### THE INFLUENCE OF SOCIAL MEDIA ON ADOLESCENT MENTAL HEALTH

by

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#### **Dedication**

I would like to dedicate this to my mother, Evelyn Burks, who is my staunch supporter and ultimate fan. She is the true example of the consummate Educator and lifelong learner. She is a retired Educator of 30 plus years and has earned the respect of all who served alongside her in the field. She opted not to take this journey, but she epitomizes those who are now called Doctor. So, I dedicate this prestigious honor to her.

I would also like to dedicate this research to the parents of all adolescents who are fighting the battle of monitoring and regulating the use of social media in your households. I pray that the data provided will equip you with the knowledge to shield your child(ren) from the dangers of the misuse of the various social network sites.

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If I have seen further than others it is because I stand on the shoulders of giants. ~Sir Isaac Newton

#### **ABSTRACT**

#### THE INFLUENCE OF SOCIAL MEDIA ON ADOLESCENT MENTAL HEALTH

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The purpose of this study was to examine the influence of social media on adolescent mental health. The study was intentional in examining the effects of social media usage on depression, self-esteem, and academic achievement. The research was completed during the fall and spring of 2020 and 2021 with 136 ninth grade students within a large suburban district located in southeast Texas. Students participated in quantitative data collection with the PEW Internet Research Survey, the Rosenberg Self-Esteem Scale, and qualitative data collection in individual interviews. All 136 students completed the surveys and 9 students participated with individual interviews. Frequencies and Percentages, the Chi-Square Test of Independence, the one way ANOVA, and thematic coding were used to analyze the data collected.

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#### CHAPTER I:

#### INTRODUCTION

In 2015, 16.1 million adults in the United States (U.S) suffered at least one episode of depression, which is one of the leading causes of disability worldwide (World Health Organization, 2016). Depression is estimated to affect 10.7% of adolescents aged 12 to 17 (National Institute of Mental Health, 2013). The highest rates of suicide resulting from depression are adolescent age range youth as well (Varnik, 2012). Depression is a combination of biological, psychological, and social factors (World Health Organization, 2016). Prior research has identified media exposures, such as video games, television, movies, and the Internet, to be associated with the development of depression among adolescents (Bickham et al., 2015; Gonzalez et al., 2016; Holfeld & Sukhawathanakul, 2017; Liu et al., 2016; Primack et al., 2009). Social media is also known to be associated with depressive symptoms and a decline in well-being among both adolescents (Pantic et al., 2012) and adults (Kross et al., 2013; Lin et al., 2016; McDougall et al., 2016; Shensa et al., 2016). The present study will be a contribution to former analyses regarding social media influence on the mental health and well-being of today's youth.

#### Research Problem

Adolescent social media use is pervasive and almost universal among U.S. adolescents (Lewis, 2015). The growing phenomenon of social media over the past few decades has given rise to both significant promise and substantial concerns regarding adolescent mental health. Social media refer to online applications in which usergenerated content is created and shared (Kaplan & Haenlein, 2010). Social media has changed the way young people learn, interact with others, and develop essential cognitive and social-emotional skills. Aside from spending time online engaged in homework and classwork, adolescents spend an average of nine hours each day on social media sites

(Common Sense Media, 2015). With the popularity of social media, many studies have explored the negative effects of social media on our lives. In 2007, Boyd and Ellison coedited the first academic research focused solely on social networking sites. Anand, Gupta, and Jain, 2012) examined the impact of social networking sites on the mindsets of adolescents. Teenagers are among the most prolific users of Social Media Sites (Ahn, 2011). Ahn conducted a study that found that youth spent a considerable portion of their daily lives interacting through social media.

The growing concerns about social media use are also contributed to psychological distress and depression in adolescents (Lewis, 2015). The characteristic which has most commonly been studied in relation to psychological distress has been the frequency or amount of use. More frequent use has been associated with negative psychological well-being (Huang, 2010). There is a link between time spent using social media and mental health issues, such as depression and anxiety (Booth, Coyne, Rogers, Stockdale, & Zurcher, 2020).

A critical review completed by Verduyn (2017) contained research investigating the relationship between social media and subjective well-being. Subjective well-being refers to the attitudes towards the quality of one's life (Veenhoven, 1991). Researchers with Pew Research Center interviewed a 2014-2015 sample of U.S. adolescents who reported that frequently using a variety of social media sites had a negative effect on their well-being. This research, as it relates to well-being, focused on the areas of adolescent depression and adolescent self-esteem. Passive social media use, monitoring the posts on other people's pages, may make an individual unhappy due to social comparison and envy. In contrast, actually producing messages can make an individual happy through building social connectedness (Verduyn et al., 2017). Negative or positive use is a component of subjective well-being (Diener et al., 2009). Several review studies

commonly suggested that social media use, especially passive use, can make an individual unhappy through social comparison.

A national survey demonstrated that adolescents who use social media more than two hours a day are likely to report mental health problems, including high levels of psychological distress and suicidal ideation (Sampasa-Kinyanga & Lewis, 2016). Young people with lower life satisfaction and contentment tend to use media more often than others (Roberts & Foehr, 2008). In a 4-year longitudinal study with adolescents, Kais and Raudsepp, 2019, founded that compulsive Internet use predicted mental health problems, especially for female students. Additional researchers, Ciarrochi et al., (2016) noted adolescents with higher levels of daily stress often sought social support through Facebook. This perceived support is associated with decreased depressive mood; seeking but not receiving social media support exacerbates depressive symptoms (Frison & Eggermont, 2015). Furthermore, researchers (Beyens, 2016; Morin-Major, 2016) noted that having too many Facebook friends and the fear of missing out resulted from overusing social media and was also associated with stress.

Wood (2019) examined the social comparison theory that was related to competition or comparing their own characteristics to those of others, that can influence an individual in several ways (e.g., evaluation of oneself, influence on self-esteem/self-confidence, and efficient decision making). People usually compare themselves with others when they are confronted with information about other people. With the popularity of social media sites, many people acquire or are exposed to information of others on social media sites, which implies that people are likely to engage in social comparison behavior on social network sites. The act of social comparison poses a threat to young adult social media users. Increased social comparison among social media users has been linked to diminished self-esteem and self-image (Haferkamp & Karmer, 2011).

Social media sites such as Facebook provide the best environment for social comparison. People have more time to present themselves in more ideal ways than reality would dictate (Verduyn et al., 2017). Although previous studies have focused on Facebook, other social networking sites contain comparisons as well. Instagram is an image-based social networking site where users post photos and videos to their own profiles (Sundar, 2008). The use of image-based social media is negatively associated with loneliness and can bring about negative emotions through social comparison (Pittman & Reich, 2016).

Social media exerts increasingly more influence on everyday life (Ahn, 2011). Social media use also has a negative effect on student achievement (citation). However, the research on social network sites and academic achievement are minimal when compared to social capital and psychological well-being. Karpinski (2009) found a direct correlation between Facebook users and grade point averages (GPAs). He concluded that teens spend a large amount of time on Social media sites and less time studying. Also Karpinski (2009) stated that social media has a negative association with students' academic performance which is much greater than the advantages derived through the use of social media platforms. Additionally, findings indicated a strong negative relationship between Facebook use and grades (Ahn, 2011). Two competing perspectives offer explanations on how Social media affect student's academic performance. One example is that the role of social media sites are portrayed in a positive light, as students formulate group discussions to exchange ideas and communicate to their teachers, teachers can also share course-related materials with their students and create student groups to collaborate on projects (Salvation & Adzharuddin, 2014).

However, an alternative view casts the interaction between social media and academic performance in a negative light. Social Networking Sites have no academic

relevance since most of the users use it for socializing purposes. Hargittai & Hsieh (2010) determined that neither social media sites usage intensity nor social practices performed on these sites are systematically related to students' academic performance. In addition, Akyildiz and Argan (2012) concluded that Social media site users spend more time socializing than learning. The authors noted that excessive use of social media reduces students' academic performance because time meant for studies is used on non-academic issues like chatting and making friends. Social media tracks users' behavior in an effort to induce the addiction in a vicious cycle (Girish, 2020). It is imperative to study the influence of social media on mental health and well-being to expand awareness of the ongoing mental health issues among our youth, and how to help address these concerns.

## Significance of the Study

The significance of this study is based on the potential to inform professionals about the relationship between social media usage and the positive or negative effects of mental health among high school students. Social media has changed the way young people learn, interact with others, and develop essential cognitive and social-emotional skills (Bryant, 2018). Adolescence is a critical stage in which teens begin to develop their own identity and create meaningful relationships. Social media has had a profound effect on adolescent development and has provided new opportunities as well as challenges today than ever before (Shapiro & Margolin, 2014). Students engaging in the various forms of social media have experienced negative emotional and mental health effects (Strickland, 2014). The Diagnostic and Statistical Manual of Mental Disorders has also acknowledged the potential negative impact of addiction on Internet-related activities on the well-being of an individual. There are many signs and symptoms of depression among today's youth who engage in social media. Depressed mood, negative emotions, loneliness, and unhappiness are symptoms found in those who engage in social media

(Gans, 2020). Forums such as Facebook and Instagram provide fertile ground for said social comparison on social media (Appel, Crusius, & Gerlach, 2016). These sites depict people who appear to have better livelihoods than most. The additional social media platforms that adolescents engage in more frequently include Snapchat, Twitter and Tumblr (Rideout, 2012). It was anticipated that through a better understanding of the social media sites used by adolescents, the frequency of adolescent participation with social media, the reasons for the participation with each social networking site, and the adolescents' perceptions of their self-esteem, the researcher would be able to analyze the impact social media usage has on the development and manifestation of high school students' self-esteem.

The goal of educators is to produce students who are productive members of society and who are emotionally and mentally stable. Additionally, the study will provide an increased understanding of students' purpose and patterns of social media usage, as well as students' self-perceptions of their self-esteem. The results of the study may assist educators, clinicians, and parents in supporting adolescents in using social media for a positive purpose and in a mindful manner (Radovic, Gmelin, Stein, & Miller, 2017).

#### **Research Purpose and Questions**

The purpose of this study will be to examine the influence of social media use on adolescent well-being and academic performance. The following research questions will guide this study:

R1: What are students' perceptions of their social media usage?

R2: Is there a relationship between social media usage and depression?

R3: Is there a relationship between social media usage self-esteem and well-being?

R4: Does social media usage have an influence on academic achievement?

R5: What do adolescents think about social media and its relevance to mental health and well-being?

## **Definitions of Key Terms**

Academic Performance: Academic performance or achievement is the outcome of education, the extent to which a student, teacher or institution has achieved their educational goals (Annie, Howard, Mildred, 1996).

*Cyberbullying*: Willful and repeated harm inflicted through the use of computers and other electronic devices (Hinduja & Patchin, 2010).

*Depression*: A common mental disorder that causes depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012)

*Emotional health*: The ability to express feelings that are based upon the information you have processed (National Institute of Mental Health, 2013).

Envy: negative emotion following social comparison with others deemed as superior.

*Mental Health*: Is the ability to process information. This includes psychological and social well-being which affects how we think, feel, act, and determines how stress is handled (National Institute of Mental Health, 2013)

*Self Esteem*: Is a person's positive or negative view of the self, the extent to which an individual views self as worthwhile and competent (Coopersmith, 1967).

*Social Comparison*: First proposed in 1954 by psychologist Leon Festinger and suggested that people have an innate drive to evaluate themselves, often in comparison to others, particularly comparisons with idealized images of people. The evaluating of one's abilities and opinions through comparison with others (Festinger, 1954).

