levels of narcissism tend to post more information about themselves on Facebook, check Facebook more frequently, and spend more time on Facebook. It seems likely that

narcissists prefer social networking sites such as Facebook because it gives them some degree of control over how others perceive them (Skues, Williams, & Wise, 2012).

In another study by Buffardi and Campbell, it was found that narcissism is related to a higher number of social relationships, self-promoting self-presentation, and having a large number of characteristics such as intelligence, power, and physical attractiveness. Being involved in online social networking is attractive for narcissists because it allows for controlled self-presentation, appeases attention-craving behavior, and promotes shallow relationships (Buffardi & Campbell, 2008). These results were further affirmed in additional research that discovered that individuals who scored higher for narcissism and lower on self-esteem spend more time on Facebook and posting self-promotional content (Mehdizadeh, 2010).

In a study by Ross et al., results indicated that individuals who scored higher on agreeableness would have a larger amount of Facebook friends. However, in a study by Amichai-Hamburger and Vinitzky, it was found that agreeableness is related to features of Facebook use and not to the amount of Facebook friends. It seems that those who scored higher for agreeableness uploaded more pictures onto the social networking site and were more willing to share contact information on Facebook (Amichai-Hamburger & Vinitzky, 2010).

Additionally, Amichai-Hamburger and Vinitzky found, as did Ross et al, that individuals who scored higher for openness to experience are more willing to use Facebook as a tool for communication and use more of its features. They tend to be more expressive on their Facebook profile and more sociable (Ross et al, 2009).

In an online questionnaire administered by Ryan and Xenos in 2011, results

indicated that Facebook users are more open and less conscientious than non-Facebook users. It also showed that Facebook users displayed higher levels of narcissism than non-Facebook users (Skues, Williams & Wise, 2012). This is interesting because it postulates whether people with certain personality traits are more drawn to particular social networking sites.

Facebook Use among College Students

Given its popularity and role in social networking, Facebook can be a useful tool in college adjustment. Facebook has been referred to as the social glue that helps students become adjusted to college life. In a study by Kalpidou, Costin, and Morris, there was a strong tie between the number of Facebook friends and social adjustment in college. It appears that having a lot of Facebook friends is positively related to social adjustment and attachment for the institution, especially for upper-class students. Social adjustment is defined as the feeling of fitting in with the college community and having established social connections and activities offered on campus (Kalpidou, Costin, & Morris, 2011).

However, it appears that first year college students reported lower self-esteem despite the number of Facebook friends than upper-class students. First year students tend to seek out friends on Facebook as a means to cope with college adjustment and tend to be more emotionally tied to Facebook than upper-class students. The ties between Facebook and college adjustment become more positive later on as one continues their academic career (Kalpidou, Costin, & Morris, 2011).

For college students, many who have moved away from home for the first time, staying in touch with friends from high school is a useful connection that can prove to be

valuable. By maintaining these ties on Facebook, they can support one another and can be of value for new information and resources. The ability to stay in touch offsets the feeling of “friendsickness,” meaning the distress brought on by the loss of old friends (Ellison, Steinfield, & Lampe, 2007).

However, there is a link between one’s emotional adjustment to college life and academic adjustment. The number of Facebook friends hinders academic adjustment, according to the study by Kalpidou, Costin, and Morris. It seems that more time spent on Facebook correlates to lower academic scores, as Facebook is often used as a method of distraction. Students use Facebook as a means of distraction or to take a break from studying. Correlational studies indicate a negative impact of Facebook use on grades. In a survey given by Skues, Williams, and Wise, students reported that they use Facebook as a distraction to avoid performing academic tasks (Skues, Williams, & Wise, 2012).

In another study by Zaremohzzabieh, Samah, Omar, Bolong, and Kamarudin, three central themes were discovered among undergraduate students: compulsion to check Facebook, high frequency use, and using Facebook to avoid offline responsibility. The sign of Facebook addiction is referred to as salience, when a specific activity becomes an integral part of an individual’s everyday life and begins to control feelings and behavior. It was found in this study that students were becoming dependent on Facebook and use the site to distract themselves from offline responsibilities. It was posited that more frequent Facebook use developed a tolerance level for individuals and created a need to increase Facebook usage to achieve original effects (Zaremohzzabieh et al, 2014). Further studies have shown that excessive Internet use, especially of particular social networking sites, leads to academic, social, and interpersonal problems (Niemz,

Griffith, & Banyard, 2005).

In a study by Junco, time spent on Facebook negatively impacts overall grade point average. More time spent on the social networking site predicts lower overall grade point average. For example, a student who spends 279 minutes more on Facebook than the average has an overall grade point average that is 0.37 points lower than average. However, the frequency of checking Facebook does not correlate as strongly to poorer academics as the amount of time spent on Facebook. Focusing less on academic work negatively impact's student's success in college (Junco, 2011).

Consistent with these findings is another study by Locatelli, Kluew, and Bryant. They studied the impact status updates and the information posted in these status updates had on college students and mental health. It was concluded that more frequent status updates, particularly of a negative nature, strongly predict the tendency to ruminate, which in turn affects subjective well-being. This tendency to muse over status updates and posts may prolong depressed moods, which in turn affect one's problem-solving skills and can hinder one's academic performance. Additional research indicates a strong connection between depression and impact on academic performance (Locatelli, Kluew, & Bryant, 2012).

