RELATIONSHIP BETWEEN SOCIAL MEDIA USE, SELF-ESTEEM AND SATISFACTION WITH LIFE

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ABSTRACT

The usage of social media has risen rapidly over recent years. This remarkable increase in popularity has drastically affected users’ lives, and the phenomenon has drawn the attention of researchers. Prior research has generally evaluated social media use on a single platform (Facebook). However, social media statistics have indicated that there has been a dramatic decrease in Facebook usage among 18-25-years-old, though older people have started to use Facebook more actively. On the other hand, the use of some other social network platforms such as Snapchat, Instagram, and Twitter have increased dramatically among young adults. A few research studies have focused on social media use including Instagram, Snapchat, and LinkedIn.

This study intends to contribute to the research in this area by examining the relationship between the usage of social media and self-esteem, and social media use and satisfaction with life among university students in the United States. To achieve this purpose, the Social Media Addiction Questionnaire (SMAQ) was used to assess the participants’ level of social media addiction. The survey also collected demographic information for the research participants. In addition to the SMAQ and demographic questions, the participants completed the Rosenberg Self-esteem Scale, the Satisfaction with Life Scale and the Positive Affect and Negative Affect Scale. 188 students participated in this study. Multiple Regression Analyses and Pearson Product-Moment Correlation were used to analyze the results. It was found that social media use is a predictor of self-esteem, negative effect, and positive effect. However, there was no correlation between life satisfaction and social media use. In addition to this, the results indicated
that there was a strong positive relationship between self-esteem, positive affect, and life satisfaction.

*Keywords: Social media use, self-esteem, and satisfaction with life*
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CHAPTER 1
INTRODUCTION

Young adults are currently more engaged with social media in comparison to the past years. 78% of young adults (18-25 years old) use Snapchat, and 71% of that age group use Instagram in the United States (Pew Research Center, 2018). Engaging with social media allows users to contact their friends, family members, and classmates – even from other countries. Likewise, it also allows people to meet new people who have similar common interests (Donde, Chopade, & Ranjiths, 2012). As such, social media sites provide some positive effects in people’s lives. However, most research in this area suggests that the high usage of social media is related to having high depression levels and low mental well-being (Feinstein et al., 2013; Kalpidou, Costin, & Morris, 2011; Rutledge, Gillmor, &Gillen, 2013, Andressan et al., 2016, Nadkarni, Hofmann, 2012). Self-esteem and life satisfaction are the other aspects that are affected by social media (Hawi &Samaha, 2017; Blachino, Przepiorka, & Pantic, 2016).

Therefore, the purpose of this study is to examine the relationship between social media use, life satisfaction and self-esteem among young adults in the US. The current research focuses on young adults because this population spends more time and uses social media more frequently than older individuals (Pew Research, 2018).

Statement of the Problem

Social media has been described as the easiest and fastest tool for gathering information and connecting with the world (Donde, Chopade, & Ranjith, 2012). The majority of Facebook users reported that they use Facebook to look at how their old friends are doing, what they look
like, and how their lives are going (Joinson, 2018). Moreover, social media users believe that others have a better lives and they are happier than themselves. They look at happy photos posted by other individuals on social media and think their lives are always good, and this perspective negatively affects their well-being (Chou & Edge, 2012). Moreover, Chen and Lee (2013) investigated the active Facebook use and psychological distress with a sample of 513 college students. They found that Facebook interaction was positively related to psychological distress ($b=0.120$, standard error=0.048, $t=2.47$, $p<0.05$) such as high depression (Feinstein et al., 2013; Kalpidou, Costin, & Morris, 2011; Rutledge, Gillmor, & Gillen, 2013) and narcissism (Sheldon & Bryant, 2016).

A large study of 23,532 Norwegian participants found that demographic characteristics such as age and sex, narcissism and self-esteem are related to addictive social media use. The study results indicated that being female ($\beta =0.196, p<0.001$), younger ($\beta =-0.156, p<0.001$), not being in a relationship ($\beta =0.035, p<0.001$), being a student ($\beta =0.069, p<0.001$), having less education (primary school; $\beta =0.021, p<0.001$), narcissism ($\beta =0.184, p<0.001$), and low self-esteem ($\beta =-0.260, p<0.001$) are all related to a higher score on the social media use scale (BSMAS), with a total of 17.5% of the variance ($F(12, 23519) =418.21, p<0.001$) (Andreassen, Pallesen, & Griffiths, 2017).

Similar findings were identified by Hawi and Samaha (2017) who concentrated on university students in Lebanon (N=364 college students). They conducted a simple linear regression and Pearson moment correlation to identify the relationship between social media use, self-esteem and life satisfaction, and the results showed that students who reported a higher score in social media addiction had lower levels of self-esteem than those who scored lower in social media addiction. In summary, there was a negative correlation between social media addiction
and self-esteem (r = -.23, N=364, p < .001). Additionally, self-esteem was explained by 5.2% of the variance in social media use (F1, 364) = 23.9, p = .001). The study also demonstrated that there was no direct relationship between social media addiction and life satisfaction and further, there was a strong positive relationship between self-esteem and life satisfaction (r = .57, p < .001). High levels of self-esteem were related to high levels of satisfaction with life (Hawi & Samaha, 2017).

Some research studies have studied the relationships between users’ personalities and social media use. Researchers have primarily used the Big Five model- (neuroticism, extraversion, openness, agreeableness, and conscientiousness) – as a correlate of the amount of time users spend on social media (Skues, Williams, & Wise, 2012). For instance, a study by Blachino et al., (2017) investigated the role of personality traits in Facebook addictions among 1011 undergraduate students from Poland, Turkey and Ukraine. The study showed that Facebook addiction correlated negatively with openness (r = -.20, p < .01), agreeableness (r = -.11, p < .05), emotional stability (r = -.27, p < .001), conscientiousness (r = -.28, p < .001) and extraversion (r = -.13, p < .05). Another research which used a sample of 237 college students at a university in Israel demonstrated that people who are highly neurotic tend to share more photos on their Facebook profile than those who are less neurotic χ2(1) = 4.30, p < 0.05 (Amichai-Hamburger & Vinitzky, 2010). This result was supported by other research which indicated that individuals with highly neurotic personalities have the motivation to share more information about themselves on social media (Seidman, 2013). Additionally, people with high narcissism levels are inclined to share more photos and information on their Facebook profile and spend more time on the site (Buffardi & Campbell, 2008).

Agreeableness that is one of the other five critical personalities according to Big Five model refers to learning in order to be cooperative and sympathetic (Ross et al., 2009).
Individuals who scored higher on agreeableness tend to have more friends on Facebook (Ross et al., 2009). The openness is one of the other traits which refers to individuals who are generally willing to undertake new approaches and people who score higher on openness traits tended to use Facebook more to communicate with other people and higher level of openness was related to be social by using Facebook (Ross et al., 2009).

Therefore, previous research has shown that social media use has a negative effect on people’s traits. To examine this adverse effects on individuals, the current study will seek the relations between social media use, self-esteem, and social media use.

Purpose and Significance

There are many active social media platforms, such as Facebook, Instagram, Twitter, and LinkedIn, and the number of people who use social media has dramatically increased over the last two decades (Hawi & Samaha, 2017). A striking rise in the use of social media has been observed over recent years, and the level of usage is expected to continue to increase (Smith, 2018). Yet, it is an undeniable fact that social media has a negative impact on people’s lives. This issue has been studied by many researchers, but they have so far mostly focused on Facebook usage and its impact on life. Kosoff (2016) suggested that social media platforms such as Instagram and Snapchat will overtake Facebook in the next couple of years. Smith and Anderson (2018) showed that young adults (especially aged 18-24) have started to prefer to use other social media platforms (Instagram and Snapchat, mostly rather than Facebook, and Facebook has become more popular among older people (Smith & Anderson, 2018). This change has attracted the attention of some researchers’ to focus on other social network platforms as well (Hawi, & Samaha, 2017; Andreassen, Pallesen, & Griffiths, 2017). However, there are a few research studies in the United States which observe the relationship between social media use,
life satisfaction, and self-esteem. To move toward filling this gap in research, the purpose of this study is to examine the relationships among the use of different social media tools (Instagram, Snapchat, Twitter, and others), self-esteem and life satisfaction among young university students in the United States.

Research has indicated that the effect of using social media on young adults is quickly growing. For this reason, it might be helpful to provide detailed information regarding social media use, self-esteem, and life satisfaction via the present study to attract attention on the impact of social media usage on young adults.
CHAPTER 2
LITERATURE VIEW

This chapter reviews the previous literature associated with this study. It emphasizes the major findings concerning the following topics, social media and recent social media penetration in the world and particularly in the United States; self-esteem, life satisfaction and demographic features related to social media use. As a result of the previous literature, the hypothesis and research questions are presented.

Social Media

The way people communicate with others has been significantly altered over the last couple of decades due to the development and improvement of social media sites such as Instagram, Snapchat, Facebook, and others. These platforms have allowed individuals to stay in contact with their friends and family members, even people from other countries. Since Facebook launched in 2004 at Harvard, the number of people who use social network sites has increased dramatically, year by year (Emarketer, 2018). While, as of January of 2017, on average, the total number of active social media users in the world was 2.789 billion, the total number of active social media users in January of 2018 was 3.196 billion, and the whole world population was measured as 7.593 billion (Kemp, 2018; Kemp, 2017). This growth shows that 42% of the world’s total population actively use social media, and the global annual digital growth has been +13% since January 2017. Regarding the Americas specifically, the number of active social media users is 648 million among the total population of 1.011 million (Kemp, 2018). This means that 64% of the total population of the Americas use social media sites, and
the United States is the 12th country in the world that uses social media the most based on the total population and monthly usage.

Facebook, which is one of the most heavily used social media networks in the world, had 1.871 billion active monthly users in 2017, while it had 936 million active daily users in the world in 2015 (Facebook, 2018). Globally, Instagram had more than 500 million regular active users (Instagram, 2018), and the United States is Instagram’s top country (Kemp, 2018). LinkedIn had more than 546 million active users in 2018 (LinkedIn, 2018). Snapchat had 178 million active daily users and 301 million monthly active users in 2017 (Snapchat, 2018). With regards to Americans, 78% of young adults (18-24-year-olds) use Snapchat, and similarly, 71% of young adults (18-24 years old) use Instagram. Besides, almost half of this age group (45%) use Twitter (Smith, & Anderson, 2018).