Social Media: Web-based services that allow individuals to (a) construct a public profile,

(b) communicate with a list of other users whom they share a common connection, and

(c) view and peruse their list of connections and those made by others in the system (Boyd & Ellison, 2007).

Social Media usage: Social media usage is defined as online behaviors that facilitate "direct exchanges" among users. Such behaviors include liking, commenting, sending messages, and otherwise engaging with other users (Verduyn et al, 2017).

Sociometer Theory: A psychological perspective that proposes that self- esteem is a gauge of the degree to which people perceive that they are relationally valued and socially accepted by other people (Leary, 1995).

*Well-Being:* When individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge (Daly, Dodge, Huyton, & Sanders, 2012).

#### **Conclusion**

This chapter provided an overview of the need for the study, the significance of the study, research purpose and questions, and key definitions pertaining to this study. The present study will provide a deeper dive into the rising concerns of the influences that social media has on adolescent mental health, depression, academic performance, and adolescent perspectives. The next chapter will be a literature review of the major topics that will encapsulate this study.

#### CHAPTER II:

#### **REVIEW OF LITERATURE**

Throughout the vast amount of literature and research related to social media and the effect it has on adolescent behavior, there are findings that both support and disprove the idea that there is a consistent connection between the two. The purpose of this study was to examine the relationship between social media, mental health, and academic performance, in an effort to analyze how social media affects children between the ages of 14-15. This chapter will present research regarding adolescent social media use. Adolescent social media use is pervasive, and almost universal among United States adolescents. The trend in the overuse of social media is growing among teens. To address these areas, this literature review will include: (a) depression (b) self-esteem and well-being, (c) academic performance, and (d) adolescent perspectives. The research that was reviewed included both qualitative and quantitative studies.

#### **Adolescent Depression**

This section provides an overview of previous research that pertains to depression, the use of social media and the relationship between the two. The diagnosis of depression has become a growing concern. The term "Facebook Depression" has become a mass media headline suggesting detrimental effects of social networking sites (Guernsey, 2014). The need to conduct research to determine the extent of differences between social media use and depression will result in mental health professionals being better prepared and more equipped to address situations that involve individuals with depression. If depression is left untreated, this can lead to increased distress or even death.

In an earlier study at the University of Wisconsin-Madison, Jelenchick, Eickhoff, and Moreno (2013), surveyed 190 college students. The purpose of this study was to

evaluate the association between social network site use and depression. Participants were asked to complete a Patient Health Questionnaire (PHQ-9) in the form of an online survey. The PHQ-9 is a diagnostic tool that is used to screen for depression. The method was used to collect data about social media use and habits through the use of a survey sent via text message, for one week. The results of the PHQ-9 were divided into three categories: (a) none, (b) mild, and (c) moderate to severe. The information gathered from each participant ranged from 49% none, 35% mild, and 14% for moderate to severe. Based on the data acquired from the sample the average report time spent on social media was 28 minutes. The results from this study found no evidence of a relationship between social media use and clinical depression (Jelenchick, 2013).

The growing concerns about social media use are contributing to psychological distress (Sampasa-Kayinga & Lewis, 2015). A better understanding about how depressed adolescents use social media is important to informing guidance on its use. In a qualitative study by Radovic et al., (2016), the authors examined descriptions of social media use among 23 adolescents (18 female, 5 male) who were diagnosed with depression to explore how social media use may influence psychological distress. As part of a larger study on adolescent depression, a convenience sampling strategy was used to recruit adolescents (ages 13 to 20) diagnosed with depression and currently receiving treatment. Thirty-one adolescents completed the interest form about the study, 8 were not able to be reached. Verbal consent was obtained from parents and adolescents who were 18 and older. A 30-60 minute semi-structured interview was used to gather information about social media use characteristics, and positive and negative experiences with social media. Adolescents were also asked to provide information regarding demographics including age, gender, race, length of depression treatment, and primary device for internet use. Data and all interviews were conducted over the phone (N = 17)

or in person (N = 6) by a researcher in Adolescent Medicine. The interviews were audiotaped and transcribed verbatim. The researcher removed any participant identifiers. Questions related to social media use were adopted from Pew Research studies on adolescent online behavior (Lenhart &Madde, et al., 2013). Data obtained from this group used social media more frequently and had a larger friend network. Adolescents were also friends with more strangers not known to them. These characteristics might suggest that this group of depressed adolescents would be engaged in more risky online behavior; however, this was not the case. The researchers found that adolescents used social media for purposes common to other adolescents without depression (e.g., entertainment, seeking a social connection, and distractions. Adolescents also had negative experiences such as cyberbullying and negative feelings due to social comparisons.

Woods and Scott (2016) conducted a study to examine how social media use is related to sleep quality, self-esteem, anxiety, and depression. This study was done to analyze the impact that social media has on adolescent well-being. The study also measured adolescent social media use, specifically night time use and sleep quality, and levels of anxiety and depression. Evidence is increasing in support of a link between social media use and various aspects of adolescent well-being, including sleep and mental health.

The study also examined how adolescent social media use relates to psychological well-being. Four hundred sixty-seven Scottish secondary students, between ages 11 and 17, completed questionnaires hosted by qualtrics.com. Participants provided consent in advance with an opportunity to withdraw their child at any time. Poor sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI; Buyse, Reynolds, Monk, Berman & Kupfer, 1989). The measure consisted of 19 self-rated items with scores from

0 to 3 points. Anxiety and Depression was assessed using The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snath, 1983). Two subscales consisting of 7 items scored from 0 to 3. The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) was used to assess trait self- esteem. Participants rated 8 statements on a 4-point Likert scale from "strongly disagree" to "strongly agree". The researchers made a slight modification to the Social Integration and Emotional Connection subscale of the Social Media Use Integration Scale (Jenkins-Guarnieri, Wright-Johnson, 2013) to assess emotional investment in social media. Overall social media use was measured using 6 question survey, and a 7 question survey on night time use.

Findings contained the overall use, nighttime-specific use, and emotional investment were each associated with lower self- esteem. Each variable was also associated with poorer sleep quality and higher levels of depression and anxiety. Findings further depicted the timing of social media use-specifically at bedtime and during the night, and emotional investment in social media were both associated with poorer sleep quality, lower self-esteem, and higher anxiety and depression levels.

In a similar study focused on Facebook use, envy and depression was conducted in 2015. The study included 736 college students. The average age of participants was 19. The participants completed a survey that inquired about the average number of hours per day that spent on Facebook (Tandoc, 2015). The survey also included a scale that was developed to measure Facebook envy by using a 5-point Likert scale to rate several questions. The Center for Epidemiologic Studies Depression Scale was used to measure depression. The results contained participants who used Facebook for an average of 2 hours per day. From data that were gathered, no direct relationship was found between the amount of time spent on Facebook and depression (Tandoc, 2015). However, a p-value of <.01 revealed that those who used Facebook more frequently, experienced

higher levels of envy. Furthermore, a p-value of <.001 showed that individuals who experienced higher levels of envy, also have more symptoms of depression. This study concluded that even though the use of Facebook should not be seen as the cause of depression, it can lead to depression. The envious nature of individuals should be viewed as the reason for the negative emotions. If envy is not present, its use has the potential to decrease the level of depression by creating a gratifying experience.

In a similar study, Lin (2016) focused on the amount of time and frequency individuals spent on social media outlets. Participants were recruited by random digit dialing and address-based sampling. The participants were asked to complete on online survey, which resulted in a sample size of 1,787 adults between the ages of 19 to 32 who resided in the United States. The survey asked participants about the frequency per day and amount of times per week they are on social media. They participated in the Patient-Reported Outcomes Measurement Information system (PROMIS) Depression Scale, which asked participants if they have felt hopeless, worthless, helpless, or depressed in the past 7 days. The responses were scored on a 5 point Likert Scale ranging from "1" (never) to "5" (always) and were used to determine the level of depression. The results revealed that the greater the frequency, as well as the amount of time spent on social media, the more an individual is likely to be depressed. This could indicate that more frequent use of social media leads to depression. However, it could potentially reveal that individuals who are depressed and possess low self-worth, resort to using social media to gain validation.

Primack (2017) conducted a study from the University of Pittsburgh, School of Medicine. This study is similar and was completed in conjunction with Lin's (2017) previous study. Both studies used the same population and methodology. However, a noteworthy difference is the focus on determining what the effect was of the use of

multiple platforms on depression (Primack, 2017). The number of individuals who used two or more social media platforms increased significantly from 42% in 2013 to 52% in 2014. This prompted the need to further consider what effect the use of multiple platforms may have on depression. Primack (2017) and Lin (2017) revealed a linear association between the number of platforms used and depression, which showed a strong positive correlation among these two variables. The more social media platforms that an individual used, the likelihood of them having depression increased. The cross-sectional study data were unclear whether using multiple social media platforms is a causal factor of depression or if a person who has depression leads individuals to use more social media platforms.

As portrayed in the studies mentioned above, evidence is increasingly supporting a connection between social media use and various aspects of adolescent wellbeing, including sleep and mental health. It is critical to analyze whether the same pattern is repeated when studying the relationship between social media and self-esteem. The next section will examine how adolescent students perceive their experiences with social media and their self- esteem.

#### **Self-Esteem**

Humans are thought to possess a fundamental drive to compare themselves with others. Social networking sites, such as Facebook, provide a plethora of opportunities for social comparison. Vogel et al. (2014) conducted a study using a correlational and experimental approach on the impact of chronic and temporary exposure to social comparison information of self-esteem. The methodology consisted of gathering data from 145 undergraduates (106 female) and 128 undergraduates (94 female) from a Midwestern university who participated in exchange for course credit. The participants were engaged in two studies. The initial study included a correlational approach to

determine whether people who have greater exposure to upward social comparison via social networking sites have lower self-esteem (145 students). The second study used an experimental approach to examine whether temporary exposure to social media-based social comparison information would impact self-esteem and self-evaluation (128 students). Data in the initial study were collected through the use of surveys and questionnaires related to frequency of use, and questions regarding social comparison (e.g., upward and downward comparison target). An example of a question included: "When comparing yourself to others on Facebook, to what extent do you focus on people who are better than you?"

To assess self-esteem, the Rosenberg Self-Esteem Scale was used. Data collection in the second study was completed in a lab setting and was experimental in nature. Participants read one of four fictitious profiles on Facebook. Immediately after viewing the profiles, participants rated their state self-esteem and also made relevant trait-based evaluations of themselves. Findings concluded that upward social comparison underlies the relationship between Facebook and well-being. The initial study included people who had the most chronic exposure to Facebook (e.g., used it frequently) had lower self-esteem. The secondary study is consistent with prior research by Motl and DiStefano (2002) which revealed that larger self-discrepancies following exposure to the upward comparison targets rather than the downward exposure.