However, in a study by Cheung, Chiu, and Lee, online social networks, such as Facebook, can help facilitate collaborative learning. Previous research indicates that learning strategies are moving towards a more active and group-oriented approach. Facebook can be used as a tool to encourage students to collaborate and work together (Cheung, Chiu, & Lee, 2010). However, some studies have indicated that students do not feel that Facebook is used as an academic tool but rather a socializing tool regardless of

content and strategies including in informal learning processes (Madge, Meek, Wellens, & Hooley, 2009).

Negative Impact of Facebook on Self-Esteem and Well-Being

Besides having a negative impact on academic achievement, Facebook poses a much larger threat to one's feelings of self-esteem and well-being. Of the variables most studied in the behavioral sciences is subjective well-being, which effects health and longevity.

In a study by Kross et al., the effects of Facebook on subjective well-being were tested by addressing two components: affective well-being and cognitive well-being. It was found that people felt worse the more they used Facebook, but people do not use Facebook any more or any less depending on their emotions or mood. It was also discovered that there is a link between more Facebook usage and a decline in life satisfaction. Loneliness was a significant contributor to Facebook use. The more people felt lonely, the more they used Facebook. Thus, this study shows how Facebook use is linked to declines in subjective well-being, including how people feel from moment to moment and how satisfied they feel with their lives (Kross et al., 2013).

The association between Facebook and loneliness is complex. While Facebook is used as a tool to minimize loneliness for some, the amount of time spent on Facebook paradoxically can increase loneliness as well. In a survey of 1,193 participants in 2010, it was found that Facebook users who left posts on other user's wall or messaged friends reported lower feelings of loneliness and increased social capital. However, users who spent more time passively viewing other's profiles and content without actively engaging in some type of interaction reported feelings of increased loneliness and reduced social

capital (Wilson, Gosling, & Graham, 2012).

Additional research suggests that Facebook and online social networking is associated with several psychiatric disorders, including depression, anxiety, and low self-esteem (Pantic, 2014). In studies by Kraut et al., more time spent online leads to a decline in communication with family members and friends, which can cause increased feelings of depression and loneliness. In another study of a high school population, more time spent on social networking sites was positively correlated to signs and symptoms of depression (Pantic, 2014).

In a study by Steers, Wickham, and Acitelli, results indicate that social comparisons made on Facebook are associated with depressive symptoms. Engaging in frequent social comparisons can negatively impact one's mental well-being. Even further, individuals with low self-esteem may end up feeling worse due to the effects of social comparison on social networking sites such as Facebook (Steers, Wickham, & Acitelli, 2014).

Results from a study by Moreno et al. suggest that approximately twenty-five percent of college students disclose symptoms of depression in comments on Facebook. Many adolescents report that they share more personal information about themselves on Facebook than they do in person. A quarter of the profiles reviewed in this research demonstrated references of depression. Another study of college students found that one-third reported symptoms of depression. Students who demonstrate more use of Facebook tended to report more symptoms of depression. Facebook users with a more involved social network are more likely to disclose feelings of depression (Moreno et al, 2011).

Another study found that Facebook use is linked to people's perceptions of other

people's lives. Studying undergraduate students at a state university in Utah, it was found that Facebook use was directly related to people perceiving other users as happier and more successful. For individuals who are already predisposed to depressive behaviors, Facebook may further negatively impact mental health (Pantic, 2014). Constant self-evaluation, competition with other users, and incorrectly perceiving other users' lives invoke feelings of jealousy and narcissistic behavior, both of which can lower self-esteem.

Further studies by Chen and Lee focused on two particular mechanisms that link Facebook interaction and psychological distress: communication overload and self-esteem. Social media increases communication overload. Facebook users uploaded over 250 million photos and clicked the "like" button over 2.7 billion times daily by the end of 2011, indicating that Facebook interaction increases the volume and complexity of communication leading to communication overload. More time spent on Facebook and self-promotional activity is negatively related to self-esteem. Thus, Chen and Lee discovered that Facebook interaction is indirectly related to psychological distress due to increased communication overload which reduces self-esteem (Chen & Lee, 2013).

Among adolescents, Facebook and social networking sites pose a threat to their well-being due to an increase in cyberbullying. Cyberbullying includes name calling, spreading rumors, distributing pictures without consent, and making threats. Significant psychosocial effects on the victims of cyberbullying include depression, anxiety, social isolation, and suicide attempts (Moreno & Kolb, 2012).

Positive Impact of Facebook on Self-Esteem and Well-Being

However it should be noted that some studies, possibly due to the duration of the study, indicate that there is not a significant correlation between Facebook use and depression, such as a study conducted over a one-week period of older adolescents at a university in 2011 (Jelenchick, Eickhoff, & Moreno, 2012). Research has indicated that there are some positive effects of Facebook use on self-esteem. One study found that Facebook can enhance “social self-esteem,” including perceptions of one’s physical appearance, relationships, and romantic appeal, especially when one receives positive feedback from their peers, notably their friends on Facebook (Gonzalez & Hancock, 2011).

Additionally, by allowing users to control what is uploaded and shared online, Facebook profiles can increase self-esteem through self-presentation. In their study, Gonzales and Hancock found that Facebook can enhance self-esteem, especially if a person is allowed to edit the information shared on their profile. It seems that Facebook allows one to present their ideal self, and since it is one’s optimal self on display, this leads to positive feelings of self-esteem (Gonzales & Hancock, 2011).