As a result of social media’s popularity, these significant increases in social media usage have attracted the attention of many researchers, and they have studied social media and its effects on people. Most of these researchers have only focused on Facebook usage, and on its influence on individuals’ lives, because it has more global users than any other social media platform (Eksisu, Hosoglu, & Rasmussen, 2017; Burrow & Rainone, 2017; Blachino, Przepiorka, & Rudnicka, 2016; Woods & Scott, 2016; Blachino, Przepiorka, & Pantic, 2016). However, it has been observed that the usage of Facebook among American young adults 18-25-years-old has not been trendy over the last couple of years. Other platforms (such as Instagram and Snapchat) have been used more widely than Facebook (Smith, 2018). According to Smith (2018), the number of Facebook users in the United States will increase by 0.9% to 169.5 million in 2018, but it is expected that older people are going to make that increase. On the other hand, Facebook users will decrease between 5.6% and 9.3% among younger users aged under 25. Also,
the most significant increase in use will be seen on Snapchat. It is expected that 68% of internet users aged 17 to 24 will use Snapchat actively. Snapchat’s influence among internet users in this age group will thus surpass that of Facebook (47.2%) and Instagram (43.6%).

Additionally, the number of Instagram users is expected to rise to 104.7 million in 2018, up 13.1% from 2017 users 35 and older who are creating profiles will drive platform growth and be connecting with (likely younger) family members who spend less time on Facebook. This change in the use of social media has encouraged researchers to focus on it anew, and a few researchers have just started to study non-Facebook social media sites, such as Snapchat, Instagram, Twitter, and others (Hawi, & Samaha, 2017; Andreassen, Pallesen, & Griffiths, 2017). However, those research studies have focused on social media users in other countries besides the United States. This study intends to examine the associations between the use of different social media platforms (Instagram, Snapchat, Facebook, and others) and self-esteem and life satisfaction among young university students specifically residing in the United States.

Satisfaction with Life and Social Media

Life satisfaction is a crucial aspect of subjective well-being, and also a significant part of psychological health (Pavot & Diener, 2008). Life satisfaction refers to how much people are satisfied with their life regarding their physical and mental ambitions (Demetrouti, Bakker, Nachreiner, & Schaufeli, 2000). These ambitions are influenced by many factors in life, such as school, family, and friends (Rostami & Abedi, 2012). It has been observed that while there is a positive relationship between life satisfaction and self-esteem (Yigit, 2012), and happiness and optimism (Sapmaz, & Dogan, 2012), there is a negative correlation between life satisfaction and loneliness (Yildiz, 2017) and depression (Stankov, 2013).
The active use of social media is one of the other factors that is negatively associated with life satisfaction (Collins, 2017; Chan, 2014). A significant number of studies have indicated that addiction to social media and stress, anxiety, and depression have a positive correlation while social media addiction and academic performance and satisfaction with life have a negative relationship (Hawi & Samaha, 2017; Hawi & Samaha, 2016; 2016; Kabasakal, 2015; Lepp, Barkley, & Karpinski, 2014; Valkenburg, Peter, & Schouten, 2006). Also, a study completed among 311 Turkish undergraduate students has supported this finding. It examined the relationship between the excessive use of social media, particularly Facebook, and life satisfaction, subjective happiness, flourishing and subjective vitality. The researchers conducted a stepwise regression analysis to predict Facebook use from these four dependent variables (life satisfaction, subjective happiness, flourishing and subjective vitality). The four predictor model explained 19% of the variance in problematic Facebook use ($F (4,310)=18.31$, $p<0.1$. The life satisfaction was found to be the strongest predictor of problematic Facebook use ($\beta = -.18$, $p < .01$). Therefore, the study showed that life satisfaction had a negative correlation with Facebook use (Satici & Uysal, 2015). To further support this finding, a recent research investigated the relationship between social anxiety symptoms, passive and active Facebook use and online and offline relationships to life satisfaction. A sample of 124 undergraduate students in the United Kingdom completed five online quantitative measures. Results indicated that there was a significant negative correlation between active Facebook use and life satisfaction, and a positive correlation between social active and passive Facebook use and anxiety (Collins, 2017).

One of the reasons for why social media use is negatively associated with social media is that people who have had Facebook for a long time and people who actively use Facebook tend to consider that others are happier and have a better life, and this belief, in turn, causes lower
personal satisfaction with life (Chou & Edge, 2012). People who use social media tend to share their best experiences and different events with others, and that makes other users think they live a less fulfilling life by making such social comparisons. This situation influences users’ self-esteem and their well-being negatively (Denti et al., 2012).

On the other hand, in a study that tested the influences of Facebook on subjective well-being with experience sampling, 82 participants over a 14-day period. The authors assessed the participants’ life satisfaction and subjective wellbeing by using the Satisfaction with Life Scale and Beck Depression Inventory (Kross et al., 2013). Participants were contacted 5 times per day for 14 days and they were asked about their subjective well-being and use of amount of Facebook. After 14 days, they found that Facebook use is negatively related to life satisfaction. Similarly, Wang et al., (2014) studied the association between social networking, site type of use and satisfaction with life with a sample 337 college students. A significant positive correlation was found between those variables.

Moreover, loneliness is one of the factors that affect people’s life satisfaction, but the relationship between social media use and loneliness is complicated. Social media can be used to decrease feelings of loneliness, while loneliness can also be increased by someone spending time on social network platforms. A study of a sample of 1,193 participants showed active Facebook users who message with their friends and shared posts on their friend’s wall felt less lonely and had more social support than passive Facebook users. Passive users who do not spend much time viewing their friends’ activities felt lonely more, and had a decreased social capital (Wilson, Gosling, & Graham, 2012).

Some disorders such as depression and anxiety are related to social media use (Pantic, 2014). Kraut et al.’s (2002) research indicated that people who spend more time online have less
communication with their families and friends, and they feel more depressed and lonelier which causes low satisfaction with life.

In contrast, a few studies have indicated that social media use and life satisfaction have a positive relationship in some way. For example, an Australian study that had a sample of 274 university students investigated social connectedness through Facebook and subjective well-being, depression and anxiety. The result showed that Facebook social connectedness is associated with lower depression (r=-.27, p<.001), lower anxiety (r=-.21, p<.001), and higher life satisfaction (r=.55, p<.001) (Grieve, Indian, Witteveen, Anne Tolan, & Marrington, 2013). Therefore, they suggested that Facebook provides social connectedness by having many online friends and maintaining relationships, and social connectedness is negatively related to anxiety and positively related to satisfaction with life (Lee & Robbins, 1995).

The present study seeks to contribute to a more accurate understanding of using social media effect on satisfaction with life, and it is hypothesized that active social media use will be negatively related to life satisfaction.

Self-esteem and Social Media

Self-esteem is defined as an individual’s appraisal of his or her value (Leary & Baumeister, 2000). Likewise, it also refers to a person’s subjective judgment of his or her worth as a human being (Orth & Robins, 2014). There are approximately 35,000 studies on self-esteem (Bleidron et al., 2016), given that it is one of the crucial phenomena for an individual’s life because high self-esteem brings many positive outcomes (Baumeister et al., 2003). According to researchers, high self-esteem is one of the mediators of mental health (Taylor & Brown, 1988), physical health (Mechanic, 1983) and it is also linked to an individual’s well-being (Mehdizadeh, 2010). Additionally, individuals with high self-esteem have more social support, more malleable
coping behaviors, and less stress (Orth, Robins, & Widaman, 2012). In contrast, people with low self-esteem are observed that they feel more lonely, shy, unsociable and anxious. They also face dissatisfied and short-term relationships more than those with a high self-esteem (Forest, Wood, 2012).

Many factors affect an individual’s level of self-esteem, and research has indicated that social media use is one of the factors that is associated with an individuals’ self-esteem level (Andreassen, Pallasen, & Griffiths, 2017; Valkenburg, Peter, & Schouten, 2006). Many researchers have studied the relationship between social media use, especially Facebook, and self-esteem. The researchers have found that low self-esteem is related to intense social media usage and people who have a low self-esteem tend to use social media sites to increase their self-image and self-esteem (Steinfield, Ellison, & Lampe, 2008; De Cock et al. 2014). Valkenburg, Peter, and Schouten (2016) studied the relations between self-esteem, life satisfaction and negative and positive feedbacks they received through social media sites among 881 adolescents between the ages of 10 and 19. They found that a positive affect was positively associated with self-esteem and satisfaction with life (r=.40, p<.001 and r=.37, p<.001, respectively). Similarly, Eksisu et al., (2017) suggested that individuals with a low self-esteem spend more time on social media networks and tend to log in to Facebook very frequently to compensate their lack of self-esteem by having a high number of online friends to increase popularity and have a sense of belonging.

Hong et al., (2014) investigated the associations between the psychological traits and social media use, particularly Facebook, among Taiwanese university students (N=215). Participants completed Rosenberg Self-esteem Scale, Lai’s personality test and Internet addiction scale that have factors names withdrawal, tolerance, life problems and substitute satisfaction, and
also participants were asked the average time they spent on Facebook daily. They found that self-esteem ($r=-.135$, $p<.05$), depressive character ($r=.259$, $p<.001$) and neuroticism ($r=-.135$, $r<.0$) had a positive correlation to Facebook addiction. The study suggested that individuals who have low self-esteem and lack self-confidence and are easily influenced by others less likely spend time on Facebook. Similarly, Malik and Khan (2015) examined Facebook addiction, self-esteem and narcissism among Pakistani university students ($N=200$). Bergen Facebook Addiction Scale was used to assess participants Facebook addiction. In addition, Rosenberg Self-esteem Scale and Narcissism Scale were used to assess participant’s self-esteem level and their narcissistic behaviors. Results showed that Facebook addiction is negatively related to self-esteem ($r=-.18$; $p<.05$) and positively related to narcissism ($r=.20$; $p<.05$). Facebook addiction was also a significant predictor of low self-esteem ($\beta=-0.18$; $p<0.001$) and narcissistic behavior ($\beta=0.202$; $p<0.001$).