In a similar study conducted by Vogel et al., (2019) the Social Comparison Orientation (SCO) was explored. Social networking sites provide information about others that can be used for social comparison. The authors examined the relationship between SCO, Facebook use, and negative psychological outcomes. Facebook was chosen because it was the most popular and researched social networking site and most theoretically relevant to social comparison. Participants included 145 undergraduate

students from a Midwestern university in the United States who received course credit for participating. The sample consisted of 64.1% White, 22.8% Black, 4.1% Asian, 1.4% American Indian or Alaskan Native, 4.8% mixed race, and 2.8% unknown. The participants completed a series of questionnaires as part of a larger study involving social media. To measure Facebook use, two constructs were assessed: (a) frequency of use and (b) psychological involvement. To assess frequency of Facebook use, participants answered questions derived from Rouis et al. (2011). Participants indicated their agreement with the items using a 5-point Likert scale. To measure psychological involvement in Facebook, participants completed a 6-item measure (Andreassen, Year) designed to assess the extent to which Facebook use interferes with everyday life. Participants indicated their agreement with the items using a 5-point Likert scale. The measure of frequency and involvement were strongly correlated (r = .65, p<.01) and showed strong reliability (x = .89). Therefore, they were standardized and combined into a composite Facebook use score. To assess individual differences in SCO, the Iowa-Netherlands Comparison Orientation Measure (INCOM). Participants indicated their agreement with 11 statements on a 5 point Likert scale. The hypothesis was supported. SCO was positively correlated with Facebook use (r = .20, p = .02). These results contained individuals who reported being more likely to habitually compare themselves to others in everyday life used Facebook more frequently.

In a similar study by Nesi and Prinstein (2018), the authors examined social comparison and interpersonal feedback seeking behaviors. The researchers conducted a study that analyzed whether these constructs were a predictor of depressive symptoms. The study consisted of 619 students in Grade 8 and Grade 9 who were in low to middle socioeconomic status (SES). Participants were between the ages of 12 and 16. All students were recruited using parental consent and adolescent assent and they were

compensated with \$10 gift cards. All measures were self-reported and administered during the school day using computer-assisted self-interviews (CASI). Participants' SES was computed by using the US Census data. The Short Mood and Feelings Questionnaire (SMFQ; Angold et al. 1995) was used to assess depressive symptoms. Sociometric nomination procedures were used to measure peer-reported popularity. In conclusion, the study provided preliminary evidence that technology based social comparison and feedback seeking behavior may be associated with depressive symptoms. However, no strong correlation exists between social comparison and low self-esteem.

Andreassen et al. (2016), conducted a study regarding addictive use of social media, narcissism, and self-esteem to determine the relationship between social comparison and self-esteem. A cross-sectional convenient sample of 23,532 Norwegians completed an open web-based survey including the Bergen Social Media Addiction Scale (BSMAS), the Narcissistic Personality Inventory-16, and the Rosenberg Self-Esteem Scale. Individuals were invited to participate anonymously. The directions and information about the study was included in the link to the survey. They were informed that they would receive immediate feedback on their score related to their social media habits. The findings contained those who were young, women, not in a relationship, a student, and less educated, reported higher scores on the social media addiction scale. The researchers further suggested that women developed more addictive behaviors, and also in line with previous research, younger people were more affected by addictive behaviors than older people. The researchers also concluded that self-esteem was negatively related to addictive use of social media. This is also in line with previous research that people use social media in order to obtain a higher self-esteem and to escape from feelings of low self-esteem.

Social media and self-esteem were further explored by Cramer et al. in a study conducted in a large University in the Midwest. The researchers examined the impact of social comparison on Facebook, a social media environment where users can present optimized versions of themselves. Social comparison motivations were explored regarding self-esteem and the consequences of social comparison. The Iowa-Netherlands Comparison Orientation Measure (Gibbons & Buunk, 1999) was adapted to gauge social comparison activity on Facebook. The researchers obtained participants' perceptions of how often social comparison occurred on Facebook in addition to their actual social comparison activity on a social media site. An electronic survey was distributed via email to students in undergraduate communication courses at a large public university in the Midwest. The Rosenberg Self-Esteem Scale was used to assess self-esteem. Two hundred sixty-seven individuals completed the survey. A majority of the participants reported daily Facebook use, averaging 2.92 hours in a day. Participants checked the social media site about ten times a day (M110.23, SD = 11.89). When asked how often they posted content (photos and text) to Facebook, 32.5 % reported sometimes, followed by rarely (29.6%), and often (17.9%).

There was no significant relationship between self-esteem and social comparison activity on Facebook detected, r(249) = 0.05, indicating self-esteem level was not related with the extent to which individuals engaged in social comparison on Facebook. Individuals with low self-esteem were more likely to perceive increased social comparison on Facebook (r = -0.13; p = 0.023) even though differences in actual social comparison activity were not evident. Self-esteem was not associated with patterns of Facebook usage, including posting, r(271) = -0.05, ns, and reading messages, r(271) = -0.02, ns, as well as general activity, r(270) = -0.07, ns.

According to Gonzalez and Hancock (2011), previous work has also addressed the role of Facebook, the ability to socialize, and the role that socializing online plays in supporting self-esteem and various forms of social capital. In this study, Gonzalez and Hancock (2011) solicited 63 students (16 males, 47 females) from a large Northeastern university. The study consisted of three conditions: (a) exposure to a mirror, (b) exposure to one's own Facebook site, and (c) a control condition in which participants used the same room without any treatment. Participants were randomly assigned to one of the three conditions, with a total of 21 participants taking part in each of the three conditions. In the Facebook stimulus condition, participants were instructed to click on the "profile" tab. The profile page contained information about the individual users. The participants were asked to look through any of the tabs on that page. They were given no specific instructions about making changes to their profile during the study. After being on the site for about 3 minutes, the participants were asked to complete a survey while looking at their profile page. A linear contrast analysis was performed to test the hypothesis that Facebook had a more negative effect on self-esteem. The results of this test were not significant, F(1,60) - 0.95, p = 0.33. To test the hypothesis that Facebook has a positive analysis, a different linear contrast analysis was performed. This contrast analysis was significant, F(1,59) = 8.60, p < 0.01, n = 0.13, demonstrating support for and suggesting that Facebook has a positive effect on self-esteem relative to traditional self-awareness stimulus.

As past and current research consistently shows, social comparison has a direct negative influence on self-esteem. Self-esteem, is affected by the comparison with others and by whether we are accepted by them or not. Social media enable their users to create spaces to highlight social comparison with others. Previous researchers have addressed the role of Facebook and the ability to socialize, and the role that socializing online plays

in supporting self-esteem and various forms of social capital (Gonzales & Hancock, 2011). The authors suggested that the frequency of use and the activity engagement have a negative effect on self-esteem. The next section will examine how social media has an impact on academic performance.

#### **Academic Performance**

Because of the social media platform's widespread adoption by college and school-aged students, there is a great deal of interest in how Facebook use is related to academic performance. Students are often confronted with technological distractions. One potential distraction is social media (Kaplan & Haenlein, 2010). Flanigan and Babchuk (2015), conducted a pilot study on the impact that social media may have on academic performance among young students inside and outside of the classroom. The participants of the study reported that the use of social media during a variety of academic activities, diminishes achievement, increases the time it takes to complete tasks, and reduces how much information students retain from study and lecture sessions. The researchers also provide future implications for educators.

The purpose of the phenomenological study was to explore how adolescent university students perceive their experiences with social media as it related to academic tasks. The study consisted of gaining approval from the university's Institutional Review Board to recruit participants from undergraduate classrooms on campus. Purposeful, criterion-based sampling was utilized to find participants who had experience using social media while engaging in academic tasks in and out of the classroom setting. Each participant received a \$15 gift card for their participation in the survey. Ten undergraduate students (M = 19.7 years old) at a large, public Midwestern University in the United States participated in this study during the 2014 spring semester. A face-to-face interview protocol consisting of 12 open-ended questions was used. The majority of

participants were White, non-Hispanic (n = 7) and also reported as having a cumulative GPA above 3.0 on a 4.0 scale. Data were collected from the interviews was recorded and transcribed by a primary investigator. Researchers concluded that university students have strong views on the impact of social media on tier academia. The researchers described how habitual use of social media disrupts their lecture learning, infiltrates their homework and studying experiences, and negatively impacts their academic achievement.

In a similar study that analyzed the relationship between social media and academic performance, Junco (2011) examined whether too much time spent on Facebook had a negative impact on academic performance. The study investigated frequency of Facebook use and frequency of engagement in various academic tasks. The selected students were enrolled in a 4- year university in the northeastern United States. They were sent a link to a survey using Survey Monkey to answer questions about time spent on Facebook. Analyses were conducted to test whether the data met the assumptions regarding time spent on social media and GPA. Correlations were examined to evaluate the relationship Facebook frequency of measures and time spent preparing for class. The Predictive Analysis Software estimation procedure was used to plot linear and quadratic functions and the correlation between GPA and fb time. Results from this study contained time spent on Facebook and checking Facebook were negatively related to overall GPA, while time spent on Facebook is slightly related to times spent studying. The results will also help inform not only interventions for students who exhibit problem behaviors, but also interventions to support students learning and engagement.

When investigating the effects of social media usage and being able to multitask, Lau (2016) conducted research on the link between social media usage, multitasking, and its effect on academic performance. Three hundred forty eight undergraduate students

found that using social media for academic purposes was not a good predictor of academic performance. The data were collected by sending mass emails to all undergraduate students at a University in Hong Kong with a voluntary invitation to participate. Academic performance was evaluated with a single item and the participants were required to provide their cumulative GPA. The Media Usage Subscale of the Media and Technology Usage and Attitudes Scale developed by Rosen et al. (2013) was used to evaluate social media usage for nonacademic purposes. Findings contained social media use and academic performance that negatively predicted academic performance. The emergence of new social media technologies is inevitable. It is imperative to be aware of how these findings shed light on understanding how social media influence academic performance and pave the way for future research.

In an explorative study involving Facebook use and its relation to academic performance as measured by Grade Point Average (GPA) and hours spent studying per week, an attempt was made to examine whether differences exist in the academic performance of Facebook users and nonusers. Data were collected from 102 undergraduate and 117 graduate students at a large public Midwestern university. The sample consisted of 87 male participants, and 132 female participants. The majority of participants identified as Caucasian with the next largest group identified as Asian. Other ethnicities represented included African American, Hispanic, and Biracial. A survey was developed containing five sections of closed-response and open-response questions using a Likert scale. Participants were recruited by visiting scheduled classes and asking for volunteers to complete surveys in the summer and fall quarters of 2008. Permission from instructors was obtained prior to visiting classes. The methodology consisted of quantitative and qualitative data analyzed using Statistical Packages for the Social

Sciences (SPSS) and the multivariate analysis of variance (MANOVA), which was used to examine the relationship between Facebook use and academic performance.

The majority of Facebook users reported that their academic performance was not impacted by Facebook because the social media site was not used frequently enough. The students emphasized that academics were a priority for them. For the Facebook users who reported an impact, they indicated that there was a negative impact due to procrastination and poor time management. They stated that they put off studying while engaging with Facebook. The main finding was that there was a significant negative relationship between Facebook use and academic performance.

Additionally, in a similar study regarding Facebook use and academic performance, a small number of prior studies examined the relationship between Facebook and grades. (Pasek, 2009) examined and found that there was no significant relationship between Facebook and academic performance. The 3,866 students who were surveyed attended a residential institution in the northeastern United States. Each student gave the researcher permission to access their academic records to obtain their overall grade point averages. Descriptive statistics were run to show the demographic characteristics of the sample. Correlations were examined to evaluate the relationship between Facebook frequency-of-use measure and time spent preparing for class. The research questions were answered using linear regression analyses were conducted to determine which variables predicted overall GPA and time spent preparing for class. High school GPA was included as both a control variable and a predictor on the dependent variable. The linear regression predicting overall GPA using Facebook time was significant. In this model, high school GPA, checking to see what friends were up to, sharing links and having a parent with an advanced graduate degree were all positive

predictors of overall GPA, while Facebook time, being African American, posting status updates, and being male were negative predictors of overall GPA.