Gender Differences in Facebook Use

There is much documentation supporting that there is a significant gender difference in utilizing social networking sites. One study by Boneva and Kraut found that females are more likely than males to use online tools such as Facebook to maintain and establish their social networks. Another study by Rosen et al. found that women share more photos and spend more time on social networking sites than men (Stefanone, Lackaff, and Rosen, 2011). Even further, it has been found that more time spent on

Facebook evokes more frequent episodes of jealousy among females (McAndrew & Jeong, 2012).

In a study by Strayhorn in 2012, first year female college students tend to use social networking sites more frequently than males. Findings suggest that female college students tend to fare better than males during their first year and report a greater sense of belonging than males (Strayhorn, 2012). Additional research has found that on average young adults report an average of 358 Facebook friends, with females reporting an average of 401 friends compared to males reporting 269 friends on average (Pempek, Yermolayeva, & Calvert, 2009). Even further, a higher percentage of women tend to use Facebook more than once per day, and females tend to spend more time on the site than males, according to a study by Kittinger, Correia, & Irons (Kittinger, Correia, & Irons, 2012).

Additional research by McAndrew and Jeong indicates that females are more interested in the relationship status of others and keeping up with other people's activities than males. They also spend more time using their profile pictures as a means for impression management, and they are more interested in the educational and career accomplishments of others compared to males. Males tend to be more interested in the number of Facebook friends other users have compared to females (McAndrew & Jeong, 2012). Males also tend to post more self-promotional photos of themselves engaging in risqué behaviors compared to females whose photo uploads tend to more romantic (Peluchette & Karl, 2008).

Another study demonstrates differences in gender and Machiavellianism tendencies. Machiavellianism is characterized by cynicism, emotional detachment, and a

willingness to manipulate others. It was discovered that females with this trait tend to be more dishonest in their self-promotion on Facebook and also tend to be more aggressive towards their online peers. Men with these characteristics tend to be more engaged in self-promotion online, and both males and females who display Machiavellianism tendencies tend to self-monitor Facebook content more consistently than those without these traits (Abell & Brewer, 2014). Additionally, it was found that emotional stability was a negative factor for Facebook usage, especially among males. It appears that males with greater degrees of emotional instability use Facebook more frequently than females (Correa, Hinsley, & Gil de Zuniga, 2010).

Research suggests that males focus more on features and entertainment on social networking sites, while females are more interested in maintaining relationships. It seems that females use social networking sites like Facebook to stay in contact with their friends, while males use it more to make new friends (Barker, 2009). In her study, Valerie Barker noted that males are more likely to use Facebook for social compensation and social identification, especially in young males transitioning from high school to college. This was further validated in another study in which it was found that females use Facebook as a way to maintain relationships, pass time, and be entertained; whereas males use the site to develop new relationships (Nazir, 2012).

Tests reveal that females tend to upload more photos than males and are tagged in more photos than males; however, females also untag themselves more frequently from pictures than males due to displeasure with their appearance (Pempek, Yermolayeva, & Calvert, 2009). In a study by Raacke and Bonds-Raacke, it was discovered that females tend to change the appearance of their social networking sites more often than males

(Nazir, 2012).

In their study of contingencies of self-worth and social networking behavior, Stefanone, Lackaff, and Rosen discovered that females tend to have a significantly larger network of strong ties than males. Females spend more time maintaining their Facebook profiles and also are more strongly concerned about appearance (Stefanone, Lackaff, & Rosen, 2011).

The Effects of Facebook on Body Image

Body dissatisfaction among women has increased significantly recently, with approximately fifty percent of girls and undergraduate women reporting that they feel dissatisfied with their bodies (Grabe, Ward & Hyde, 2008). This develops relatively early, as girls as young as seven years old report these perceptions. A major influence on these perceptions is the role of the media emphasizing the thin ideal. Content analyses reveal that the ideal female body showcased on television, the movies, in magazines, and on the internet embodies the idea that thin is both normative and attractive. Both meta-analytic studies and longitudinal studies reveal that a higher level of exposure to mass media is correlated to increased levels of body dissatisfaction and disordered eating (Levine & Murnen, 2009).

However, it is important to note that males are just as likely to develop eating disorders as females. Rates of eating disorders among women, such as anorexia nervosa and bulimia, are on the rise, and an increasing number of men are seeking treatment as well. More men are becoming concerned with shape and weight as they become bombarded with media pressure, including that of social media (Derenne & Beresin, 2006).

Recent research has been exploring the effects social networking sites have on body image esteem, especially among young adolescent females. It has been well documented that this particular demographic has reported widespread dissatisfaction with body shape and weight. In a study by Tiggemann and Miller, Internet exposure, including time spent on Facebook, is directly related to body image concerns, including a drive for thinness. In an additional study by Tiggemann and Slater, the relationship between time spent on Facebook and body image concern was statistically significant. Facebook users scored significantly higher for body image concern than non-Facebook users. Even further, the time spent on social networking sites was related to higher levels of the drive for thinness, the thin ideal, and body surveillance (Tiggemann & Slater, 2013).

Meier and Gray took Tiggemann and Slater's studies even further. In their research, Meier and Gray discovered that it is not the overall amount of time spent on Facebook, but the time spent on photo activity that is associated with higher thin ideal internalization, drive for thinness, and weight dissatisfaction. Moreover, appearance-related Facebook exposure is correlated to self-objectification.