Blachino et al., (2016) examined whether self-esteem and satisfaction with life are predictors of Facebook use. It was a paper-and-pencil study and had 653 Polish Facebook users. They used Facebook Motivation and Importance Scale that focuses motivation to use Facebook, Facebook Intensity Scale, Narcissistic Personality Inventory and Rosenberg Self-esteem Scale. Low level of self-esteem and high level of narcissism are predictors of a high level of Facebook use. There was also a negative and significant correlation of self-esteem with Facebook personal importance ($\beta = -.26$, $p < .001$) and Facebook intensity ($\beta = -.17$, $p < .001$). Narcissism had positive and significant relations with Facebook personal importance ($\beta = .41$, $p < .001$) and Facebook intensity ($\beta = .33$, $p < .001$), followed by Facebook social use ($\beta = .21$, $p < .001$) and Facebook instrumental use ($\beta = .12$, $p < .05$). Participants who had high self-esteem do not attach significant importance to Facebook use. Those who have low self-esteem consider Facebook as a
tool to improve their self-image. They perceive themselves more talented, smarter (Baumeister et al., 2003) and more persistent, and they experience more positive feelings and attach more actions (Baumeister et al., 1996).

Those with high levels of self-esteem and narcissism and low levels of self-esteem are more absorbed in Facebook and they cannot consider life without Facebook. People with low self-esteem generally share more negative posts on their profiles and allow themselves to receive negative comments from their friends or strangers, which may decrease their self-esteem further (Forest & Wood, 2012). People feel pessimistic after they spend so much time on Facebook because users compare themselves with others through Facebook. Being exposed to social comparison through social media negatively influences people’ well-being and self-esteem (Steers, Wickham & Acitelli, 2014).

On the other hand, some findings indicate that social network sites do not always negatively affect self-esteem, social media use also increases users’ self-esteem level. It is supported by another longitudinal study which indicated that self-esteem was a mediator between Facebook usage and bridging social capital (Steinfield, Ellison, & Lampe, 2008). Social capital is described as the benefits gathered through social relationships and interactions (Coleman, 1988). It is also related to many positive outcomes, like fewer crime rates and better health conditions (Adler & Kwon, 2002). Individuals with low self-esteem expand their social capital by using Facebook more than those with high self-esteem. According to the hypothesis of Kraut et al. (2002), people with low self-esteem compensate for their difficulties in social relations to improve their popularity and feel belonging to a group through online social network sites. This hypothesis is called “the poor can get richer.” (Kraut et al., 2001). It refers to those with lower
self-esteem try to atone by looking for more friends on social media to have a sense of belonging and raise their popularity.

As a result, this study aims to examine the relationship between addiction to social media use and self-esteem by focusing on different social media platforms such as Instagram, Snapchat, and others.

**Social Media Use and Demographic Characteristics**

**Gender**

According to a statistical report, the percentage of Facebook users declared to be female is 44%, and to be male is 56%. Regarding Instagram, the rate of female users is 50.4%, and the percentage of male users is 49.4% (Kemp, 2018). Although the percentage of female and males who use social media tools are so close, it is suggested that females spend more time using social media than males. It is supported by a study which indicated that females spend 46 minutes per day on social media while males spend 31 minutes per day on social media (Pew Research Center, 2015). Another study by Rosen et al. (2011) has also demonstrated that females tend to share more photos and spend more time on social media tools than males. Similarly, among research participants, a study reported that women use Facebook more than once in a day and women spend more time on it than men (Kittinger, Correis, & Irons, 2012).

Research suggests that men are generally interested in entertainment and activities while women focus on keeping up relationships. We can say that women are active on networking sites to keep in contact with their friends while men prefer to have an account on social networking sites to make new friends (Barker, 2009). This finding was supported by a research study which showed that females use Facebook to keep their relationships, spend their leisure time, or find entertainment, while males use Facebook to find new connections (Nazir, 2012).
Age

Age is another demographic characteristic that is highly correlated with social media usage. Those who are between 18-29 years old have been mostly social media users. According to Pew Research Center (2015), 90% of those age group use social media. This rate was 12% in 2005. The use of social media has increased to 78% among young adults in ten years. The percentage of people who are between 30-49 years old and use social media was 77% in 2015, in comparison 8% in 2005 (Perrin, 2015). Today, 88% of young adults (18-29) reported that they use any form of social media. That rate decreases to 78% among 30-59 years old and to 37% among American 65 and older (Pew Research Center, 2018). It is supported by research of a sample of 23,532 Norwegian participants. The study showed that 16-25 years old scored higher on the measure of social media use (12±5.4) than 26-35 years old (10.6±4.8) and 36-45 years old (9.7±4.3) (Andreassen, Pallesen, & Griffiths, 2017). The reason why younger people score higher on social media addiction scales than older people is that they have accustomed to being more frequently online than older people (Pensky, 2011). It is also clear that young people become adapted to new technologies faster than older (Pensky, 2011). Further, social media is considered as an arena where younger people can discover and improve their identities and culture without judgments from their family members or parents (Mazzoni & Iannone, 2014; Andreassen, Pallesen, & Griffiths, 2017).

Ethnicity

Regarding ethnicity, it was found that there are similarities among different ethnic groups with regards to the use of social media. 56% of African Americans used social media and 65% of Whites, and Hispanics used social media in 2015 (Pew Research Center, 2015).

Research Questions
Research Question 1:

What is the relationship between scales (self-esteem, satisfaction with life, positive and negative affect and social media use?

Research Question 2:

What is the relationship between the user’s self-esteem and social media use?

2.1. Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Research Question 3:

What is the relationship between the user’s satisfaction with life and social media use?

3.1. Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Research Question 4:

What is the relationship between the user’s positive affect and social media use?

4.1. Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Research Question-5:

What is the relationship between the user’s negative affect and social media use?

5.1. Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Research Question-6:

What is the relationship between the user’s social media use and demographic characteristics (Age, gender and ethnicity)?

Research Hypothesis
Hypothesis 1

1.1. Self-esteem, positive affect, and satisfaction with life are positively related.

1.2. Self-esteem is correlated negatively with negative affect.

Hypothesis 2

Hypothesis 2.1. Social media use is negatively correlated with self-esteem.

Hypothesis 2.2. Social media use is negatively correlated with satisfaction with life.

Hypothesis 2.3. Social media use is negatively related to positive effect.

Hypothesis 2.4. Social media use is positively related to negative effect.

Hypothesis 3

The relationship between user’s self-esteem social media use will change based on demographic characteristics.

Hypothesis 4

The relationship between user’s satisfaction with life and social media use will change based on demographic characteristics.

Hypothesis 5

The relationship between the user’s positive and negative affect and social media use will change based on demographic characteristics.
CHAPTER 3
METHODOLOGY

Participants

There were 200 students from the University of Alabama who participated in the study. 12 participants started to complete the survey, but they left the study without answering all the questions, and their response was not included. Without these 12 participants, the final dataset for analysis included 188 participants. 152 participants completed the survey for extra credit, and 36 participants completed the survey voluntarily and without any rewards. In the model, features of participants are shown in Table, 3.1;

Sample Characteristics in First Model

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Participants (%)</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>78.2%</td>
<td>147</td>
</tr>
<tr>
<td>Male</td>
<td>21.8%</td>
<td>41</td>
</tr>
<tr>
<td>Transgender</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>73.9%</td>
<td>139</td>
</tr>
<tr>
<td>African-American</td>
<td>18.1%</td>
<td>34</td>
</tr>
<tr>
<td>Asian</td>
<td>2.7%</td>
<td>5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.1%</td>
<td>5</td>
</tr>
<tr>
<td>Native American</td>
<td>0.5%</td>
<td>1</td>
</tr>
</tbody>
</table>
Because of these vast differences in sample sizes between ethnicity groups and ages, all ethnicity groups except white were merged and named “non-white.” In the final model, 73% of participants (N=139) was white, and 26.1% of participants (N=49) was non-white. Regarding age, 18-19-20 years old recoded 1, 21-22-23 years olds re-coded as 23, 25, and older than 25 olds re-coded 3. In the final model, 39% of participants were 18-20 years old (N=75), 42% of participants were 21-23 years old (N=79), and 18.1% of participants were 24, 25 and older years old (N=34). The final model of sample features are shown in Table 3.2;

Table 3.2

*Sample Characteristics in Final Model*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage of Participants (%)</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>78.2</td>
<td>147</td>
</tr>
<tr>
<td>Male</td>
<td>21.8</td>
<td>41</td>
</tr>
</tbody>
</table>
Ethnicity

|                |    |  
|----------------|----|---|
| White          | 73 | 139 |
| Non-White      | 26.1 | 49 |

Age

| Age   |    |  
|-------|----|---|
| 18-19-20 | 39 | 75 |
| 21-22-23 | 42 | 79 |
| 24-older  | 18.1 | 34 |

Females were coded 0, and male was coded 1. White was coded 1, non-white was coded 0. Besides, to do regression analyses, 18-20 years old coded as dummy 1 and 21-23 years old coded dummy 2. Gender, age, and ethnicity were independent variables in this study.

Materials

The survey was made up of five separate parts, demographic information, and four different research instruments. The demographic component included questions regarding gender, age, education level, social network sites participants have used and reasons for using social media tools. The others instruments were the Social Media Addiction Questionnaire, the Rosenberg Self-Esteem Scale, the Satisfaction with Life Scale and Positive Affect and Negative Affect Scale. The survey required approximately 5 minutes complete and the order of presentation was fixed.

The Social Media Addiction Questionnaire (Hawi, &Samaha, 2017)

A survey that assesses participants’ addiction to social media needs to have good psychometric features and should be short and reliable. Also, it should include behavioral addiction symptoms. The SMAQ meets these requirements. It was developed by Hawi and Samaha (2017). The SMAQ is similar to the Facebook Intrusion Questionnaire (FIQ), which has 8-items to assess Facebook addiction and was developed based on Brown’s ten behavioral
addictions (Brown, 1997) and the Mobile Phone Involvement Questionnaire (Walsh, White, & McD Young, 2010). FIQ mainly focuses on Facebook, but SMAQ covers other platforms such as Instagram, Snapchat, LinkedIn, Facebook, and others. The factor structure of the SMAQ was tested by an initial principal components analysis and Kaiser Normalization. The Kaiser-Meyer-Olkin was 0.92 that is significantly higher than 0.60 recommended value. All of the item loadings performed from good to excellent. Internal consistency was found .87 (Nawi & Samaha, 2015).