As portrayed in the above studies, social media has a negative effect on academic performance, considering the time students spend engaged in use. It is critical to analyze whether the same pattern is repeated when analyzing the parent point of view and perspectives on their child's social media use. The next section will examine the opinions and perspectives from an adolescent point of view.

### **Adolescent Perspectives**

Botou and Marsellos (2018) conducted a study the perceptions of teenagers about social networks and investigates whether Facebook, as a representative of social networks, has impact on teenager's self-esteem. The study was conducted among students 16 years of age, 62.9% boys and 37.1% girls. The students completed the Self Perception Profile for Adolescents (Harter, 1988). The survey was conducted in January 2018 at the Zirdis Private School. The private school was selected because the students come from a good social, financial and education level, and they own their own personal computers, smartphones, tablets, and internet connection. Participation was voluntary. The goal was to examine Facebook influence in teenagers' self-esteem, whether teenage students used Facebook safely and whether the time spent by teenaged students on Facebook was against their personal relationships. The research data was processed using 25 analysis from SPSS. There was no positive correlation between Facebook use and self-esteem of the teens who participated in the survey. However, authors determined that teens participated in social media to establish and maintain relationships with close friend, peers, and the opposite sex. The number of "likes" was positively correlated with relationships with the opposite sex.

In a qualitative study, Burnette, Kwitowski, and Mazzeo (2017), explored how young adolescent females used social media and their related body image perceptions and experiences. This study used six focus groups of early adolescent girls between ages 12 to 14. Thematic patterns were identified in the data. Each group had one facilitator and one note-taker. The leaders used a semi-structured interview schedule. Questions were based on literature and used an inductive approach. 38 girls, 19 in Grade 7 and 17 in Grade 8. The sample identified as 86.1% White, 13.9% Black, 5.6% Hispanic, and 2.8% Asian. Results contained girls who had some appearance concerns regarding social comparison, particularly with peers. Results also contained girls who displayed high media literacy, an appreciation of differences, and confidence, strategies that appeared helpful in mitigating the potential negative association between social media exposure and body image. Additionally, both parental involvement and school environment were important factors in the relation between social media exposure and appearance concerns.

Another impactful qualitative study was conducted by Khaled El Eman and MajaVan der Velden (2013) to understand how chronically ill teens manage their privacy on social media sites. The sample consisted of teenage patients between the ages of 12 to 18 years old. There were 11 girls and 9 boys. No detailed questionnaire was used. Semi-structured interviews based on a set of primary and secondary questions. If the patient mentioned any facet of social media (e.g., Facebook, YouTube, or Twitter), they were asked the third question about sharing personal health information. Results showed that teenage patients did not disclose their personal health information on social media, even though the study found a pervasive use of Facebook. The teens only shared their upward comparison of their social lives and not their diagnosis and treatment. Social media allowed the teen patients to be "regular" teenagers.

Barry et al. (2017) conducted a study investigating adolescent and parent reports of social media use and its relation to adolescent psychological adjustment. The study sample consisted of 226 participants ranging from 14 to 17 years of age. The data analyses involved matching parent-adolescent dyads with survey data. The adolescents completed a survey developed for this study on their social media use, which social media they used most often, and the frequency that they checked social media. Parents completed a similar survey that assessed their perceptions of their child's social media use. The researchers concluded that social media activity (i.e., number of accounts and number of times checking social media) was associated with the fear of missing out and loneliness, as well as with anxiety and depression.

Additionally, Dunn, Kim, and Poucher (2021) conducted a qualitative study of Social Media and Electronic Communication among Canadian Adolescent Female Soccer Players. The study consisted of athletes, parents, and coaches from one soccer organizations. Each one participated in semi-structured interviews discussing their use of and their perspectives on social media use. The findings consisted of four themes (a) friendships and trust with teammates; (b) athlete, parent, and coaches' perspectives of social media; (c) uses of social media and electronic communication; and (d) the development and perception of subgroups. The implications for coaches, parents and athletes, included developing policies for the use of social media and electronic communication in sports settings. Also, for athletes to engage in open communication about the uses of social media.

#### **Theoretical Framework**

Leon Festinger (1965) gave substantial exploration of his social comparison theory on his book entitled "Social Comparison Processes. He explained his various hypotheses. His first hypothesis stated that "there exists, in the human organism, a drive

to evaluate his opinions and abilities". People are driven to acquire a precise assessment of themselves discerning their abilities and opinions in comparison with individuals around them. The social comparison theory and its subsequent studies reported that comparing with others can influence an individual in several ways (e.g., evaluation of oneself, influence on self-esteem/self-confidence, and efficient decision making) and people compare with others when they are confronted with information of others. With the popularity of social network sites, many people acquire or are exposed to information of others on social network sites, which implies that people are likely to frequently engage in social comparison behavior on social network sites. People get a sense of validity and cognitive clarity by comparing themselves in significant domains against an objective benchmark provided by the individuals they are comparing themselves with. Every human being has the ability to form his own opinions and to confirm these, as in the case of a person who evaluates his writing ability by comparing himself with a more experienced writer. How close this person gets to the experienced writer is the basis of evaluation of his writing ability.

Festinger's second hypothesis states that "people evaluate their own opinions and abilities by comparing respectively with the opinions and abilities of others to the extent that objective and non-social means are not available". If the actual or physical setting in which someone can compare his opinions and abilities with is unavailable, this person then tends to infer a subjective opinion. According to Festinger's Social Comparison Theory, people who compare themselves with those who are similar to them typically produce accurate appraisals of their capabilities and beliefs. Comparisons are more sensible when the comparison target has the same aspects, such as gender or age, with the person making the comparison. Given this study's examination of the relationship

between social media and mental well-being, Festinger's social comparison theory will be used as the framework from which the findings will be centered.

## **Summary of Findings**

Current research contains social media information that has a direct negative influence on self-esteem and adolescent depression (Sampasa-Kayinga & Lewis, 2015). Engaging in social comparison on the various social media platforms has negatively impacted the mental and psychological health of adolescents. Teens who have frequent exposure to social media prove to have lower self-esteem than their counterparts who use social media less or not at all. Findings include social comparison as the act that directly affects self-esteem. Low self-esteem was negatively related to the addictive use of social media in girls. The girls who showed the more addictive behavior to social media, had lower self-esteem than boys. Adolescents living with depression who use social media had poor sleep quality and high levels of anxiety and depression (Radovic et al., 2016). The poorer the sleep quality, the higher the levels of depression and anxiety (Jenkins, 2017).

Teens and parents also concluded that the amount of time their children spent using social media caused a depressed mood. Parents also noted that their child's social media was positively related to fear of missing out and loneliness, as well as with hyperactivity/impulsivity, anxiety and depression (Barry et al., 2017).

#### Conclusion

This chapter presented a review of relevant literature relating to the purpose of this study, which was to examine the influence of social media on adolescent mental health and academic achievement. Discussions include social comparison as it related to self-esteem, the effect of social media on academic performance, and the effect of social media on mental health with an emphasis on depression. In the next chapter, an overview

of the research problem, theoretical constructs, research purpose, questions, research design, population and sampling selection, and the limitations to the research will be introduced and discussed.

#### CHAPTER III:

#### **METHODOLOGY**

The purpose of this study was to examine the relationship between social media use and mental health in adolescents. This mixed methods study collected survey data from a purposeful sample of Grade 9 students in a large suburban district in southeast Texas. Additionally, individual interviews were conducted with a purposeful sample of students to examine the perspectives across genders regarding social media use and mental health. The quantitative data, collected from The *PEW Teen Social Media*, and the *Rosenberg Self-Esteem Scale* (RSES), were analyzed using frequencies, percentages, a Chi-Square Test of Independence, and a One-Way Analysis of Variance (ANOVA) test. For the qualitative data, semi-structured interviews were analyzed using a deductive coding process whereby relevant themes were extracted from the interviewee's responses. This chapter presents an overview of the research problem, operationalization of theoretical constructs, research purpose and questions, research design, population and sampling selection, instrumentation used, data collection procedures, data analysis privacy, ethical considerations, and the research design limitations of the study.

### **Overview of the Research Problem**

Social media has changed the way young people learn, interact with others, and develop essential cognitive and social emotional skills (Wagner, 2015). Students engaging in social media on the various forums cause a negative effect on their social and emotional health. Because of their limited capacity for self-regulation and susceptibility to peer pressure, children and adolescents are at some risk as they navigate and experiment with social media (Clarke-Pearson & O'Keefe, 2020). The growing concerns about social media use is also contributed to psychological distress and depression in adolescents (Lewis, 2015). For this reason, it is important that parents become aware of

the nature of social media sites, given not all of them are healthy environments for adolescents (Barry et al., 2017). Social media has been linked to higher levels of loneliness, envy, anxiety, depression, narcissism, and decreased social skills (Silva, 2017). When adolescents interact over social media for prolonged periods of time, they feel compelled to seek validation through updates, "likes", or comments. Psychologists refer to this external validation as intermittent reinforcement (Silva, 2017). The characteristic which has most commonly been studied in relation to psychological distress has been the frequency or amount of use. More frequent use has been associated with negative psychological well-being (Huang, 2010). Teenagers use social media on a daily basis as they provide information services and communication in relationships.

# **Operationalization of Theoretical Constructs**

The study consisted of two constructs: (a) depression, (b) self-esteem, (c) well-being, and (d) social media usage. Depression was defined as complex interactions between social, psychological and biological factors resulting from life events such as childhood adversity, loss and unemployment. Depression was a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration (WHO, 2012). Depression was measured using the *PEW Research Teen Social Media Survey*. Self-esteem was defined as a person's positive or negative view of the self; the extent to which an individual views self as worthwhile and competent (Coopersmith, 1967). It affected how we think, feel, act, and determines how stress is handled (National Institute of Mental Health, 2013).

Self-esteem was be measured using the *PEW Research Teen Social Media Survey* and *Rosenberg Self-Esteem Scale* (RSES). Well-being was defined as a complex combination of a person's physical, mental, emotional and social health factors. It was

also described as how you feel about yourself and your life. Wellbeing was when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge (Daly et al, 2012). The four pillars of wellbeing working together are physical wellbeing, mental wellbeing, financial wellbeing, and social wellbeing. Each pillar contributes to an individual's overall wellbeing. Wellbeing was measured using the *PEW Internet Research Survey* and the *Rosenberg Self-Esteem Survey*. Social media usage is defined as online behaviors that facilitate "direct exchanges" among users. Such behaviors include liking, commenting, sending messages, and otherwise engaging with other users (Verduyn et al, 2017). Social media usage was analyzed by the responses on the *PEW Internet Research Survey*.

# Research Purpose, Questions, and Hypothesis

The purpose of this study was to examine the relationship between social media use and mental health in adolescents. The study included the following research questions:

R1: What are students' perceptions of their social media usage?

R2: Is there a relationship between social media usage and depression?

Ha: There is a relationship between social media usage and depression.

R3: Is there a relationship between social media usage and self-esteem?

Ha: There is a relationship between social media usage and self-esteem.

R4: Does social media usage influence academic performance?

Ha: Social media does have an influence on academic performance.

R5: What do adolescents think about social media and its relevance to mental health and well-being?