Self-objectification theory describes how females are trained to objectify women in the media and then in turn use this objectification on themselves. On Facebook this is exemplified by uploading photos, taking on an objective view of one's physical self, and having one's view affirmed or rejected by the number of "likes" or comments by other users (Meier & Gray, 2014).

Additionally, social comparison theory suggests that people naturally are inclined to compare themselves to others as a means to determine their progress and standing in

life. However, women tend to compare themselves to unrealistic, thin media images just as often as they compare themselves to their peers. Further, females tend to make appearance-related comparisons more frequently, which can lead to body dissatisfaction. In a study by Myers and Crowther, it was found that individuals who engage in social comparison have higher levels of body dissatisfaction, especially among women (Myers & Crowther, 2009).

These findings were affirmed by a study by Wilcox and Laird, which found that women who tend to view and compare themselves to images of more slender women reported lower self-esteem afterward compared to women who viewed more robust female images (Wilcox & Liard, 2002). A study by Morrison et al. found that women with lower levels of self-esteem tend to participate in social comparison, which in turn affects their eating patterns (Morrison et al, 2003).

Even more concerning is a study by Rodgers et al. which explored Internet addiction symptoms and their relation to body image esteem, body image avoidance, and disordered eating. According to their study, body image avoidance and disordered eating are highly correlated to time spent on social media, especially Facebook, but not on any other type of website. This was mostly for females, as there were no significant findings among males. Additionally, time spent online was related to disordered eating among females (Rodgers et al, 2013).

It is important to note that individuals with higher levels of body image concern may be more predisposed to pathological Internet addiction, particularly of social networking sites. Further, some research suggests that Internet addiction can lead to social isolation, which in turn can lead to a vicious circle of higher levels of

psychopathology (Rodgers et al, 2013).

There has been limited exploration to determine the effects Facebook specifically has on body image concerns. Most of the previous research in this area focused on the media or the Internet in general and not one particular site. The hope of this study is to discover if there is a correlation between time spent on Facebook, self-esteem levels, and body image satisfaction.

Chapter 3

Methodology

Participants

The current study examined a group of forty undergraduate students (twenty male and twenty female) enrolled in the course Essentials of Psychology during the spring of 2015, at a Northeastern middle-sized University. Undergraduate students eighteen years of age and older were encouraged to participate and receive credit towards their class research requirements for participation.

Materials

Body Esteem Scale (Franzoi & Shields, 1984). The Body Esteem Scale is a measure used in the analysis of one's attitudes towards the appearance or function of particular body features. Two versions are used that emphasize specific features of both genders. In the male's version, three subscales are used to measure physical attractiveness, upper body strength, and physical condition. In the females' version, the three subscales measure sexual attractiveness, weight concern, and physical condition. Using a series of thirty-two questions, participants are asked to rate the appearance or function of a specific body feature and responses are analyzed using a scale from one (having strong negative feelings) to five (having strong positive feelings). Higher scores indicate higher body esteem.

Rosenberg Self-Esteem Scale (Rosenberg, 1965). The Rosenberg Self-Esteem Scale measures self-esteem, self-confidence, and self-liking using ten general statements that participants are asked to rank. Examples include, "On the whole, I am satisfied with myself" and "I wish I could have more respect for myself." Participants use a Likert

scale ranging from one (strongly agree) to four (strongly disagree). Higher scores indicated higher self-esteem.

Eating Attitudes Test-26 (Garner, Olmsted, Bohr, & Garfinkel, 1982). The Eating Attitudes Test-26 consists of twenty-six questions designed to identify disordered eating habits in adolescents and young adults. Examples of questions on the EAT-26 include “I feel that food controls my life” and “I am terrified of being overweight.” Using a Likert scale, items are ranked from one (never) to six (always). Higher scores on this measure indicate a higher risk for disordered eating.

Facebook Intensity Scale (Ellison, Steinfield, & Lampe, 2007). The Facebook Intensity Scale is a tool used to measure Facebook usage, frequency, and duration. It also measures emotional connectedness to the social networking site. Examples of questions used in this measure include “Facebook is part of my everyday activity” and “I would be sorry if Facebook shut down.” Participants are asked to rank each item on a scale from one (strongly disagree) to five (strongly agree). Scores are computed by calculating the mean of all items.

Design

A bivariate correlational study evaluating the responses to the aforementioned surveys was used. The independent samples T-test was also used to compare overall means with gender. The independent variables are the amount of time spent on Facebook during a one week time span and the number of friends on Facebook. The measured dependent variables are self-esteem and body image esteem.

Procedure

Students enrolled in the course Essentials of Psychology during the spring of 2015 who elected to participate in the study were given the Body Esteem Scale, the Rosenberg Self-Esteem Scale, the Eating Attitudes Test-26, and the Facebook Intensity Scale. Undergraduate students eighteen years of age and older were encouraged to participate and receive credit toward their class research requirements for participation. The measures were administered online and students who participated remained anonymous. The measures were scored accordingly and used to determine if there is a correlation between Facebook usage and self-esteem.

Chapter 4

Results

The current study explored the relationship between self-esteem and Facebook usage by administering an on-line survey to undergraduate students enrolled in Essentials of Psychology during the spring of 2015. The online survey consisted of questions from the Rosenberg Self-Esteem Scale, the Eating Attitudes-26 Scale, the Facebook Intensity Scale, and the Body Esteem Scale. The survey was anonymous and posted online for one week, and students earned research credit for their participation. Twenty females and twenty males participated in the online survey.