Participants were informed that the SMAQ assessed their relationship with the use of social media (Facebook, Twitter, Instagram, LinkedIn, Snapchat, and others). It is a 7-point Likert scale, ranging from 1 (strongly agree) to 7 (strongly agree). An example item is “I often think about social media when I am not using it.”

The Rosenberg Self-Esteem Scale (Rosenberg, 1965)

A study by Demo (1985) investigated different measures of self-esteem including self-report scales, ratings by others and a projective instruments. Findings from the study showed that two traditional self-reports (Coopersmith Self-esteem Inventory and Rosenberg Self-esteem Scale) and a personal interview were valid to assess participants’ self-esteem level (Demo, 1985). In this study RSE scale will be used because The Rosenberg Self-esteem Scale is a widely used self-reported instrument (Gray-Little, Williams, & Hancock, 1997). This scale has ten items that assess an individual’s general evaluation of themselves as a human being (Rosenberg, 1965). It measures self-esteem, self-confidence, and self-liking. It is a 4-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). It has five positive statements (for example, “On the whole, I am satisfied with myself.”) and five negative statements (“I certainly feel useless at times.”). The RSE indicates a Guttman scale coefficient of reproducibility of .92. Test-retest
reliability of RSE was measured throughout two weeks, and it showed that correlations were .85 and .88. So, RSE indicated excellent internal consistency. Regarding validity, RSE significantly correlated with other self-esteem measures including Coopersmith Self-esteem Inventory.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

Life satisfaction is one of the critical components of subjective well-being (Diener, 2000). So, this scale focuses on subjective well-being and measures cognitive self-judgment satisfaction with an individual’s life. It has been used by many cognitive and behavioral research (Deiner, Sapyta, & 1998). This scale emphasizes the valuation of satisfaction with life as a whole. It does not focus on specific domains such as relationships, work, etc. It is a 7-point Likert scale and includes five items ranging from 1 (strongly disagree) to 7 (strongly agree). High scores on the SWLS indicated high satisfaction with life. An example item is “I am satisfied with my life.”

The SWLS have demonstrated that it has favorable psychometric properties that cover high internal consistency and high temporal reliability. SWLS indicates that test-retest correlation was .82 and coefficient alpha was .87. Also, the SWLS is significantly correlated with other subjective well-being scales (Campbell=.75, Andrews and Withey=.68). Additionally, the SWLS showed good validity when it was compared with PANAS (Positive and Negative Affect Scale) (Pavot, & Diener, 1993).

Positive and Negative Affect Scale (PANAS) (Watson, Clark & Tellegen, 1988)

Positive affect (having good feelings and moods) and negative affect (having insufficient pleasant emotions and moods) are the other components of subjective well-being. A current study by Busseri (2018) showed that PA and NA are the underlying subjective well-being factors. People are with high subjective well-being tend to have more positive feelings and few negative feelings. Life satisfaction, pleasant, and unpleasant effect are the interrelated component
of subjective well-being (Diener & Suh, 1997). Therefore, life satisfaction is positively correlated with positive affect and is negatively associated with negative affect (Busseri, Sadava & DeCourville, 2007; Schimmack, 2008). Those who are with the presence of positive emotions and the absence of negative feelings have more satisfaction with their lives (Diener, 2000). Therefore, in order to assess the positive and negative effects on individuals, Positive Affect and Negative Affect Scale (PANAS) will be used.

It is a self-report measure of effect. It has 20 items (10 positive affect questions, ten negative affect questions). It is 5-Likert Scale ranging from 1 (very slightly or not at all) to 5 (Extremely). For the total positive score, a higher score shows more of a positive effect. From the total negative score, a lower score indicates less of a negative impact. An example of the positive effect is “Interested,” and an example of the negative effect is “Upset.” PANAS indicated high internal consistency ranged between .86-.90 for positive affect and .84-.87 for negative effect. Test-retest reliability for the PANAS (1 week) was measured .79 for positive affect and .81 for negative effect. For the validity of PANAS, it was significantly correlated with HSCL (.74 for positive affect and -.19 for negative affect, and with BDI (.65) for negative affect and -.29 for positive affect (Watson et al., 1988).

Procedure

Participants were students at the University of Alabama who were enrolled for courses in the departments of Educational Research Methodology, Human Development, Communication Studies, Social Work and Journalism and Creative Media for Summer 2 and Fall Semester in 2018. Participants who were associated with courses received extra course credit. Instructors decided the amount of extra credit to be given in each class. Students who did not want to
participate in this study did not lose any benefits or rights, and it did not impact their grades. Other participants took the study voluntarily and did not receive any credits or benefits.

Before the study, the approvals of instructors were required. After gaining the permission of instructors, the link that provides questionnaires was sent to instructors, and then the instructors sent the link to their students. Students were informed by instructors either verbally or by email regarding the process. Other participants received an email that was sent by the investigator and provided the link to complete questionnaires. Participants were informed that they could withdraw from the study at any time they wanted, this was communicated via a consent form at the beginning of the questionnaires. After students complete the online surveys, their responses were gathered by the Qualtric survey hosting-provider.

Data Analysis

In the current study, the Pearson Product-moment correlation was used to examine the relationship between social media use, life satisfaction and positive and negative affect scales. In order to assess predictors of self-esteem, life satisfaction and positive and negative affect, hierarchical multiple regressions were run. In this model, self-esteem, life satisfaction and positive and negative affect were dependent variables. Social media use, age, gender and ethnicity were independent variables. In addition to these analyses, a multiple regression was run to predict social media use from gender, age and ethnicity.
CHAPTER 4
ANALYSES AND RESULTS

Self-Reported Social Media Use

According to the results, 100% of participants use social media. No one selected the option “do not use any social media tools.” 48% (N=91) of participants put Instagram as the top social media platform. It was followed by 20% (N=39) of the participants who identified Snapchat and 15% (N=39) who indicated that Facebook was their preferred social media tool. Twitter followed Facebook as a fourth most used social media tool (6.9% N=13).

Most of Instagram users (88.8%, N=167) use Instagram for entertainment, 42% (N=80) of them use Instagram for maintaining their relationships, and 35% (N=67) of users use it for creating media content, and share opinions and also 35% (N=67) of them use it for social events.

A huge amount of Snapchat users (74% (N=139) use it for entertainment, 57% (N=101) of users prefer to use Snapchat for maintaining their relationships, and 24% (N=46) of those users use it for social events.

Most of Facebook users (70% N=132) use Facebook for entertainment, 55% (N=104) of them to maintain relationships and 49% (N=92) of those users use it for social events.

Reliability

Cronbach’s alpha was used to measure the reliability of scales. The internal consistency of RSES was .92. When it is compared with previous research, it is a little bit higher than published norms. For example, Krieger et al., (2017) found .87 Cronbach alpha and Blachino, Przepiorka, & Rudnicka (2016) found .83. The internal consistency of SwLS was .86 that is
higher than previous research (Correa, Hinsley, & Zuniga, 2010). They found Cronbach's alpha .83. The internal consistency of Positive Affect was .89, internal consistency of negative affect scale was .83. Those scale’s reliability is also higher than previous research who found alpha estimates of .86 and .81 (Oh, Ozkaya & LaRose 2014). Lastly, the internal consistency of the SMAQ scale was .80. The scale was used by Hawi and Samaha (2017) to examine the relationship between social media use and self-esteem among Lobaninan university students, and they found Cronbach’s alpha .87. As it is shown in Table 4.1, they were all greater than 0.80, indicating strong internal consistency.

Table 4.1

*Reliability Analysis for Scales*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosenberg Self-esteem Scale</td>
<td>.915</td>
</tr>
<tr>
<td>Satisfaction with Life Scale</td>
<td>.860</td>
</tr>
<tr>
<td>Positive affect</td>
<td>.887</td>
</tr>
<tr>
<td>Negative Affect Scale</td>
<td>.826</td>
</tr>
<tr>
<td>Social Media Addiction Scale</td>
<td>.802</td>
</tr>
</tbody>
</table>

Analyses

Research Question 1: What is the relationship between scales (self-esteem, satisfaction with life, positive and negative affect and social media use)

Pearson Correlation was used to examine the relationship between satisfaction with life, self-esteem, positive and negative effects in the sample. Results from the analysis indicated that, as shown in Table 4.2.;
There were negative relationships between participants’ total scores on social media use and their total scores on the self-esteem and, positive affect measures (\( r = -0.227, p < 0.01 \) (medium to small effect); \( r = -0.161, p < 0.05 \) (small effect size), respectively). However, they are relatively weak. This finding suggests that students with higher scores on the social media use test tended to also have lower scores in the self-esteem measure and positive affect measure.

Social media use had a positive correlation with the negative affect measure; (\( r = 0.329, p < 0.01 \)). Students who had a higher score on social media use test had a higher score on the negative affect test.

The result indicated a strong positive relationship between self-esteem and positive effect: \( r = 0.72, p < 0.01 \) (large effect size). This finding suggests that students with higher scores on the self-esteem test tended to also have higher scores in the positive effect test.

The result indicated a positive relationship between self-esteem and satisfaction with life: \( r = 0.59, p < 0.01 \) (large effect size). This finding suggests that students with higher scores on the self-esteem test also tended to have higher scores in the satisfaction with life test.

There was a negative correlation between satisfaction with life and negative affect: \( r = -0.31, p < 0.001 \) (medium to small effect). Students who scored higher on satisfaction with life tended to have a lower score on negative affect scale.

Analyses also demonstrated that there was a negative correlation between self-esteem and negative affect: \( r = -0.636, p < 0.01 \) (large effect). This finding suggests that students with higher scores on the self-esteem test tended to also have higher scores in the negative test (having a higher score on the negative test means lower negative affect). There were positive correlation between satisfaction with life and positive affect: \( r = 0.551, p < 0.01 \) (large effect size). This
finding suggests that students who scored higher on the satisfaction with life test tended to also have higher scores in the positive affect test.