## **Research Design**

For this study, the researcher used a sequential mixed-methods design. This design consisted of two phases: (a) quantitative phase and (b) qualitative phase. During the quantitative phase, the researcher collected survey data and the qualitative phase included interviews. The advantage of implementing this design is that it allows for a more thorough and in-depth exploration of the quantitative results by following up with a qualitative phase. A purposeful sample of Grade 9 students from a large suburban school district in southeast Texas were solicited to complete the *PEW Teen Internet Research Scale* and *the Rosenberg Self-Esteem Scale*, which assessed the habits of youth on social media and how they view their social and emotional well-being. In addition, semi-structured interviews were conducted with students to understand the perspectives of students across genders on how social media use influences their own well-being. Quantitative data were analyzed using frequencies, percentages, a one-way ANOVA, and a Chi-Square Test of Independence, while qualitative data were analyzed using a deductive coding process.

### **Population and Sample**

The population of this study consisted of a large suburban school district in south Texas. This school district comprised 23 campuses (three comprehensive high schools, one career technical school, one behavior alternative school, seven junior high schools, and 17 elementary schools), employed 1,609 teachers, and has a student population of 25,945 (TEA,2018). There were a total of 12,561 female students, and 13,384 male students. Of the total race/ethnicity, 21.0 % African-American, 40.0% Hispanic, 26.0% White, 0.4% American Indian, and 0.8% Pacific Islander. Table 3.1 contains the student district data obtained from the 2018-2019 Texas Academic Performance Report.

Table 3.1

District Student Demographic Data

	Frequency (n)	Percentage (%)
Female	12,561	48.0
Male	13,384	52.0
African-American	5,491	21.0
Hispanic	10,396	40.0
White	6,828	26.0
American Indian	107	0.4
Asian	2,433	9.0
Pacific Islander	22	0.8
Two or More Races	668	3.0
Economically Disadvantaged	13,386	52.0

A purposeful sample of Grade 9 students in a large suburban district were solicited to participate in the study. One comprehensive high school was selected to survey for this study. The campus enrollment for this selected high school is 2,560 students. This campus has one principal, one associate principal, and six assistant principals. Table 3.2 presents the demographics of the selected high school. This campus was selected to participate based on its campus demographics being more racially and economically diverse and proportionate, whereas on each of the other campuses the demographics are not proportionate, making it difficult to obtain a range of different

races to complete the study. The campus student demographics consists of 34.0% African-American, 45.0% Hispanic, 15.0% White, 4.0% Asian, 0.2 % American Indian, and 0.08% Pacific Islander.

Table 3.2

Student Enrollment and Demographic Data selected High School

	Frequency (n)	Percentage (%)
Female	1,241	48.0
Male	1,319	52.0
African American	862	34.0
Hispanic	1,156	45.0
White	377	15.0
American Indian	5	0.2
Asian	105	4.0
Pacific Islander	2	.08
Two or More Races	53	2.0
Economically Disadvantaged	1,487	58.0
English Language Learners	352	14.0
At-Risk	1,315	51.0
Special Education	288	11.0

For the purpose of this study, this campus was selected to participate in the study based on there being a more proportioned set of demographics including at-risk indicators. This campus' demographics more closely mirrors the demographics of the entire district. This campus enrollment consists of students who were between the ages of 14 and 15, which is the audience for this study.

Table 3.3

Student Enrollment and Demographic Data selected for Grade 9 ~High School

	Frequency	Percentage (%)
Female	402	49.0
Male	422	51.0
African American	240	54.0
Hispanic	401	49.0
White	120	15.0
American Indian	0.0	0.0
Asian	42	5.0
Pacific Islander	0.0	0.0
Two or More Races	0.0	0.0
At-Risk	376	46.0
Special Education	74.0	9.0

Overall, the campus serves 824 Grade 9 students (between the ages of 14 and 15) in the selected high school. For the purpose of this study, this campus was selected to participate in the study based on the at-risk, ethnic, and socio-economic demographics.

The students surveyed from this campus were between the ages of 14 and 15, which is in the adolescent age range identified for this study.

# **Participant Selection**

A purposeful sample of Grade 9 students between the ages of 14 and 15 were solicited to participate in an interview. These students completed The *PEW Internet* and The *Rosenberg Self-Esteem* surveys. An open-ended question on this survey was provided for students to indicate if they were willing to participate in an interview and to leave their contact information. The researcher examined the scores from the students who took the *Rosenberg Self-Esteem survey*. From that list, the researcher selected three students who scored in the "high" range for self-esteem and three students who scored in the "low" range for self-esteem, and two who scored in the "normal" range for self-esteem. The students were an equal representation from the campus demographic populations of Hispanic, African American, and White students. The researcher contacted the students to schedule the interviews in a one week time frame of submission.

#### Instrumentation

### **Rosenberg Self-Esteem Scale**

The *Rosenberg Self-Esteem Scale* (RSES) developed by Dr. Morris Rosenberg (1965), is a tool for assessing global self-esteem. It is a measure widely used in social-science research. The RSES is designed similar to the social-survey questionnaires. It is a 10-item Likert scale with items answered on a 4-point scale (Strongly Agree, Agree, Strongly Disagree, and Disagree). Five of the items have positively worded statements and five have negatively worded statements. The scale measures global self-worth by measuring both positive and negative feelings about oneself. The original sample for which the scale was developed consisted of 5,024 high-school juniors and seniors from 10 randomly selected schools in New York. The Rosenberg self-esteem scale is

considered a reliable and valid quantitative tool for self-esteem assessment. The scale ranges from 0-30. Scores above 25 indicate high self-esteem. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. For items 1, 2, 4, 6, and 7: Strongly agree = 3, Agree = 2, Disagree = 1, and Strongly disagree = 0. For items 3, 5, 8, 9, and 10 (which are reversed in valance), Strongly agree = 0, Agree = 1, Disagree = 2, Strongly disagree = 3. Table 3.4 presents sample items from the scale and descriptions of scoring the items.

Table 3.4
Sample Items for Rosenberg Self-Esteem and Scoring

Item Number on Scale	Example	Likert-type response choice scoring (points)
1, 3, 4, 7	On the whole, I am satisfied with myself.	1 = Strongly Agree
1, 3, 4, 7	On the whole, I am saustice with mysen.	2 = Agree
		3 = Disagree
		4 = Strongly Disagree
2, 5, 6, 8, 9	I certainly feel useless at times.	1 = Strongly Disagree
		2 = Disagree
		3 = Agree
		4 = Strongly Agree

The RSES exists in various languages: English, French, and Norwegian. Ten statements are included in the report that measure issues related to self-worth and self-acceptance. There are seven contrived items as a Guttman scale. The RSES has highly rated reliability areas: internal consistency was .77, minimum coefficient of

reproducibility was at least .90 indicating excellent reliability (Rosenberg, 1965). The scale also demonstrates concurrent, predictive and construct validity. It correlates significantly with other measures of self-esteem, including the *Coopersmith Self-Esteem Inventory*. The RSES uses the two-factor composite model, representing the positive and negative components of self-esteem. This represents an adequate fit of the data, and provided a better fit for the data that the one-factor conceptualization. Additionally, composite reliability of the two-factors was very good for both the positive (pc = .96) and negative (pc = .98) self-esteem sub-scales (Huang & Dong, 2012). The RSES also correlates in direction with measures of depression.

In Table 3.5, relevant statistical data through the procedure reliability: mean, variance and internal consistency coefficient if each item is eliminated. Items with higher discriminative power are 6 ("I certainly feel useless at times") with an r=.72 and 10 ("I take a positive attitude toward myself") with an r=.70. And the item with less power is 4 ("I am able to do things as well as most other people") with an r=.49. The item-total correlation is strong and statistically significant. Cronbach's alpha was used to estimate the internal consistency which was determined in two subgroups: women (alpha = 0.88) and male (alpha = 0.88). Since RAS is a univariate scale, we determined the total alpha (0.88). Alpha values in the overall sample and in both subgroups are high 0.88 reflecting good internal consistency (Hill & Hill, 2009).

Table 3.5

Rosenberg Self-Esteem Scale Chronbach's Alpha

Item	M.	Var.	R	Alpha
1	27.78	24.02	0.64	0.87
2	28.06	21.55	0.68	0.86
3	27.68	24.84	0.54	0.87
4	27.66	24.72	0.49	0.88
5	27.79	23.10	0.60	0.87
6	27.90	21.42	0.72	0.86
7	27.74	24.41	0.61	0.87
8	28.22	22.17	0.55	0.88
9	27.34	23.65	0.65	0.87
10	27.77	23.05	0.70	0.86

#### The PEW Teen Internet Research Scale

The *PEW Teen Internet Survey* is a 13-item scale that was used to assess social media usage and addiction. The survey was developed in May of 2018 by Monica Anderson and Jing Jing Jiang. The original sample for which the scale was developed consisted of 1060 teens ages 13 to 17, of which 614 were white, 101 non-blacks, 236 Hispanics, 109 other races. Each teen was sampled about their social media use. This particular survey featured interviews with 1,058 parents who belong to the panel and have a teen ages 13 to 17, as well as interviews with 743 teens.

Parents who had multiple teenage children were asked to provide information about each of these teens. The panel randomly selected one of these teens, and parents were instructed to respond to all survey questions with this teen in mind. Interviews were conducted online and by telephone from March 7 to April 10, 2018. The survey was adapted from the PEW Research Center, which is a nonprofit, tax-exempt 501(c)(3) organization and a subsidiary of Pew Charitable Trusts, its primary funder. The Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping America and the world. It conducts public opinion polling,

demographic research, content analysis and other data-driven social science research. The Center studies U.S. politics and policy; journalism and media; internet, science and technology; religion and public life; Hispanic trends; global attitudes and trends; and U.S. social and demographic trends.

The main purpose of the survey was to illustrate the ways in which teens navigate social norms on the various social media sites and how often they post to these sites. The analysis is based on surveys of parents and teens that were conducted by randomly selecting U.S. households and sampled with a known, nonzero probability of selection, and then each family was contacted by U.S mail, telephone and field interviews (face to face). The rationale for developing the instrument consisted of 14 multiple choice questions. Composite scores will be compiled based on the frequencies and percentages of the number of students who of selected the same answer for each question. The reliability of the instrument is plus or minus 5% for the full sample 743 teen respondents. Today, social media use is nearly universal among teens. The survey originally revealed that at times teens feel overwhelmed by the drama on social media and pressure to construct only positive images of themselves. Andersen and Jiang (2018), simultaneously credit these online platforms with several positive outcomes – including strengthening friendships, exposing them to different viewpoints and helping people their age support causes they care about.

### STAAR End of Course Exams - Reading and Math

In schools across the U.S., student achievement is measured based on performance on state assessment data. In Texas, students participate in the State of Texas Assessment of Academic Readiness (STAAR) (Texas Education Agency, 2010) as the state assessment. The purpose of the STAAR test is to determine if learning standards have been approached, met, or mastered for specific knowledge at the particular grade

level tested (Texas Assessment Management System, TEA, 2017). This year, due to the global pandemic, the STAAR test was administered to students in Texas but not factored in the state accountability system.

The Algebra I assessment is comprised of a total of 34 multiple choice questions and 2 griddable items making it a 36-question test. It includes the 5 reporting categories:

(a) Number and Algebraic Methods, (b) Describing and Graphing Linear Functions, Equations, and Inequalities, (c) Writing and Solving Linear Functions, Equations, and Inequalities, (d) Quadratic Functions and Equations, and (e) Exponential Functions. The English I assessment is comprised of 36 multiple choice questions and a writing composition. It includes the 6 Reporting categories: (a) Understanding/Analysis Across Genres (Reading), (b) Understanding/Analysis of Literary Texts (Reading), (c) Understanding/Analysis of Informational Texts (Reading), (d) Composition (Writing), (e) Revision (Writing), and (f) Editing (Writing).