The hypotheses for the current study, first were that more frequent Facebook use and interaction would negatively affect self-esteem levels. Secondly, females spend more time on Facebook than males. Thirdly, increased exposure on Facebook leads to lower body image satisfaction and a greater drive for thinness. Finally, self-esteem influences Facebook interaction and psychological well-being. More specifically, there is a relationship between the number of Facebook friends, overall Facebook usage, and self-esteem levels.

Mean scores were computed in Excel and compared between gender, the overall time spent on Facebook, and self-esteem levels. Mean scores of the results from the Eating Attitude-26 Scale were compared with gender, and the mean scores of overall body satisfaction from the Body Esteem Scale were compared with gender. The average time spent on Facebook per day for females was between fifteen and forty-four minutes. The average time spent on Facebook per day for males was between zero and thirty minutes. The mean self-esteem score for males, out of forty points, was 31.05.

The mean self-esteem score for females was 29.0. The mean score for the Eating Attitudes-26 scale for males was 5.25 and 9.80 for females. A higher score on this test indicates a risk for disordered eating and a drive for thinness. The mean score for the Body Esteem Scale for males was 44.35 for males and 25.10 for females.

Correlational analyses computed between the overall time spent on Facebook per day over the course of the week prior to taking the survey and individual self-esteem levels were not significant. However, correlational analyses between gender and overall time spent on Facebook per day were significant, $r(38) = .333$, $p = .036$. Female students spent more time on Facebook per day over the course of one week than their male counterparts, as shown in figure 1.

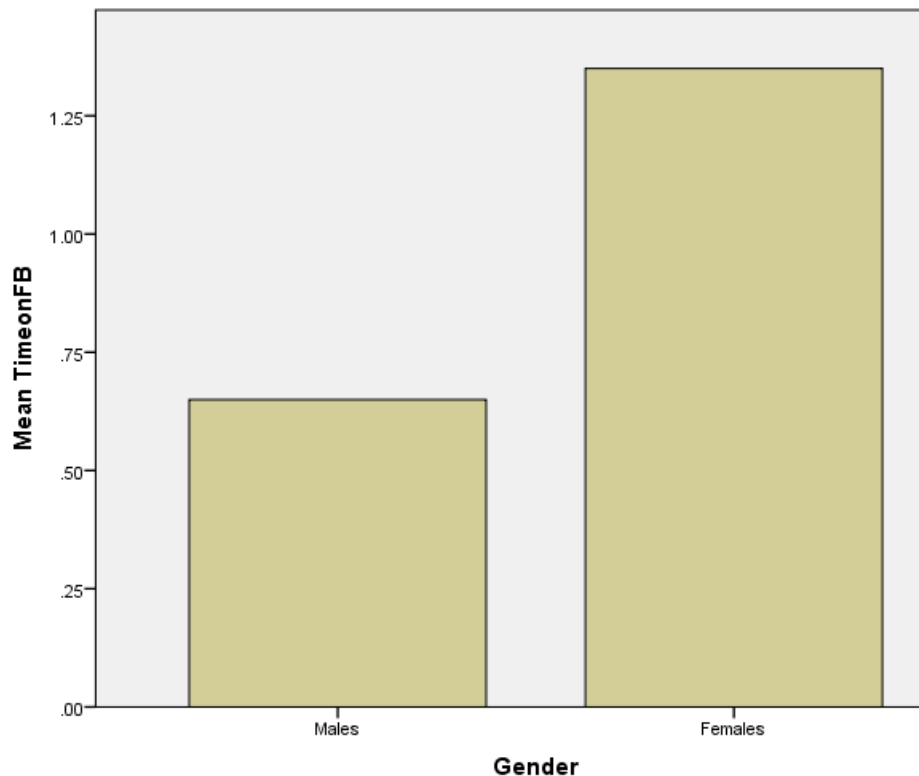


Figure 1. Cumulative mean scores of time spent on Facebook compared to gender.

A bivariate correlational analysis was computed between gender, the overall time spent on Facebook, the overall scores from the Eating Attitudes-26 Scale, and the overall scores from the Body Esteem Scale. Correlational analyses were not significant between exposure on Facebook and body image satisfaction. However, there is a positive correlation between gender and body image satisfaction, $r(38) = .292, p = .034$. Comparing mean scores of the Eating Attitudes-26 Scale and gender indicate that females are more at risk for disordered eating, as shown by figure 2. Even further, comparing the overall scores of the Body Esteem Scale and gender indicate that females have lower levels of body image satisfaction than males, with $M = 44.35$ for males and $M = 25.10$ for females, as shown by figure 3.