Furthermore, there was a negative correlation between negative effect and positive effect; \( r = -0.423, p < 0.01 \) (large to medium effect size) The finding shows that students who scored higher on positive affect test tended to have a lower score on negative affect test.

Table 4.2.

*Pearson Correlation of each scale*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Rosenberg(Self-Esteem)</th>
<th>Negative Affect</th>
<th>Positive Affect</th>
<th>Satisfaction with Life</th>
<th>Social Media Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosenberg</td>
<td>1.000</td>
<td>-.636**</td>
<td>.721**</td>
<td>.589**</td>
<td>-.227**</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>-.636**</td>
<td>1.000</td>
<td>-.423**</td>
<td>-.307**</td>
<td>.329**</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>.697**</td>
<td>-.374**</td>
<td>1.000</td>
<td>.551**</td>
<td>-.161*</td>
</tr>
<tr>
<td>Satisfaction with Life</td>
<td>.551**</td>
<td>-.285**</td>
<td>.514**</td>
<td>1.000</td>
<td>-.077</td>
</tr>
<tr>
<td>Social Media Use</td>
<td>-.246**</td>
<td>.360**</td>
<td>-.148*</td>
<td>-.071</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: N=188, **p<0.01, *p<0.05

Research Question 2: What is the relationship between user’s self-esteem and social media use? Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)
Table 4.3.

Descriptive Statistic of Demographic Differences in Rosenberg Self-esteem Scale

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30.14</td>
<td>6.65</td>
<td>41</td>
</tr>
<tr>
<td>Female</td>
<td>30.65</td>
<td>5.87</td>
<td>147</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>31.65</td>
<td>5.88</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>30.15</td>
<td>6.06</td>
<td>139</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>30.97</td>
<td>5.47</td>
<td>75</td>
</tr>
<tr>
<td>21-23</td>
<td>30.18</td>
<td>5.83</td>
<td>79</td>
</tr>
<tr>
<td>24-over</td>
<td>30.41</td>
<td>7.63</td>
<td>34</td>
</tr>
</tbody>
</table>

Descriptive statistic of demographic differences in self-esteem scale is shown in Table 4.3. Also, an independent-samples t-test was run to determine if there were differences in self-esteem score between males and females, white and non-white participants. There was no statistical difference in mean self-esteem score between males and females, t(186)=-.474, p=.744, and white and non-white participants, t(186)=-1.502, p=.0436. Regarding age, a one-way ANOVA was conducted to determine if the self-esteem score was different for age groups with different age levels. Participants were classified into three groups: 18-20 years old (n=75), 21-23 years old (n=79) and 34-25 and older (n=35). The result showed there was not statistically significant differences for age groups, F (2,185)=.331, p=.719.
Table 4.4.

*Results from the hierarchical regression analysis where age, gender, ethnicity and SMAQ were regressed upon the Rosenberg Self-esteem Scale score (N=188)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>p</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.052</td>
<td>.052</td>
</tr>
<tr>
<td>SMAQ</td>
<td>.146</td>
<td>.046</td>
<td>.002**</td>
<td>.227</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.078</td>
<td>.022</td>
</tr>
<tr>
<td>SMAQ</td>
<td>.163</td>
<td>.047</td>
<td>.001**</td>
<td>.253</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-1.469</td>
<td>.983</td>
<td>.137</td>
<td>.107</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 1 (age 18-20)</td>
<td>.713</td>
<td>1.253</td>
<td>.173</td>
<td>.139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 2 (age 21-3)</td>
<td>.271</td>
<td>.217</td>
<td>.824</td>
<td>.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.614</td>
<td>.048</td>
<td>.559</td>
<td>.042</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *** p<0.001, ** p<0.01, * p<0.05*

A two step hierarchical multiple regression (Table 4.4) was conducted with self-esteem as the dependent variable. Social media use (SMAQ) was entered at step one of the regression to control for self-esteem responding. The demographic characteristics (gender, ethnicity and age (Dummy-1) and age (Dummy-2)) were entered at step two. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.006. Further, normality tests for the standardized residuals revealed adherence to the normality assumption based on the P-P plot. Variance inflation factors (VIF) for the independent variables did not indicate multicollinearity (VIF$_{SMAQ}$ = 1.70; VIF$_{age(dummy1)}$ = 2.047; VIF$_{age(dummy2)}$ = 1.961; VIF$_{race}$ = 1.012; VIF$_{gender}$ = 1.018). Examination of Cook’s Distance statistics did not indicate extreme outliers.
The hierarchical multiple regression revealed that at Step 1, SMAQ contributed significantly to the regression model, $F(1,186) = 10.119 \ p<.05$ and accounted for 5.2% of the variation in self-esteem. Introducing the demographic characteristics (gender, ethnicity and age (Dummy-1) and age (Dummy-2)) variables explained an additional 2.2% of variation in the self-esteem, however, this change in $R^2$ was not significant $F(5,182) =1.290, \ p=.276$. Therefore, controlling for participants’ demographic characteristics did not systematically change the relationship between social media addiction and self-esteem.

The negative slope for social media use as a predictor of self-esteem ($b=0.054$) indicated that there was about a .054 point decrease total scores on the self-esteem measure for each 1-point increase in total scores on the social media use measure.

Research Question-3: What is the relationship between user’s satisfaction with life and social media use? Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Table 4.5.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>21.85</td>
<td>7.65</td>
<td>41</td>
</tr>
<tr>
<td>Female</td>
<td>24.96</td>
<td>6.08</td>
<td>147</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>22.30</td>
<td>6.28</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>24.98</td>
<td>6.53</td>
<td>139</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Descriptive statistic of demographic differences in satisfaction with life scale is shown in Table 4.5. An independent-samples t-test was used to determine if there were differences in satisfaction with life scale score between males and females, white and non-white participants. There was a statistical difference in mean satisfaction with life score between males and females, with females scoring higher than males, \(24.96\pm0.50\) [mean± standard error] \(t\) (186) = \(-2.730\), \(p=.025\). Regarding ethnicity, there was no statistical difference in mean satisfaction with life score between white and non-white participants, \(t\) (186) = \(-2.491\), \(p=.712\). Regarding age, a one-way ANOVA was conducted to determine if the satisfaction with life score was different for age groups with different age levels. The result showed there was not statistically significant differences, \(F\) (2,185) = \(2.377\), \(p=.096\).

Table 4.6.

*Results from the hierarchical regression analysis where age, gender, ethnicity and SMAQ were regressed upon the Satisfaction with Life Scale score (N=188)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>(B)</th>
<th>(SE)</th>
<th>(p)</th>
<th>(\beta)</th>
<th>(R^2)</th>
<th>(\Delta R^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.006</td>
</tr>
<tr>
<td>SMAQ</td>
<td>-.054</td>
<td>.051</td>
<td>.292</td>
<td>-.077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.100*</td>
<td>.094</td>
</tr>
<tr>
<td>SMAQ</td>
<td>-.092</td>
<td>.051</td>
<td>.073</td>
<td>-.131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2.503</td>
<td>1.055</td>
<td>.019*</td>
<td>.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 1(age)</td>
<td>1.823</td>
<td>1.345</td>
<td>.177</td>
<td>.136</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18
20
In the first model, results of the hierarchical multiple regression (Table 4.6) analyses showed that the model was not statically significant, $R^2 = .006$, $F (1,186) = 1.117$, $p = .292$. Social media use is not a significant predictor of satisfaction with life. In the second model, the addition of the demographic characteristics (gender, ethnicity and age (Dummy-1) and age (Dummy-2)) to the prediction of satisfaction with life led to a statically significant increase in $R^2$ of .094, $F (5,182) = 4.052$, $p < .05$. Together the five independent variables accounted for 10% of the variance in satisfaction with life ($R^2 = .100$), and ethnicity ($b = 2.503$, $p < .05$) and gender ($b = 2.87$, $p < .05$) are the only significant predictors of satisfaction with life. Therefore, controlling for participants’ demographic characteristics resulted in a stronger negative relationship between social media addiction and satisfaction with life.

Regarding model 2, the Durbin-Watson statistic indicated no significant violations of the assumption of independence for error terms (Durbin Watson = 1.969). A scatterplot of the standardized predicted value against the standardized residuals indicated no significant violations of the assumption of homoscedasticity for the error terms. Further, normality tests for the standardized residuals revealed adherence to the normality assumption based on the P-P plot. Variance inflation factors (VIF) for the independent variables did not indicate multicollinearity ($VIF_{age (dummy)} = 1.07; VIF_{age (dummy2)} = 2.047; VIF_{race} = 1.961; VIF_{gender} = 1.012$) and values for Cook’s Distance statistics did not indicate extreme outliers.

Results from Model 2 indicated that gender was significantly predictive of satisfaction with life when other variables were statistically controlled: $t (182) = -2.55$, $p < .001$. The
negative slope for gender as a predictor of satisfaction with life (b=-2.87) indicated that the predicted total score on the satisfaction with life scale for females is approximately 3 points lower than the predicted total score for males, controlling for the ethnicity, age, and SMAQ.

Ethnicity was the other significantly predictive of satisfaction with life when other variables were statistically controlled: \( t (182) = 2.73, p < 0.001 \) in model 2. The positive slope for ethnicity as a predictor of satisfaction with life (b=2.5) indicated that the predicted total score on the satisfaction with life measure for white people is 2.5 points higher than the predicted nonwhites, controlling for gender, age, and SMAQ.

Research Question 4: What is the relationship between user’s positive affect and social media use? Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity?)

Table 4.7.

*Descriptive Statistic of Demographic Differences in Positive Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34.39</td>
<td>7.01</td>
<td>41</td>
</tr>
<tr>
<td>Female</td>
<td>36.45</td>
<td>7.30</td>
<td>147</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>36.67</td>
<td>6.65</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>36.12</td>
<td>7.50</td>
<td>139</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>36.93</td>
<td>7.36</td>
<td>75</td>
</tr>
<tr>
<td>21-23</td>
<td>35.88</td>
<td>6.80</td>
<td>79</td>
</tr>
</tbody>
</table>
Descriptive statistic of demographic differences in positive affect scale is shown in Table 4.7. An independent-samples t-test was run to determine if there were differences in positive affect score between males and females, white and non-white participants. There was no statistical difference in mean positive affect score between males and females, $t(186) = -1.615$, $p = .745$, and white and non-white participants, $t(186) = .371$, $p = .507$. Regarding age, a one-way ANOVA was conducted to compare the effect of age on the positive affect score. The result showed the effect of age on positive affect scale was not statistically significant, $F(2, 185) = 1.639$, $p = .197$.