#### **Data Collection Procedures**

### Quantitative

Prior to data collection, the researcher will gain approval from the University of Houston-Clear Lake's (UHCL) Committee for Protection of Human Subjects (CPHS) and the school district in which the study took place. Next, the campus principal will be contacted via email with information regarding the purpose of the study and the process of collecting surveys. The purpose of the study, voluntary participation, the timeframe for completing the survey, as well as the ethical and confidentiality considerations will be communicated to parents and teachers.

Letters of parental consent and student assent outlining the details of the study will be emailed to parents and students using the electronic system Docusign. Students will receive the consent and assent letters via Docusign prior to the administration of the

survey. All consent forms will be kept on file electronically. Appendix C contains the parental consent form and Appendix D contains the student assent form. The consent/assents states that participation is voluntary, the approximate time frame to complete each survey (20-25 minutes), and that demographic and response information will remain confidential. Once the consent and assent letters are signed by participants and their respective parent/guardian and returned to the campus research assistant or teachers the survey was administered. Students were provided with an electronic QR code link of the surveys which also contain the survey cover letter.

The survey responses were collected over a six-week period. The teachers, students, and parents will be notified of the survey via email at the beginning of the data collection period. Follow-up emails will be sent to teachers during both the first two weeks. Upon receipt of the survey responses, the data will be entered into quantitative research software IBM Statistical Package for the Social Sciences (SPSS) for further analysis. All data were secured in a password-protected folder on the researcher's computer and in the researcher's office within a locked file cabinet at all times. At the culmination of the study, the data will be maintained by the researcher for five years, which is the time required by CPHS and district guidelines. The researcher will destroy the contents of the file once the deadline expires.

## Qualitative

Student perceptions of their own social media usage were further examined using an individual interview protocol as developed to measure individual perceptions of how social media usage affects well-being. The interview protocol was designed with 16 overarching open-ended questions that focused on three areas of inquiry including time spent on social media, content posted, and the mood after usage. Prior to administering the survey, a panel of experts in the field of qualitative research examined the interview

protocol for alignment goals to better support the validity of the study. The researcher conducted the interview session with participants and posed questions using the semi-structured interviews based on a set of primary and secondary questions. The researcher assigned code names to the participants' responses to protect their identity.

The students participating in the study were solicited from the participating high school. Students were selected purposefully based on their participation in the *PEW Teen Survey and Rosenberg Self Esteem Survey*. The face to face individual interviews took place on campus with prior reservation arrangements made. The interviews consisted of approximately eight students. Each interview lasted approximately 25-30 minutes each. The questions posed during the interviews were based on content from the survey and previous research conducted on social media usage and mental health. Each interview session was recorded for accuracy of the transcription process.

## **Data Analysis**

## Quantitative

All data were collected and uploaded to IBM SPSS for analysis. Research question number one, was analyzed using frequencies and percentages. Research questions two and three were answered using a Chi-Square Test of Independence to determine if there was a relationship between time spent using social media and symptoms of depression, and a relationship between time spent on social media and self-esteem. Research question four was answered using a One-Way Analysis of Variance, ANOVA, to determine if time spent on social media had an influence on academic achievement. The independent variable, time spent on social media, was divided into five categorical groups: (a) no time at all, (b) 1 to 4 hours, (c) 5-9 hours, and (d) 10 or more hours. The dependent variables depressed mood and self-esteem were continuous in measurement and the composite scores were calculated by combining individual

responses for the variables. The dependent variable, academic achievement (percent correct score) was continuous. However, the researcher converted the percent scores to the categories of pass and fail, therefore categorical. Effect size was determined using eta-squared and a significance value of .05 will be used for this study.

## Qualitative

Following the quantitative data analysis, findings were used to create the questions for the student interviews in an attempt to provide more in-depth understanding of the perceptions of social media usage in adolescents and their perceptions regarding depressed mood, self-esteem, and academic performance. The open-ended questions were aimed at providing deeper thoughts on behalf of students across genders regarding the topic. The interview data were analyzed using a constant comparative deductive coding process in order to create an understanding of the impact of the relationship between social media usage and adolescent mental health.

The data analysis included a process of data reduction, display, conclusions, and verifications (Berg, 2001). Data reduction allows for data to be more accessible and coherent and allowed for the extraction of relevant themes and patterns. This process took place via the transcription of the interview audio recordings, the organization of the data into recurring themes, and the translation of the data into written summaries. The coding process began by recognizing in-vivo codes. Once the codes were identified, emphasis was placed on search for patterns and themes from the data (Coffey & Atkinson, 1996) in order to put them into categories. Once the establishment of categories, subcategories were created, the findings were recorded. Conclusions were made based upon the findings about the data.

## **Qualitative Validity**

The qualitative analysis process entailed validation by using triangulation of individual student responses by campus. In order to ensure validity, data obtained from the surveys and focus groups was cross-checked and compared amongst participating groups. The data collected during the interviews were subject to member-checking by having the student participants review the preliminary results and transcripts in order to enhance the validity of the responses provided. The peer reviews served the purpose of obtaining feedback related to questions posed to the students related to their perceptions of matters pertaining to their social media usage. Member checking was used to ensure the voices of participants is accurately captured and thus increasing the validity of the findings.

## **Privacy and Ethical Considerations**

Prior to the collection of any data, the researcher gained approval from the UHCL's CPHS and the school district in which the study took place. Given that the intended survey instruments are pre-existing, the researcher asked for written approval for its use. All participants were provided with detailed information related to the purpose of the study and directions for completing the surveys. Parent consent and student assent forms were collected from participants prior to collecting any survey data. The data collected remains securely locked in a cabinet and flash drive in the researcher's office. The researcher will maintain the data for five years as required by the CPHS and school district guidelines. After the deadline has passed the researcher will destroy all data files associated with the study.

### **Research Design Limitations**

As noted by Creswell (2002), the research design of this study consisted of several limitations. First, for the quantitative data, the researcher depended upon the

honest feedback of the survey participants who are 14-15 years of age. Dishonest answers could skew the results and the validity of its findings. Second, only one high school was selected to sample. The findings of the study cannot be generalizable to other campuses, and will only be limited to one demographic of our district. Third, if the participant selection subjects are not equally represented, the qualitative data could be skewed, and therefore invalid. Fourth, political correctness as opposed to candid answers by the interviewees could threaten the validity of the findings. Fifth, the small sample size of interview participants makes it difficult to draw any generalizations about the interview data.

### **Conclusion**

The purpose of this study was to examine the influence of social media on adolescent mental health and academic achievement. This chapter identified the need to further examine the relationship amongst the constructs. In order to better understand the student perceptions of social media and how it affects their mental health and its relationship to academic achievement, both the quantitative and qualitative finding was essential to the study. In Chapter IV, survey and interview responses will be analyzed and discussed in further detail.

#### CHAPTER IV:

#### **RESULTS**

The purpose of this study was to examine the relationship between social media use and mental health in adolescents. This chapter contains the results from the quantitative and qualitative analysis of the study. The researcher analyzed survey data, STAAR data, and interview data. This chapter begins with a presentation of the participant demographics, then data analysis for each research question, and concludes with a summary of the findings of each of the research questions that guided this study.

# **Participant Demographics**

Participants for this study consisted of 14 and 15-year-old students who had been enrolled in one high school within a large suburban school district in southeast Texas. The district contained three comprehensive high school campuses and one choice high school campus. One hundred and thirty-six parents consented to having their student participate in the survey and individual interviews; the response rate was 100.0%.

Of the 136 participants, 64 students were female (47.1%) and 70 students were male (52.9%). Two students (.02%) preferred not to identify their gender. Of the 136 student participants, 37 students (27.2%) indicated they were African American, nine students (6.6%) indicated they were Asian, 63 students (46.3%) indicated they were Hispanic, one student (.7%) indicated they were Native American or American Indian, and 26 students (19.1%) indicated they were White. Participants of this study were adolescents ages 14 and 15 years old. Of the 136 students who completed the survey, 54 students indicated they were 14 years of age (39.7%), while 82 students indicated that they were 15 years of age (60.3%). Delineated in Table 4.1 are the specific student demographics for participants.

Table 4.1

Student Participant Demographics of Participating Campus

Demographic	Frequency (n)	Percentage (%)
Total	136	100.0
Female	64	47.1
Male	70	52.9
African American	37	27.2
Asian	9	6.6
Hispanic	63	46.3
Native American or American Indian	7	1.0
White	19	26.0
Age 14	54	39.7
Age 15	82	60.3

Of the 136 student participants, eight students participated in individual interviews. Of the seven interview participants, four students indicated they were female (57.1%), and three students indicated they were male (42.9%). Of the seven students, two students (28.6%) indicated they were African American, two students (28.6%) indicated they were Hispanic, two students (28.6%) indicated they were White, and one student indicated (14.3%) she was Asian. Table 4.2 contains interviewee demographics.

Table 4.2

Interviewee Demographics

Participants	Frequency (n)	Percentage (%)
Total	8	100.0
Female	4	50.0
Male	4	50.0
African American	2	25.0
Asian	2	25.0
Hispanic	2	25.0
White	2	25.0

# **Research Question One**

The following research question was addressed during the investigation, *What are students' perceptions of their social media usage?*, was answered using frequencies and percentages to determine demographic and categorical information regarding patterns in students social media use. The student responses from the *PEW Internet Survey* were used to gather students' perceptions on preferred social media platforms, frequency of use, and the content and activity posted on social media. The survey questionnaire for the PEW Internet Survey included 15-multipe choice items, which assessed the habits of youth on social media and how they view their social and emotional well-being.

In order to examine the social media platforms students utilized, the survey included a series of questions related to the total number of social media platforms that students frequented. Of the 136 students surveyed, students responded with their most frequently used social media platforms. Eighty percent of the students used TikTok and

66.9% used Instagram. While very few students (11.8%) used Facebook. Two students (1.5%) indicated that they did not use social media platforms at all. Table 4.3 contains social media platforms use.

Table 4.3

Most Frequently Accessed Social Media Platforms

Platform	Frequency (n)	Percentage (%)
Total	136	100.0
Facebook	16	11.8
SnapChat	13	9.6
Instagram	91	66.9
Twitter	4	2.9
YouTube	10	7.4
TikTok	109	80.1
I do not use social media	2	1.5

The students also shared the multiple number of social media platforms in which they had accounts. Almost 72% of all the students surveyed indicated that they had at least four or more accounts. Table 4.4 depicts the number of various social media accounts that each student maintained.

Table 4.4

Number of Social Media Accounts

Number	Frequency (n)	Percentage (%)
0	2	1.5
1	4	2.9
2	11	8.1
3	21	15.4
4 or more	98	72.1

In order to determine the frequency of participant time spent on the various social media sites, the researcher asked the survey respondents to identify the amount of time spent on social media each day and per week. Less than 50.0% of the students spent 10 or more hours per week on social media, while 22.8% of the students spent no time at all. Table 4.5 depicts the survey findings from the 136 adolescents on their daily and weekly use on social media.

Table 4.5

Time Spent on Social Media

Student Use	Frequency (n)	Percentage (%)
10 or more hours per week	57	41.9
5-9 hours per week	47	34.6
Less Than 5 hours per week	31	22.8
No Time at all	1	0.7

In order to gain insight into the activity that students participated in on social media, the survey asked a range of questions about students' activity on social media. Overall and based on the expanded response data, 39.7% students (n = 54)) indicated they post their accomplishments on social media more often per week. Almost 25.0% of the students indicated they post videos at least 2-3 times per week. Additionally, very few students (1.2%) indicated they never posted "where they are" or "what they are doing" when engaged on social media. Student responses for the activity of interests while engaged in social media did not strongly indicate that students had activity on social media multiple times per week. Table 4.6 displays the questions and responses regarding content students may post on the various social media sites.