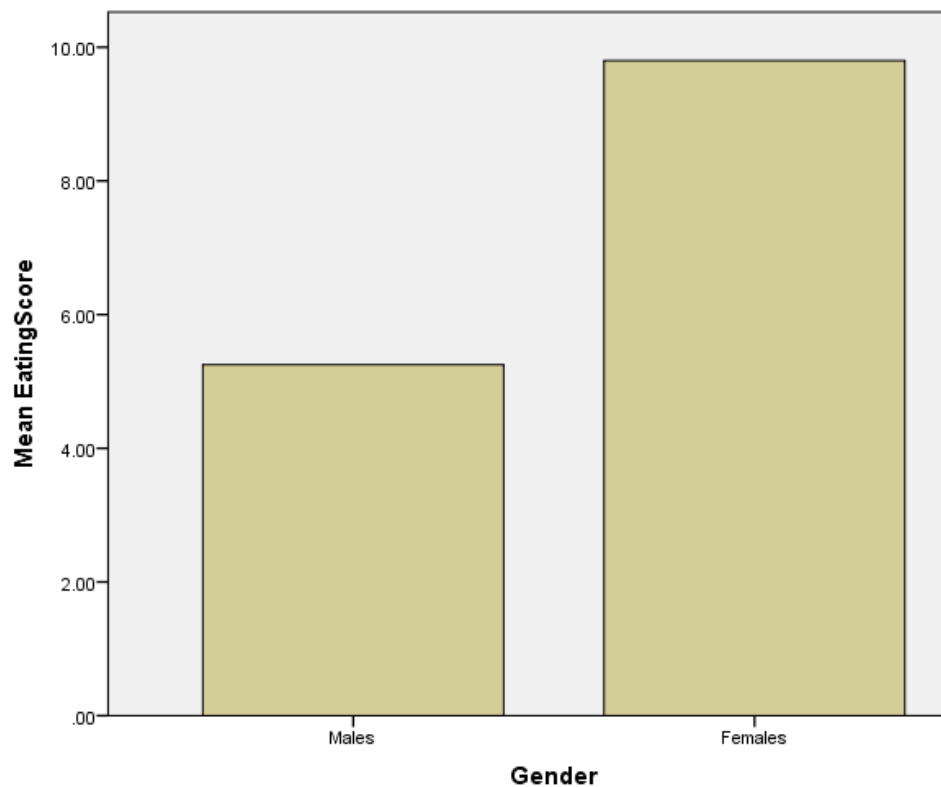


Figure 2. Comparison between gender and scores from Eating Attitudes-26 Scale.

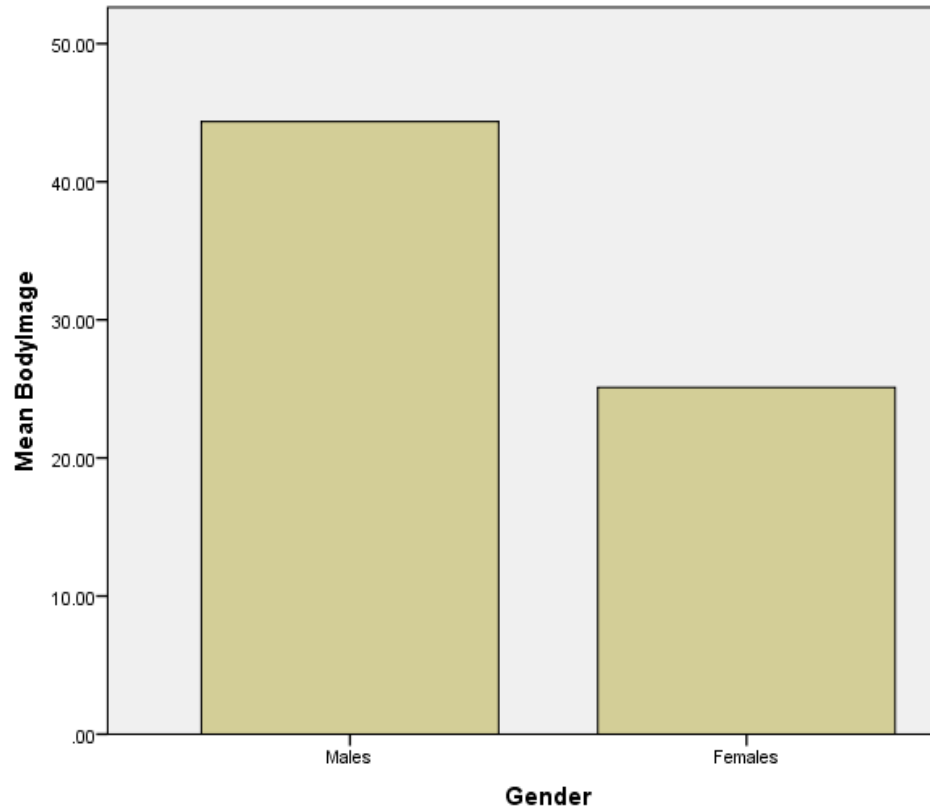


Figure 3. Comparing gender and overall scores from the Body Esteem Scale.

A bivariate correlational analysis was computed between gender, the number of friends on Facebook, overall Facebook usage and time spent on Facebook, and self-esteem levels. Correlational analyses were not significant between Facebook usage, the number of Facebook friends, and self-esteem levels. However, results did indicate that females tend to have a larger amount of friends on Facebook than males, with $M = 5.70$ for males and $M = 6.30$ for females, as shown in figure four.