Table 4.8.

*Results from the hierarchical regression analysis where age, gender, ethnicity and SMAQ were regressed upon the Positive Affect Scale score (N=188)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$B$</th>
<th>SE</th>
<th>$p$</th>
<th>$\beta$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMAQ</td>
<td>-.124*</td>
<td>.056</td>
<td>.028*</td>
<td>-.161</td>
<td>.026*</td>
<td>.026</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.073</td>
<td>.047</td>
</tr>
<tr>
<td>SMQA</td>
<td>-0.163**</td>
<td>.057</td>
<td>0.005</td>
<td>-0.211</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.311</td>
<td>1.18</td>
<td>0.79</td>
<td>0.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 1 (age 18-20)</td>
<td>3.650</td>
<td>1.513</td>
<td>0.017</td>
<td>0.246</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 2 (age 21-23)</td>
<td>2.22</td>
<td>1.469</td>
<td>0.132</td>
<td>0.151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-2.18</td>
<td>1.26</td>
<td>0.86</td>
<td>-0.125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: *** p<0.001, ** p<0.01, * p<0.05*
A hierarchical multiple regression (Table 4.8) was carried out to investigate whether social media use, gender, age and ethnicity could significantly predict participants’ positive affect’ score. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. The Durbin-Watson statistic indicated no significant violations of the assumption of independence for error terms (Durbin Watson = 2.043). A scatterplot of the standardized predicted value against the standardized residuals indicated no significant violations of the assumption of homoscedasticity for the error terms. Further, normality tests for the standardized residuals revealed adherence to the normality assumption based on the P-P plot. Variance inflation factors (VIF) for the independent variables did not indicate multicollinearity and values for of Cook’s Distance above 1.

In the first step, results indicated that social media use explained 2.6% of the variance in positive affect, $R^2=0.073$, $F(1,186) =4.924$, $p<.05$. Furthermore, the addition of the demographic characteristics (gender, ethnicity and age (Dummy-1) and age (Dummy-2) to the prediction of positive affect explained an additional 4.7% of the variation in positive affect however, this change in $R^2$ was not significant $F (5,182) =2.847$, Sig. F change=0.061. These results suggest that controlling for demographic characteristics did not substantially change the relationship between social media addiction and positive affect.

The negative slope for social media use as a predictor of positive affect (b=−.12) indicated that there was about a .12 decrease in the predicted total score on the positive affect measure for each 1 unit increase in students’ total score on the social media use measure, controlling for age, gender and ethnicity.

Research Question-5: What is the relationship between user’s negative affect and social media use?
Does this relationship change when we account for demographic characteristics? (Age, gender, ethnicity)

Table 4.9.

*Descriptive Statistic of Demographic Differences in Negative Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23.48</td>
<td>6.81</td>
<td>41</td>
</tr>
<tr>
<td>Female</td>
<td>22.66</td>
<td>6.50</td>
<td>147</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>21.32</td>
<td>7.02</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>23.38</td>
<td>6.32</td>
<td>139</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>23.14</td>
<td>6.71</td>
<td>75</td>
</tr>
<tr>
<td>21-23</td>
<td>23.02</td>
<td>6.21</td>
<td>79</td>
</tr>
<tr>
<td>24-over</td>
<td>21.76</td>
<td>7.07</td>
<td>34</td>
</tr>
</tbody>
</table>

Descriptive statistic of demographic differences in negative affect scale is shown in Table 4.9. An independent-samples t-test was run to determine if there were differences in negative affect score between males and females, white and non-white participants. There was no statistical difference in mean positive affect score between males and females, \( t (186) = .708, p = .714 \), and white and non-white participants, \( t (186) = 1.89, p = .160 \). Regarding age, a one-way analysis of variance was conducted to determine if the negative scale score was different for age groups with different age levels. The analysis indicated that there was no statistically significant difference, \( F (2,185) = .567, p = .568 \).
Table 4.10.

Results from the hierarchical regression analysis where age, gender, ethnicity and SMAQ were regressed upon the Negative Affect Scale score (N=188)

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>p</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMAQ</td>
<td>.230***</td>
<td>.048</td>
<td>0.000**</td>
<td>- .329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.131</td>
<td>.022</td>
</tr>
<tr>
<td>SMQA</td>
<td>.233***</td>
<td>.050</td>
<td>.000</td>
<td>0.334</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.84</td>
<td>1.036</td>
<td>0.078</td>
<td>0.123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 1 (age 18-20)</td>
<td>-.236</td>
<td>1.32</td>
<td>0.859</td>
<td>0.041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dummy 2 (age 21-23)</td>
<td>.549</td>
<td>1.28</td>
<td>0.669</td>
<td>0.067</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.056</td>
<td>1.105</td>
<td>0.341</td>
<td>0.067</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** p<0.001, ** p<0.01, * p<0.05

A hierarchical multiple regression (Table 4.10) was calculated to predict negative affect based on participants’ social media use, gender, age and ethnicity. There was linearity assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.889. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. A scatterplot of the standardized predicted value against the standardized residuals indicated no significant violations of the assumption of homoscedasticity for the error terms. Further, normality tests for the standardized residuals revealed adherence to the normality assumption based on the P-P plot and values for Cook’s distance above 1.
Results of the regression analyses showed that at Step 1, SMAQ contributed significantly to the regression model, $R^2=.131$, $F(1,186) = 22.649$, $p<.001$. SMAQ explained 10% of variance in negative affect. Adding demographic characteristics (gender, ethnicity and age (Dummy-1) and age (Dummy-2) to the prediction of negative affect explained an additional 2.2% of the variation in negative affect, but this change in $R^2$ was not significant $F(5,182) = 5.471$, sig F change= .331. These results suggest that controlling for participants’ demographic characteristics did not substantially influence the relationship between social media addiction and negative affect.

The positive slope for social media use as a predictor of negative effect ($b=.23$) indicated that there was about a .23 point predicted increase in the total scores on the negative affect measure for each 1 point increase in social media use, controlling for age, gender and ethnicity. Research Question-6: What is the relationship between user’s social media use and demographic characteristics (Age, gender and ethnicity)?

Table 4.11.

*Descriptive Statistic of Demographic Differences in Social Media Use Scale*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30.68</td>
<td>9.95</td>
<td>41</td>
</tr>
<tr>
<td>Female</td>
<td>31.82</td>
<td>9.25</td>
<td>147</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonwhite</td>
<td>30.61</td>
<td>10.22</td>
<td>49</td>
</tr>
<tr>
<td>White</td>
<td>31.91</td>
<td>9.09</td>
<td>139</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-20</td>
<td>34.29</td>
<td>8.59</td>
<td>75</td>
</tr>
</tbody>
</table>
Descriptive statistic of demographic differences in social media use questionnaire is shown in Table 4.11. An independent-samples t-test was run to determine if there were differences in negative affect score between males and females, white and non-white participants. There was no statistically difference in mean social media use score between males and females, \( t(186) = -0.686, p = 0.733 \), and white and non-white participants, \( t(186) = 0.833, p = 0.275 \).

Regarding age, one-way ANOVA was conducted to compare the effect of age on the social media use. The result showed that the effect of age on social media use was statistically significant, \( F(2, 185) = 6.228, p = 0.002 \). SMAQ score decreased from 18-20 years old (34.29±8.59), to 21-23 years old (30.44±9.40), to 24-25 and older (28.20±9.69) age groups.

Table 4.12.

*Summary of the Multiple Regression Analyses for Variables predicting Social Media Use*

<table>
<thead>
<tr>
<th>Variables</th>
<th>( b )</th>
<th>( SE )</th>
<th>( p )</th>
<th>( \beta )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>27.828</td>
<td>1.913</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.821</td>
<td>1.635</td>
<td>0.616</td>
<td>-0.036</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>0.773</td>
<td>1.533</td>
<td>0.615</td>
<td>0.36</td>
</tr>
<tr>
<td>Age(Dummy1)</td>
<td>-6.00*</td>
<td>1.905</td>
<td>0.002</td>
<td>0.314</td>
</tr>
<tr>
<td>Age(dummy2)</td>
<td>2.28</td>
<td>1.892</td>
<td>0.228</td>
<td>0.120</td>
</tr>
</tbody>
</table>

Note: \( R^2 = .066 \), \( R = .256 \)
A multiple regression was carried out to examine whether gender, age and ethnicity could significantly predict participants’ social media use. The result of the regression demonstrated that the model explained 6.6% of the variance and that the model was a significant predictor of social media use $F (4, 183) = 3.220, p < 0.05$ with $R = 0.256$ and $R^2 = 0.066$.

The Durbin-Watson statistic indicated no significant violations of the assumption of independence for error terms (Durbin Watson = 1.668). A scatterplot of the standardized predicted value against the standardized residuals indicated no significant violations of the assumption of homoscedasticity for the error terms. Further, normality tests for the standardized residuals revealed adherence to the normality assumption based on the P-P plot. Variance inflation factors (VIF) for the independent variables did not indicate multicollinearity ($\text{VIF}_{\text{age(dummy1)}} = 1.942; \text{VIF}_{\text{age(dummy2)}} = 1.945; \text{VIF}_{\text{race}} = 1.010; \text{VIF}_{\text{gender}} = 1.017$). Examination of Cook’s Distance statistics did not indicate extreme outliers.

The first age dummy variable (18-20 years old) was the only significantly predictive of social media use when other variables were statistically controlled: $t (183) = 3.149, p < 0.001$. The positive slope for this variable as a predictor of social media use (b=6.00) indicated that there was predicted average difference of 6.0 points on the social media use scale between 18-20 and 24 and over years old, controlling for gender and ethnicity.