Table 4.6

Responses to Social Media Activities

Survey Item	Everyday	4-5 Times/ Week	2-3 Times/ Week	Less Often	Not At All
1. How often do you	1.5%	0.0%	8.1%	30.1%	60.3%
post selfies?	(n=2)	(n=0)	(n = 11)	(n = 41)	(n = 82)
2. How often do you	4.4%	0.7%	22.8%	33.8%	38.2%
post videos?	(n = 6)	(n = 1)	(n = 31)	(n = 46)	(n = 52)
3. How often do you post where you are?	0.7% (n = 1)	2.9% (n = 4)	7.4% (n = 10)	23.5% (n = 32)	64.0% (n = 87)
4. How often do you post what you are doing?	2.2% (n = 3)	5.9% (n = 8)	9.6% (n = 13)	18.4% (n = 25)	64.0% (n = 87)
5. How often do you post your accomplishments?	7.4% (n = 10)	19.1% (n = 26)	20.6% (n = 28)	33.8% (n = 46)	19.1% (n = 26)
6. How often do you post things you want to go viral?	2.2% (n = 3)	.73% (n = 1)	8.8% (n = 12)	22.7% (n = 31)	65.4% (n = 89)
7. How often do you post your personal problems?	1.4% (n = 2)	1.5% $(n = 1)$	4.4% (n = 6)	16.1% $(n = 22)$	77.0% (n = 105)

# **Research Question Two**

Research question two, *Is there a relationship between social media usage and depression?*, To examine the students' mood, the researcher included a series of responses related to the students' feelings after spending time on social media. Students were allowed to select as many "feelings" that were applicable. Table 4.7 shows the results of the survey. Of the 136 students surveyed on the *PEW Internet Scale*, 24.0% of the students responded they felt worse about their own life after social media use. Sixty three percent of the students who used social media stated they felt more connected to their friends and family. Equally, 60.0% of the students reported social media had no bearing at all on their feelings of being overwhelmed, connections, or confidence.

Table 4.7

Feelings After Use

How does what you see on social media	Frequency (n)	Percentage (%)
make you feel?		
Total	136	100.0
Not at all	82	60.0
Worse about your life	32	24.0
Overwhelmed	39	29.0
Feels Connected	86	63.0
Confident	89	65.0

The researcher also wanted to examine the relationship between time spent on social media and adolescent depressed mood. The results of the Chi-Square test of

Independence indicated a statistically significant relationship existed between the amount of time a student spent using social media and their mood,  $X^2(1, N = 84) = 8.9$ , p = .003. In other words, there is a relationship between time spent on social media and their mental status. The cross-tabulation results in Table 4.8 revealed that students who spend one to four hours (77.4%), five to nine hours (74.5%), and 10 or more hours (64.9%) reported feeling worse about their life. Students felt especially overwhelmed who spent five to nine hours (25.5%), and 10 or more hours (29.8%) on social media. Of those students who spent one to four hours, only 9.7% stated that they feel connected when using social media. Those students who spent 10 or more hours, only 5.3% reported that they feel connected when using social media.

Table 4.8

Cross-Tabulation Feelings After Use

		Worse about life	Overwhelmed	Feels Connected
	No			
	Time	0.0%	2.9%	0.0%
Hours on		(n=0)	(n=1)	(n=0)
	1-4			
Social Media	Hrs	77.4%	12.9%	9.7%
		(n=24)	(n=4)	(n=3)
	5-9			
	Hrs	74.5%	25.5%	0.0%
		(n=35)	(n=12)	(n=0)
	10+Hrs	64.9%	29.8%	5.3%
		(n=37)	(n=17)	(n=3)

## **Research Question Three**

Research question three, *Is there a relationship between social media use and self-esteem?*, was measured using frequencies and percentages from the *Rosenberg Self-Esteem Scale in* an effort to further understand the self-esteem of adolescents. Table 4.9 displays the results from the survey. Among the 136 survey participants, 84.0% (n = 114) of the participants responded with either *strongly agree/agree* regarding self-satisfaction, and 69.0% (n = 94) of the participants responded with either *strongly agree/agree* regarding their belief to be a person of worth, at least on an equal plane with others. Additional questions related to feelings of self-worth yielded results with lower percentages. About 87.0% (n = 119) of participants responded with either *disagree/strongly disagree* regarding great qualities they believed they had, and 48.0% (n = 65) of the participants responded with *strongly agree/agree* that they had a positive attitude toward themselves.

Table 4.9

Rosenberg Self-Esteem Scale

Survey Item	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.	24.0% (n = 32)	60% (n = 82)	9.0% (n = 13)	6.0% (n = 8)
2. At times, I think I am no good at all.	39.0% (n = 53)	4.4% (n = 67)	6.0% (n = 8)	6.0% (n = 8)
3. I feel that I have a number of good qualities.	2.2% (n = 3)	10.2% (n = 14)	46.3 (n = 63)	41.1% (n = 56)
4. I am able to do things as well as most other people.	26.0% (n = 35)	65.4% (n = 89)	7.3% (n = 10)	1.4% (n = 2)
5. I feel I do not have much to be proud of.	5.1% (n = 7)	26.0% (n = 35)	37.0% (n = 50)	32.3% (n = 44)
6. I certainly feel useless at times.	32.3% (n = 44)	42.0% (n = 57)	24.0% (n = 32)	2.2% (n = 3)
7. I feel that I am a person of worth, at least on an equal plane with others.	33.0% (n = 45)	36.0% (n = 49)	26.0% (n = 35)	5.0% (n = 7)
8. I wish I could have more respect for myself.	26.0% (n = 35)	36.0% (n = 49)	24.0% (n = 33)	14.0% (n = 19)
9. All in all, I am inclined to feel that I am a failure.	16.0% (n = 22)	40.0% (n = 54)	21.0% (n = 29)	23.0% (n = 31)
10. I take a positive attitude toward myself.	12.0% (n = 16)	36.0% (n = 49)	28.0% (n = 38)	24.0% (n = 33)

Among the surveyed adolescents, 64.0% had *normal* self-esteem (score between 25-35). Eighteen percent of participants had an above-average, high self-esteem (score greater than 35). In the low self-esteem range, 30.0% of the students indicated that they struggled with feelings of low self-worth. Figure 1 contains the self-esteem scores of the students who completed the Rosenberg Self-Esteem scale.

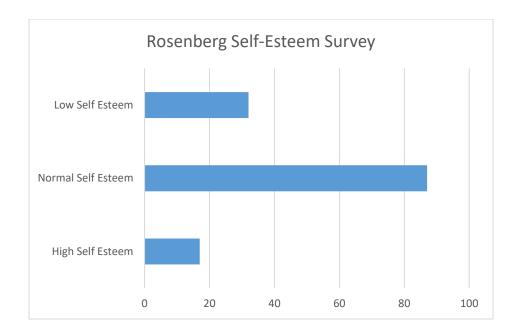


Figure 1
Rosenberg Self-Esteem Scale Results

*Note*. This figure demonstrates the percentage of the 136 students surveyed, who scored in the low, normal, and high self-esteem ranges.

The researcher also wanted to examine the relationship between spending more time on social media and adolescent self-esteem. To complete this analysis, a Chi-Square Test of Independence was conducted to determine whether a relationship existed between the amount of time (one to four hours, five or more hours, or 10 or more hours) a student spent using social media and the self-esteem scores (high, normal, and low) of each participant. The results of the Chi-Square Test of Independence revealed that there was not a statistically significant relationship between the amount of time a student spent

using social media and self-esteem,  $X^2(6, N=136)=10.472$ , p=.106. Table 4.10 contains the crosstabs results depicting the hours spent on social media and the relationship between the students' level of self-esteem. The majority of the students reported having normal self-esteem whether they spent one to four hours (64.5%), five to nine hours (68.1%), or 10 or more hours (61.4%).

Table 4.10

Self- Esteem Cross-Tabulation

		Low SE	Normal SE	High SE
	No			
	Time	100.0%	0.0%	0.0%
Hours on		(n=1)	(n=0)	(n=0)
Social Media	1-4 Hrs	12.9%	64.5%	22.6%
		(n=4)	(n=20)	(n=7)
	5-9 Hrs	27.7%	68.1%	4.3%
		(n=13)	(n=32)	(n=2)
	10			
	+Hrs	24.6%	61.4%	14.0%
		(n=14)	(n=35)	(n=8)

## **Research Question Four**

Research question four, *Does time spent on social media influence academic achievement?*, was answered using data from the 2021 Reading and Math STAAR End of Course (EOC) exams. The student STAAR EOC scores were collected as the percent correct score and were used to gather information on students' overall academic success in the classroom. The passing percent score for the STAAR Reading test is 56.0%. The

passing percent score for the STAAR Math test is 37.0%. Of the 136 students identified for this study, only 128 students received a score for the Reading STAAR EOC, and 91 students received a score for the Math STAAR EOC.

The researcher wanted to examine whether spending more time on social media had an influence on academic achievement. To complete this analysis, the researcher used a One-way Analysis of Variance (ANOVA) to determine if there was a statistically significant mean difference between the amount of time (one to four hours, five or more hours, or 10 or more hours) a student spent using social media, and the STAAR End Of Course Reading and Math score for each participant. The results of the one-way ANOVA revealed that time spent on social media does not influence academic achievement in Reading, F(3, 125) = .836, p = .476. The results of the one-way ANOVA also revealed that time spent on social media does not influence academic achievement in Math, F(3,189) = 1.382, p = .253.

The students' STAAR EOC percent correct scores were converted to "pass or fail" based on the percent passing score, which is 37.0% for Reading and 56.0% for Math. The researcher also wanted to examine the relationship between time spent on social media and academic achievement in Reading. The results of the Chi-Square test of Independence indicated a statistically significant relationship did not exist between the amount of time a student spent using social media and academic achievement in Reading,  $X^2(3, N = 128) = 1.787, p = .618$ . In other words, there is not a relationship between time spent on social media and academic achievement in Reading. Table 4.11 contains the cross-tabulations results depicting the hours spent on social media and the STAAR Reading EOC pass or fail scores. Out of the students who failed the Reading STAAR EOC, 30.0% spent one to four hours on social media, 30.0% spent five to nine hours on social media, and 40.0% spent 10 or more hours on social media.

Table 4.11

STAAR EOC Reading Cross-Tabulation

		Fail	Pass
	No		
	Time	0.0%	1.0%
Hours on		(n=0)	(n=1)
Social Media	1-4 Hrs	30.0%	19.4%
		(n=9)	(n=19)
	5-9 Hrs	30.0%	35.7%
		(n=9)	(n=35)
	10		
	+Hrs	40.0%	43.9%
		(n=12)	(n=43)

The researcher also wanted to examine the relationship between time spent on social media and academic achievement in Math EOC pass or fail scores. The results of the Chi-Square test of Independence indicated a statistically significant relationship did not exist between the amount of time a student spent using social media and academic achievement in Math,  $X^2(3, N = 91) = 6.089$ , p = .107. In other words, there is not a relationship between time spent on social media and academic achievement in Math. Table 4.12 contains the cross-tabulations results depicting the hours spent on social media and the STAAR Math EOC pass or fail scores. Out of the students who failed the Math STAAR EOC, 60.0% of students reported spending one to four hours on social media, while 40.0% reported spending 10 or more hours on social media.