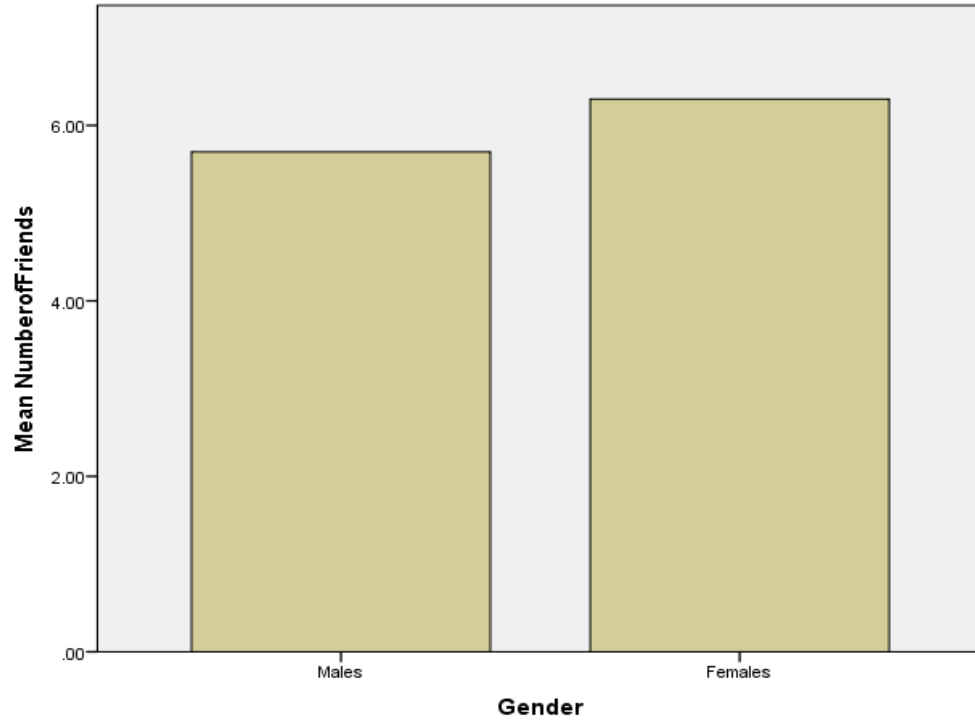


Figure 4. Comparing the number of Facebook friends with gender.

Chapter 5

Discussion

Conclusions Regarding Facebook Usage and Self-Esteem

The purpose of this study was to explore the effect that social networking sites such as Facebook have on self-esteem and body image satisfaction. Specifically, this study sought to discover a link between frequency of Facebook use and negative self-esteem and body image, especially among females.

The hypotheses for the current study, first were that more frequent Facebook use and interaction would negatively affect self-esteem levels. After reviewing the data from the Facebook Intensity Scale and the Rosenberg Self-Esteem Scale, there did not appear to be a significant correlation between the time spent on Facebook and self-esteem levels. These results indicate that in this particular group of undergraduate college students, frequent Facebook use does not negatively affect self-esteem levels. Past research has indicated that frequent use of social networking sites, such as Facebook, has a direct effect on self-esteem levels due to overexposure, communication overload, and social comparison. However, the results of this study differed from these past studies, and, in the case of hypothesis one, there was no direct effect of more frequent Facebook use on overall self-esteem levels.

The second hypothesis posited that females spend more time on Facebook than males. After reviewing the data from the Facebook Intensity Scale and comparing overall time on Facebook to gender, this hypothesis was supported. On a daily basis, females do spend more overall time in minutes on this social networking site than males. Past research has indicated that females do spend more time on Facebook collectively

than males do, and they tend to spend more time uploading photos, posting statuses, and viewing others' profiles. Therefore, the results of this study are consistent with previous research that indicates females spend more collected time on Facebook than their male counterparts.

After reviewing the data for the third hypothesis, that increased exposure on Facebook leads to lower body image satisfaction and a greater drive for thinness, results indicated that there was no direct effect of increased Facebook exposure on body image satisfaction. However, results did indicate a relation between gender and body image satisfaction when comparing mean scores of the Eating Attitudes-26 Scale and gender, showing that females are more at risk for disordered eating. Even further, results indicated that females have lower levels of body image satisfaction than males. Previous studies have shown that females are more at risk for developing eating disorders and have lower levels of body image satisfaction much in part due to the media and social comparison which lead to a greater drive for thinness. While this study did not find a link between social media exposure and body image dissatisfaction, it did find that females do tend to have an overall lower level of body image satisfaction and a higher level of disordered eating compared to males.

Finally, after reviewing the data for hypothesis four, that self-esteem influences Facebook interaction and psychological well-being and that there is a relationship between the number of Facebook friends, overall Facebook usage, and self-esteem levels, results indicated that there is no direct connection between self-esteem and the number of Facebook friends or Facebook usage. However, results did indicate that females tend to have a larger number of friends on Facebook than males. Previous research has indicated

that self-esteem plays a role in the number of Facebook friends one has and the amount of time spent on Facebook. Studies showed that those with lower self-esteem levels tend to have a larger amount of Facebook friends and spent more time on the social networking site compared to those with higher levels of self-esteem. While this study did not support these past studies, it did show that females overall tend to have more friends on Facebook than males. Whether this is related to previous results that females also tend to spend more time on Facebook than males or if it's a way for females to compensate for lower levels of self-esteem would have to be the focus of future research.

Limitations

This study had several limitations. A major limitation was its sample size. Only forty undergraduate students (twenty female and twenty males) signed up to participate in this study.

Another limitation was that in using the undergraduate subject pool, only students enrolled in the Essentials of Psychology course during the spring of 2015 could sign up to participate in the survey. Therefore, these findings may not be representative of the undergraduate population.

Finally, while this study was anonymous, it did rely on the honesty and integrity of the participants. Rather than monitoring time spent on Facebook, participants were asked to report how many minutes or hours they spend on the social networking site on a daily basis over the course of one week. This is also another limitation, as students were only asked to report overall Facebook usage for the course of the week prior to them completing the on-line survey. Due to any number of circumstances, the amount of time student's reported may differ from other weeks.