Overall, findings of the study showed that social media use is a negative predictor of self-esteem and positive affect, and a positive predictor of negative affect. In other words, those who scored higher on social media use scale tend to have lower score on self-esteem scale and positive affect scale. Individuals who had higher score on social media scale, also took higher score on negative affect scale. However, it is not possible to say whether low self-esteem or positive affect cause to use social media or they are the consequences of use of social media.
because the study is a cross-sectional study. In addition, although it was claimed there is negative correlation between social media use and satisfaction with life, the result did not supported that hypothesis. In sum, the study suggest that social media use had negative effects on young adults.
CHAPTER 5

DISCUSSION

Social networking platforms provide a service where people can create their profile and get connected with others publicly (Boyd & Ellison, 2008). Internet and social media use have constantly increased since 2000. The statistics in 2017 have indicated that individuals had used more than 600 active social media tool and some of them have more than 150 million accounts (Peng, Biagi, & Ito, 2017). Research has indicated that most use Facebook and YouTube, but young adults mostly use Instagram and Snapchat (Smith & Anderson, 2018). The results also showed 78% of 18 to 24-year-olds use Snapchat, and 71% of that age group use Instagram and 45% use Twitter. This rise in the usage of social media has influenced social behaviors, relationships and social interactions (Samaha & Hawi, 2015).

Previous research has investigated how social media use and its effect on people's' social/emotional well-being. It was found that people who use social media frequently tend to have a lower subjective well-being (Kross et al., 2013), believe others are happier and have a better life than themselves (Chou & Edge, 2012), and have a lower quality of life (Bevan et al., 2014). On the other hand, some studies found a positive relationship with social media use. It was found that social media usage increases social capital (Ellison et al., 2007), and provides a high friendship quality (Valkenburg & Peter, 2009).

The present study was designed to investigate the relationship between social media use, life satisfaction and self-esteem. It was also sought to determine in this study whether or not
there was a relation between each of the scales. Previous literature has focused mostly on a specific social media tool, Facebook and its effect on personal traits. This research aims to examine some other social media tools such as Instagram and Snapchat and their impact on personal characteristics among young adults.

Self-esteem was negatively related to social media use and showed a medium-size effect controlling for basic demographics (gender, ethnicity and age). The result is also in keeping with previous research (Hong et al., 2014; Malik & Khan, 2015), and may imply that social media users tend to compare their lives with others, so they tend to perceive a low life satisfaction and low self-esteem (Chou & Edge, 2012) because people generally post their best experiences and different events through social media, and these portrayals on social media may make people consider that others are happier, have more connected lives, which may make individuals feel unhappy or socially isolated (Shensa et al., 2014). On the other hand, people may use social media to gain a higher self-esteem or to escape from emotions of low self-esteem by being socially connected with others (Andreassen, Pallasen & Griffiths, 2017). People with high self-esteem also may not attach important significance to social media use. Those who have low self-esteem consider social media as a tool to improve their self-image (Blachino, Przepiorka, & Pantic, 2016). People with high self-esteem feel more talented, smarter and more popular (Baumeister et al., 2003), and have more positive feelings and attach more actions (Baumeister et al., 1996). As a result, they may not prefer to be more active or popular on social media and do not need extra attention on social media.

Another explanation for why self-esteem and social media use are negatively correlated is that individuals use social media to compensate for their lack of self-esteem by meeting new people and making online friends (Lee et al., 2012; Eksisu et al., 2017). Having many online
friends may feed a participants’ self-esteem. In addition, people with low self-esteem consider social media as a more secure area to express their feelings or opinions than those with a higher self-esteem (Forest & Wood, 2012). They may prefer communicating online rather than face to face. Lastly, another reason why social media use is a negative predictor of self-esteem is positive and negative interactions and feedbacks are made through social media. Negative interactions are made through social media cause low self-esteem and positive interactions lead to high self-esteem (Valkenburg et al., 2006). Thus, people who mostly receive negative feedback (like negative comments) tend to have a low self-esteem. Beside all of these explanations, because of the cross-sectional nature of the data, the causal direction of self-esteem and social media use is not possible to discern. Addictive social media use may be a consequence of low self-esteem or a cause of low self-esteem.

Regarding Hypothesis 2.2, it was not supported by the current study. It was stated that life satisfaction and social media use are negatively related. However, the study results showed that there was no correlation between the life satisfaction scale and social media usage. This result is consistent with previous research (Hawi & Samaha, 2015). It is possible that social media use did not relate to life satisfaction of university students, because overall life satisfaction is also affected by some other aspects, such as friends, teachers, classmates, and family (Moksnes & Espness, 2013) and an individuals’ personality and their life experiences (Valenzuela, Park, & Kee, 2009). It might also be explained that the current study focused on many social media tools in comparison to previous research that indicates negative relationships between social media use and life satisfaction has specifically focused on Facebook only. Using multiple social tools may cause to find the result of the study. Conversely, some previous research indicated that social media use and life satisfaction are negatively related. There is a very similar
research with the current study, focusing on social media, particularly Facebook, which found that satisfaction with life is negatively correlated with Facebook intensity (Blachino, Przepiorka & Pantic, 2016). It is supported by expert research that involved 82 American participants who used Facebook more than others. The results demonstrated that the participants’ well-being and life satisfaction were lower than those who use Facebook less (Kross et al., 2013; Satici & Uysal, 2015). This might be the result of that some social media users post their best experiences and different events through social platforms, and that makes other users believe they have a better life and are happier than themselves, in turn, this causes a lower personal satisfaction with life (Chou & Edge, 2012) and self-esteem (Denti et al., 2012).

On the contrast of these results that showed both negative and zero relationships between life satisfaction and social media use, interestingly, a study of 2,603 college students in Texas found that there is a positive relationship between life satisfaction and Facebook use (Valenzuela, Park & Kee, 2009). It was explained that this might result in due to the defense mechanism of individuals who realize the first negative result of their Facebook use may differ themselves and claim they are satisfied with their life, and they do not see that as a problem (Blachino, Przepiorka & Pantic, 2016). Direct social network interactions may allow people to feel better in general because people tend to use social media when they feel bad (Kross et al., 2013). Similarly, participants of a qualitative research reported that they use social media when they get frustrated to relax and forget about their work (Wang et al., 2015). Therefore, social media usage can be associated positively to life satisfaction.

In the current study, besides the satisfaction with life scale, a measure of positive effect and negative effect were used to assess participants’ satisfaction with life because positive effect and negative effect are highly correlated with subjective well-being and life satisfaction (Oh,
Ozkaya, & LaRose, 2014). and it has been considered as a crucial predictor of life satisfaction (Fredrickson & Joiner, 2001). In the current study, it was hypothesized that social media use is negatively related with both life satisfaction and positive effect and negatively associated with negative effect. Interestingly, the result of the current study showed that while it does not correlate with life satisfaction, social media is negatively correlated with positive effect with small effect size and positively correlated with negative effect with medium effect size. It can be explained that life satisfaction is considered as a conscious, cognitive judgment of life satisfaction as a whole (Pavot & Diener, 2009) and positive and negative effect are generally conceptualized as emotional responses (Watson et al., 1988). Therefore, the life satisfaction scale is more general and covers whole life, PANAS focuses on emotional responses, and it is more specific than the life satisfaction scale. Prior study is consistent with the current study and has showed that using multiple social media platforms is negatively related to emotional and cognitive outcomes (Wang et al., 2015; Becker, Alzahabi, & Hopwood, 2013; Ophir, Nass & Wagner, 2009). The more constant SM checking is correlated with the lower positive mood (Wang et al., 2015). For example, college students may feel pressure to quickly respond to their social media requests and have a constant connection with their peers (Wang et al., 2015; Ames, 2013). Also, those who use social media mainly as a content may have their mood and well-being negatively affected (Burke, Marlow & Lento, 2010).

One of the reasons that using different social media platforms leads to negative emotions and mood is that being an active user with different social media platforms may result in multitasking between those platforms which is associated with poor cognitive and mental health outcomes (Becker, Alzahabi, & Hopwood, 2013). For instance, multitasking has been found to relate to decreased subjective well-being (van Der Schuure et al., 2015) and higher levels of
anxiety (Becker, Alzahabi, & Hopwood, 2013). Another reason is that each social media tool includes their own unwritten rules and assumptions. Those who use one or two platforms can learn these rules easily and manage those platforms. However, individuals who use many platforms may have difficulties to navigate those different worlds, causing a negative mood and emotions.

It is not clear to say based on cross-sectional, correlational data that whether students who have low self-esteem or negative emotions tend to use social media or intense social media use lead to have negative moods Correlational studies can only examine relationships, not casual directions. Besides, cross-sectional research methods assess social media use and other constructs such as life satisfaction or anxiety at one time only. Therefore, it is recommended that future research should conduct longitudinal research to assess causal direction of social media use and self-esteem, life satisfaction and mood.

In addition to these findings, it was stated that self-esteem has a positive relationship with both satisfaction with life and positive effect. The hypothesis was supported, and there was a strong positive correlation between self-esteem, life satisfaction and positive effect with large effect sizes. This can be explained that life satisfaction, self-esteem and positive effect are significant positive indicators of positive well-being, and negative effect is the negative indicator of positive well-being (Curran, 2012; Swanepoel, Surujlal & Dhurup, 2015). Evan (1994) examined many personality factors’ effect on satisfaction with life, and self-esteem was found that it has a direct effect on quality of life. Further support to Evans (1994) conclusion is found in Diener and Diener’s (2009) article which showed that self-esteem, positive affect and life satisfaction are positively correlated which means that a high level of self-esteem and positive
effect are related to high levels of satisfaction with life. Self-esteem is one of the most crucial correlates of life satisfaction (Adelman et al., 1989; Gilman et al., 2000).

Regarding social media use and demographic features, age was the only predictor demographic variable of social media use. Younger participants scored higher on social media use scale than older participants. It is supported by Pew Research Center (2018) which analyzed a 2,002 sample of 18 years old or older who live in all of the US states. They found younger people tend to use social media tools more than older people. They also found gender differences in using social media and no ethnicity differences. Females tend to use each social media tool more than males. However, the current study did not support it. There were no gender differences on social media use. It can be the result of sample feature because there were more females (N=147) than men (N=41) in the current study, and it may affect the outcome. For future studies, it is recommended to have an equal number of female and male participants.

It was an important contribution of our study that the study evaluated social media broadly -using 8 of the most used social media platforms- to assess the frequency of use instead of using a single platform such Facebook and social media use effects on individuals’ self-esteem and life satisfaction. While more research is needed to make these associations clearer, it is also suggested that individuals with low self-esteem and have negative emotions and those who use a high number of different social media tools may want to decrease their intense social media use, particularly after the study showed that the findings associated with Facebook are more generally applicable as the social media use of young adults has a negative impact on their self-esteem and mood regardless of the social media platform. This is important now and will be more important in the future because using different social media platforms increases significantly among young adults (Pew Research Center, 2018), and it is difficult for them to
decrease the frequency of social media use. Young adults tend to use social media for different reasons as is shown by the current research and previous research (Pantic, 2014). For example, many university students use Snapchat and Instagram for entertainment, maintaining relationships and creating media. Meanwhile, Twitter and Reddit are used to follow news.

Therefore, another potential solution might be to help individuals to manage their social network sites by using educational interventions. This may help students or young adults to decide which social media tools are necessary for them and worthy to use, and which ones are not helpful, in turn, they can decrease their intense usage of social media.

Implications

Theoretical Implications

The study demonstrated that social media use has some negative consequences on young adults. Most of the students reported that they use social media for entertainment; however, findings have also indicated that social media usage is negatively correlated with self-esteem and positive effect. This result is significantly crucial for researchers to examine further the underlying psychological mechanism of social media use. Some effective treatments or prevention methods can be found to aim in coping with social media negative effects on young adults.

This study also presents a picture of social media usage in the U.S context. As social media is an overwhelming trend around the world, it would be beneficial for other countries around the world start to pay attention on social media use and its’ effects on young adults.

Practical Implications-to Educators

Educators and universities, especially the University of Alabama, should consider the study and try to decrease the negative influences of social media on university students. It is
difficult for universities and educators to control the usage of social media by students. One of the ways to do this would be to encourage students to limit their usage social media. Universities could provide more social activities that make them stay away from their social media and have face-to-face communications with their friends. Lee at al., (2010) investigated how internet and face-to-face communication affects the quality of life, and they found that while internet communication is associated negatively with life satisfaction, face-to-face communication has a positive correlation with life satisfaction. Therefore, students should be encouraged to attend more social and outdoor activities such as trekking, climbing or riding bicycles. Another way would be to encourage students to have some hobbies and help them to explore their interests to avoid excessive usage of social media.

Social media can also be used as an online channel for educators to become connected with students outside of the classroom. Students can be motivated to use the advantages of social media such as searching information or social activities and sharing with their friends, group discussions or cooperative learning activities that may be useful for students. As shown by Bartel et al., (2015), people are more likely to use social media as a place of gathering information. A study of 1,920 faculty members from different disciplines in higher education in the US reported that faculty members consider social media sites are valuable for teaching (Moran, Seaman & Tinti-Kane, 2011). The majority of faculty members also reported that social media platforms can be used as useful tools for collaborative learning. It is essential for educators and parents to aware of negative effects of social media use on young adults, and parents and educators should help students to be knowledgeable consumers.

Limitations and Future Research Direction
There were some limitations to this study. A major weakness was that the participants were only selected from a single university in the Southeastern USA. Therefore, findings from the study may not be representative of the undergraduate population in the United States at large. For future research, it is recommended that the participants should be gathered from different universities in different states in the United States to generalize the results to a whole college student population.

Another limitation of this study is the use of self-report measures for data collection. Although self-reporting provides some benefits, such as it time-saving and is allowing for more participants, it may not be useful for internal validity. This study relied on participants’ honesty and integrity. However, when students were asked to report sensitive topics, they may not feel comfortable to reveal their real information.

The sample of the study may have provided a threat to external validity. The majority of participants of the example (78%) were female, and 73% of participants were white. As a result of the sample features, it is not clear to generalize the results for other university samples. For future research, it is recommended that there should be the equal number of females and males and ethnicity groups. In addition, age was used as an ordinal variable in the study, it is recommended for future studies to use age as a continuous variable.

The sample size was one of the limitations. Only 188 students participated in the study. It was not a small sample; however, if more participants took the study, more significant results could have been achieved.

Lastly, the study did not focus on each social media platform separately. It is recommended for future research to look at the differences between using each social media and their effects on individuals. For example, LinkedIn is commonly used for occupational reasons,
and it could provide more positive outcomes than other social media platforms. Snapchat may be used for private conversation with close friends. Many people among young adults maintain their Facebook accounts, but use their Facebook accounts for receiving information from formal groups like universities associated activities. Moreover, Tumblr and Pinterest are more likely popular among young adults with artistic and craft related desires. Therefore, it would be beneficial for future research to examine each social media tools and its effects on individual’s life.

Although, there are some limitations to the current study, there are significant contributions in this study. The study provides a contribution to literature of positive psychology by focusing on the predictors of well-being.

Conclusion

In conclusion, the current study examined the relationship between social media use and self-esteem and life satisfaction among American university students. The study showed that students at the University of Alabama are active users of social media. The most popular social media tools that used by students of the University of Alabama are Instagram and Snapchat. It also indicated that entertainment is the major reason for most of students to use social media. Major findings from the study is that social media use is a predictor of self-esteem, positive effect and negative effect of young adults. It has a negative relationship between self-esteem and the positive effect scale, and a positive relationship with the negative effect scale. Also, there was no relationship between social media use and life satisfaction. Furthermore, the finding indicates that self-esteem is strongly positively related with life-satisfaction and positive effect, and negatively associated with negative effect.
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Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., ... & Ybarra, O. (2013). Facebook use predicts declines in subjective well-being in young adults. PloS one, 8(8), e69841


Sweden's largest Facebook study. (2012).


APPENDICES

Appendix-A

Demographic Questions

1- What sex were you assigned at birth (For example, on your birth certificate)?

Female ( ) Male ( ) Intersex

2- What is your current gender?

Woman ( ) Man ( ) Transgender ( ) A gender not listed here (please specify) ( )

3- What is your age? 18( ) 19( ) 20( ) 21( ) 23( ) 24( ) 25 or older ( )

4- What is your level of school? Freshmen ( ) Sophomore ( ) Junior ( ) Senior ( ) Graduate ( )

5- Please specify your ethnicity (or Race)?

Hispanic ( ) White ( ) African-American ( ) Native American ( ) Asian ( ) Other (Specify)

6- Rank order of following social media tools on order of use (most used item at the top). If you don't use social media, move that option to the top.

Instagram

Snapchat

Twitter

Pinterest

Facebook
Skype

WhatsApp

LinkedIn

Other Specify........

do not use social media(  )

7-Give your reason for using each social media tools (You can choose one or more reason)

<table>
<thead>
<tr>
<th></th>
<th>Entertainment</th>
<th>Meeting new people</th>
<th>Maintain relationships</th>
<th>Social events</th>
<th>Create media content and share opinions</th>
<th>Academicals posts</th>
<th>Following news or politics</th>
<th>Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instagram</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Snapchat</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
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<td></td>
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<td></td>
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<tr>
<td>Pinterest</td>
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<tr>
<td>Facebook</td>
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<td>Skype</td>
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<tr>
<td>WhatsApp</td>
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<tr>
<td>LinkedIn</td>
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</tbody>
</table>
Appendix-B

Social Media Addiction Questionnaire (Hawi, & Samaha, 2017)

This instrument has some questions that show your relationship with use of Social Media (Instagram, Snapchat, Facebook, Twitter, LinkedIn and others).

<table>
<thead>
<tr>
<th>Social media here includes Facebook, Twitter, Instagram, LinkedIn, and the like</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Weakly Disagree</th>
<th>Neutral</th>
<th>Weakly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I often think about social media when I am not using them</td>
<td></td>
<td></td>
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<td>2. I often use social media for no particular reason</td>
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<tr>
<td>3. Arguments have arisen with others because of my use of social media</td>
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<tr>
<td>4. I interrupt whatever else I am doing when I feel the need to access social media</td>
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<tr>
<td>5. I feel connected to others when I use social media</td>
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<td></td>
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<td></td>
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<tr>
<td>6. I lose track of how much I am using social media</td>
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<tr>
<td>7. The thought of not being able to access social media makes me feel distressed</td>
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<tr>
<td>8. I have been unable to reduce my use of social media</td>
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</tbody>
</table>
Appendix-C

Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

Instructions: Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

• 7 - Strongly agree
• 6 - Agree
• 5 - Slightly agree
• 4 - Neither agree nor disagree
• 3 - Slightly disagree
• 2 - Disagree
• 1 - Strongly disagree

_____ In most ways my life is close to my ideal.
_____ The conditions of my life are excellent.
_____ I am satisfied with my life.
_____ So far I have gotten the important things I want in life.
_____ If I could live my life over, I would change almost nothing.
### Appendix-D

**PANAS-GEN (Watson, Clark, & Tellegen, 1988)**

This scale consists of a number of words that described different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally feel this way, that is how you feel on average.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Distressed</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Excited</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upset</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Scared</td>
<td></td>
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<tr>
<td>Hostile</td>
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<td></td>
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<tr>
<td>Enthusiastic</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proud</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Irritable</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Alert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ashamed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attentive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jittery</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afraid</td>
<td></td>
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</tbody>
</table>
Appendix-E

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself.

Read each item and then mark the appropriate answer in the space next to that item.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>On the whole, I am satisfied with myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>At times, I think I am no good at all.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I feel that I have a number of good qualities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I am able to do things as well as most other people.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I feel I do not have much to be proud of.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I certainly feel useless at times.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I feel that I’m a person of worth, at least on an equal plane with others.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I wish I could have more respect for myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>All in all, I am inclined to feel that I am a failure.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I take a positive attitude toward myself.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix-F

IRB Approval

THE UNIVERSITY OF ALABAMA

Office of the Vice President for Research & Economic Development
Office for Research Compliance

July 10, 2018

Alev Guven
Dept. of Educational Psychology
College of Education
Box 870231

Re: IRB#: 18-OR-250 "The Relationship between Social Media Use, Satisfaction with Life and Self-esteem"

Dear Alev Guven:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Your application will expire on July 9, 2019. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Request for Study Closure Form.

Please use reproductions of the IRB approved stamped consent form to provide to your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,