Future Research

Future research should include a larger sample size not limited to only undergraduate students from one particular university. Additionally, when using the Facebook Intensity Scale, a longer period of time should be given to analyze the average collected time spent on Facebook. In the current study, students were asked to report the amount of time spent in minutes over the course of the week prior to their participation in the online survey. Due to any number of circumstances, this response may have been different if a longer time frame was given, such as a month.

Future research should also include the activities students participate in while on Facebook and the amount of time allotted for each activity. For example, how often do students view others' profiles, how often do students upload pictures, and how many times per day do they post Facebook statuses. It would be interesting to note if there are any differences in participation in these activities among gender.

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Appendix A

Body Esteem Scale

Please indicate if you are male or female: M / F

Instructions: On this page are listed a number of body parts and functions. Please read each item and indicate how you feel about this part or function of your own body using the following scale:

1 = Have strong negative feelings

2 = Have moderate negative feelings

3 = Have no feeling one way or the other

4 = Have moderate positive feelings

5 = Have strong positive feelings

1. Body scent _____
2. Appetite _____
3. Nose _____
4. Physical stamina _____
5. Reflexes _____
6. Lips _____
7. Muscular strength _____
8. Waist _____
9. Energy level _____
10. Thighs _____
11. Ears _____
12. Biceps _____

13. Chin _____
14. Body build _____
15. Physical condition _____
16. Buttocks _____
17. Agility _____
18. Width of shoulders _____
19. Arms _____
20. Chest or breasts _____
21. Appearance of eyes _____
22. Cheeks/cheekbones _____
23. Hips _____
24. Legs _____
25. Figure or physique _____
26. Sex drive _____
27. Feet _____
28. Sex organs _____
29. Appearance of Stomach _____
30. Health _____
31. Sex activities _____
32. Body Hair _____
33. Physical condition _____
34. Face _____
35. Weight _____

Appendix B

Rosenberg Self-Esteem Scale

Please indicate if you are male or female: M/F

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

- | | | | | |
|---|----|---|---|----|
| 1. On the whole, I am satisfied with myself. | SA | A | D | SD |
| 2. At times, I think I am no good at all. | SA | A | D | SD |
| 3. I feel that I have a number of good qualities. | SA | A | D | SD |
| 4. I am able to do things as well as most other people. | SA | A | D | SD |
| 5. I feel I do not have much to be proud of. | SA | A | D | SD |
| 6. I certainly feel useless at times. | SA | A | D | SD |
| 7. I feel that I'm a person of worth, equal to others. | SA | A | D | SD |
| 8. I wish that I could have more respect for myself. | SA | A | D | SD |
| 9. All in all, I am inclined to feel that I am a failure. | SA | A | D | SD |
| 10. I take a positive attitude toward myself. | SA | A | D | SD |

Appendix C

Eating Attitudes Test-26

Please indicate if you are male or female: M / F

Instructions: Below is a list of statements dealing with your general attitudes about eating. Please complete the form below as accurately and honestly as possible using the following scale:

1=Never 2=Rarely 3=Sometimes 4=Often 5=Usually 6=Always

1. I am terrified about being overweight. _____
2. I avoid eating when I am hungry. _____
3. I find myself preoccupied with food. _____
4. I have gone on eating binges and feel like I can't stop eating. _____
5. I cut my food into small pieces. _____
6. I am aware of the calorie content of foods that I eat. _____
7. I avoid food with high carbohydrate content (i.e. bread, rice, pasta). _____
8. I feel that others would prefer if I ate more. _____
9. I vomit after I have eaten. _____
10. I feel extremely guilty after eating. _____
11. I am preoccupied with a desire to be thinner. _____
12. I think about burning calories when I exercise. _____
13. Other people think that I am too thin. _____
14. I am preoccupied with the thought of being fat. _____
15. I take longer than others to eat my meals. _____
16. I avoid foods with sugar in them. _____
17. I eat diet foods. _____
18. I feel that food controls my life. _____

19. I display self-control around food. _____
20. I feel that others pressure me to eat. _____
21. I give too much time and thought to food. _____
22. I feel uncomfortable after eating sweets. _____
23. I engage in dieting behavior. _____
24. I like my stomach to be empty. _____
25. I have the impulse to vomit after meals. _____
26. I enjoy trying rich new foods. _____

Appendix D

Facebook Intensity Scale

Please indicate if you are male or female: M / F

Please rate the following items as follows:

1 = strongly disagree; 2 = disagree; 3= neutral; 4 = agree; 5 = strongly agree; unless otherwise noted

1. Facebook is part of my everyday activity _____
2. I am proud to tell people I'm on Facebook _____
3. Facebook has become part of my daily routine _____
4. I feel out of touch when I haven't logged onto Facebook for a while _____
5. I feel I am part of the Facebook community _____
6. I would be sorry if Facebook shut down _____
7. Approximately how many TOTAL Facebook friends do you have? Please circle one.
 - a. 10 or less
 - b. 11 – 50
 - c. 51 – 100
 - d. 101 – 150
 - e. 151 – 200
 - f. 201 – 250
 - g. 251 – 300
 - h. 300 – 351

i. 351 – 400

8. In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook? Please circle one.

a. 0-14 min

b. 15-29 min

c. 30-44 min

d. 45-59 min

e. 60-74 min

f. 75-99 min

g. 100 or more minutes