Table 4.12

STAAR EOC Math Cross-Tabulation

		Fail	Pass
	No		
	Time	0.0%	1.2%
Hours on		(n=0)	(n=1)
Social Media	1-4 Hrs	60.0%	17.4%
		(n=3)	(n=15)
	5-9 Hrs	0.0%	32.6%
		(n=0)	(n=28)
	10		
	+Hrs	40.0%	48.8%
		(n=2)	(n=42)

## **Research Question Five**

Research question five, *What are students' perceptions of social media use?*, was answered by using a qualitative deductive coding process. In an attempt to capture a more in-depth understanding of the relationship between social media use and adolescent mental health, eight students (9th graders) were interviewed regarding their perceptions on the issue. To protect their anonymity, the eight students were coded as Participant A, B, C, D, E, F, G, and H. This study's findings reveal information that the students shared in order to help explain their perceptions of social media use and its impact on their lives. The perceptions of the students were presented to provide in-depth information and a rich description about the students' personal experiences. A deductive coding analysis established two distinct themes, Student Perceptions and Self-Esteem Implications. There were four sub themes. The sub themes that derived from Student Perceptions were (a)

time spent using social media, and (b) activity on social media. The sub theme that derived from Self-esteem Implications were (a) feelings after use, and (d) TikTok is the media of choice. The emergent themes obtained from students' responses are provided below followed by a sample of the students' comments.

Student Perceptions. Interviews were conducted with eight students in grade nine about their perceptions of how social media influences their personal lives. The ninth-grade students were all engaged in four or more social media sites and perceived their involvement on social media as constant and pervasive. The participants all shared that they spend 10 hours per week on average, using social media sites. The theme of self-perception is further delineated into two subthemes: (a) time spent on social media, and (b) activity on social media. The emergent themes are provided below followed by a sample of the students' comments.

Time spent on social media. Two sub themes developed from the interview data. The first theme identified was time spent on social media. Based on the students' interview responses regarding the amount of time that they spend and their activity on social media, five out of the eight student participants spent 10 or more hours on average per day. The majority felt that they spent too much time using the various social media sites. When they were asked "How many hours per day, would you say you spend on social media?, One of the students, Participant C, responded "I spend like nine hours or more per day. And then on weekends, like 12 hours or more". Participant D agreed that she spent too much time as well. "I am on 8 hours per day, Monday through Saturday". "I spend 10 hours per day totaling 70 hours per week", stated Participant G. Three students out of the 10 who were interviewed shared a different perspective. They felt that they did not spend too much time on social media. "I am only on social media seven hours total per week. Sometimes maybe an hour or less per day", stated Participant B.

Participant A also agreed that he was not allowed to spend much time on social media. "Uh, I only spend 30 minutes per day on social media, because my parents limit my screen time." Participant E also shared a similar perspective as the group "probably like an hour a day, probably like seven hours a week, I guess."

Activity on social media. The next sub theme that developed as students discussed their perceptions of social media is the activity on social media. One of the 9<sup>th</sup> grade participants describes the activity on social media as recreational and a way to spend their time. When asked "What types of things do you share on social media and what are some reasons you use social media?, Participant F commented:

I connect with friends and keep up to date with events. I share only using the "on the story" feature because I do not like permanent things out there. If I ever look back at it, I'm like oh my gosh, why did I post this is so cringy?

Participant G responded "I use social media for entertainment." "I post pictures, videos, and what I do on a daily basis." Participant C agreed "I find social media entertaining and I only post/share funny memes. I use it to chat with my friends." Participant E shared a different opinion. He stated:

I don't know, I just look at relatable stuff on there. I use Snapchat to text my friends and Instagram to like my friends' pictures. I don't really post anything, I just use it to text him if we're going to go ahead and go somewhere, go play football somewhere or something.

When I asked him the follow up question, why he used Snapchat to text and not his cell phone, Participant E stated "I don't really save my friends numbers. I only save my family members. I use Snapchat because it's quicker to text my friends".

Participant A shared a similar response. "I only post my basketball highlights on Twitter and Instagram so I can get recognition from a college or a team. I don't use it for much else." Participant D commented:

I don't post my personal feelings. I know a lot of people who do. But, I just post pictures that I feel are like, how do I describe it, just make me feel good. Like only the pictures I feel pretty in.

The aforementioned comments indicate students use social media for a variety of reasons. The group consisted of eight students. Based on the student responses collected, six out of eight participants, seem to spend an average of 15 hours per week on various social media sites. All participants indicated that they use it for entertainment purposes only. The participants agreed that the time spent and the common activities that they engage in, contributed to their perceptions of social media. The subsequent theme will share the commonalities regarding the participants view on how social media use affects their self-esteem.

**Self-Esteem Implications.** The next major theme is self-esteem implications. In regards to 9<sup>th</sup> grade students' perceptions regarding their views of self-esteem, based on the interview responses, four of the student participants agreed that they had average self-esteem. When interviewing the students, the responses from the interview questions regarding self-esteem, the questions can be broken into two categories: (a) how they viewed self-esteem and (b) how social media affects their self-esteem. Regarding self-esteem, there were three students who scored in the high self- esteem range, a score above 30, three that had average self- esteem, and two that scored in the low self-esteem range.

Participant A, commented "I think it's pretty good. I don't look down on myself. I know my potential. Other people don't know my potential, or what I can

do." He also shared advice, "You should never listen to what people have to say. Block out the haters. You should always have friends who support you." Participant A agreed that social media "helps to raise your self-esteem so that people can feel better about themselves. It allows you to post what you are doing in your life."

## Participant B commented:

I think self-esteem is important whenever you are talking about something that you want to do. You should not give up on yourself and accept defeat. If you do then you know your self-esteem is not really well.

# He continued to say:

Social media can either increase or decrease self-esteem for any person. Someone can see a post that says, I'm so cool because I have all of this stuff that a regular person doesn't have. It would cause them to feel bad about themselves. So, they would feel bad about it and then you know, low self-esteem. But for me personally, social media doesn't affect me too much. Sometimes, it inspires me to do better.

Participant C shared that the beauty standards that are set on social media attribute to her self-esteem. She stated:

Self- esteem is how you feel about yourself and how you see yourself. I have low self-esteem. I feel like I can be doing more. I feel like I can be a better person by looking better. When it comes to low self-esteem, if you don't look like an Instagram model, you may as well forget about it. And if you are dark-skinned, you are not really pretty, but if you are light-skinned you are.

## Participant D stated:

Self-esteem is confidence. I am pretty confident in who I am and how I look. I block out what other people say about me. I have heard rumors that people say I

am not pretty and that I am mean. I just block it out. People who constantly give out negativity on social media to others are not confident in themselves and have low self-esteem.

Participant E agreed that "self-esteem is confidence. It is being comfortable with the people around you." People who have higher self-esteem tend to post more on social media because they are comfortable with themselves."

## Participant F stated:

Self-esteem affects people because of the beauty standard that is set by others. However, I don't get the mean comments and hate because I am more towards the beauty standard. Due to medical reasons, I used to have to eat a lot. I was worried that my tummy was not flat like what society states that you have to be skinny or else you are not pretty. My dad also played a huge role in my insecurities. I only heard negative words from him. He never told me that I was pretty until like last year.

Participant G feels like her self-esteem is intact. She stated:

People use social media to boost their self-esteem. However, I am pretty confident. But I try not to focus on what others think about me. I only talk to people who won't bring me down. Being near the toxic people in my life sometimes brings me down with the negative comments that they make. People use it to boost their self- esteem. They use it to get people to make positive comments about them, but that doesn't always happen. The negative people comment as well.

Overall, the students have a clear understanding of what social media is and the effects that social media has on their self-esteem. I noticed the disposition of participant F when speaking about her self-esteem and the relationship with her father. She began to tear up

as she was sharing. I allowed her to just talk freely and even though she stated that she had a healthy level of self-esteem, her actions showed that it may not have been as high as she scored herself.

**Feelings after social media use.** The first sub theme that developed from the theme of self-esteem implications, is how students feel after using social media. 9<sup>th</sup> grade students were asked, "Do you ever experience feelings of depression, decreased energy, low self-worth, loss of interest or pleasure, or poor concentration?", five of the eight students disagreed and stated that social media did not affect their mood, self-worth, or energy in a negative manner. Participant C described her experiences on social media as helpful.

She commented, I kind of feel that way without social media just with life and stuff like that. I think social media kind of like helps me feel a bit better because my feed and stuff like that makes me feel okay.

Participant A recognized that he did not experience any change in mood, energy, or self-worth. He shared "I never experience depressed mood. My energy level doesn't really go down, and my self-esteem is always the same. So is my self-worth." Participant F also agreed that social media use does not affect her mood.

She stated: No, I mean, I feel bad for others because there's definitely a lot of putting down there. Like you know, it's everywhere. There's always gonna be negativity, and not I'm not part of the people who get that kind of negativity. It's still just sad to see and I wish the better for the people who are getting that kind of negative attention.

## Participant B stated,

None of those I would say. I mean sometimes I feel like if I see something that's, you know, inspirational, I guess you could say. Then I feel like you know I can

try to do something to accomplish a new goal. But nothing really making me feel down.

The three remaining students all shared similar feelings regarding their mood after using social media. For example, Participant D recalled:

When using social media maybe at one point I felt low before. But I think I've grown to learn with the fact that I'm me and I'm going to enjoy who I am. When I was in 7<sup>th</sup> and 8<sup>th</sup> grade, I would post a lot. Now that I have grown up a little bit more, I realized that I shouldn't be posting so much you know. When I was posting, I wouldn't get as many "likes". So, I was like, am I not pretty, do people not like my style, do they not like my feed? So, I would delete my pictures and it would make me upset.

Participant G recognized that she experienced depressed mood, and feelings of low self-worth after spending time on social media. She stated "I feel that way when I couldn't make someone happy when they see what I did. I feel kinda down when I don't get the "likes" on my posts that I think I should get." Participant E shared, "sometimes I lose concentration and procrastinate and never get my assignments done. But I usually end up getting done like last minute."

Tik Tok media of choice. In addition, students expressed a common theme in their media of choice. The participants stated that TikTok may play a role in how they viewed their feelings. Each participant interviewed and surveyed listed the various social media sites of choice that they frequented. When they were asked "What social media platforms do you use most frequently?", all eight of the participants communicated that TikTok was a common site of choice. The researcher noticed the pattern and asked the follow up question "What do you like about the sites you mentioned?", three of the eight participants described TikTok as a place to watch videos. Participant A stated "I can find

videos about anything on TikTok." Participants C stated "I get some inspiration from there that entertains me." Participant H described TikTok as "a fun place to watch and post videos about anything." Participant F stated "I love the dance challenges." The remaining four students, Participants E, D, G and B represented a different viewpoint. They felt that TikTok afforded them a place to be free to be who they really are. They also had similar responses about the number of people in their families who have TikTok. "I like TikTok because I send and share videos and challenges with my sister and my mom", stated Participant D. Participant G stated "me and my brother and sister often do dance challenges with each other on TikTok." Participant B describes his interaction on TikTok by stating "I like TikTok because I play games like the Call of Duty. I also like singing random songs while driving around the map. I use it to joke around and mess around a lot."

The aforementioned comments shared by students illustrate why TikTok is the social media site of choice. Students appear to engage in using TikTok on a daily basis. The creation of and sharing of videos are the preferred activity while students engage in social media. Despite the various options for students to engage in social media, overall appear to prefer TikTok above SnapChat, Facebook, and Instagram.

Students commented on their feelings about social media and how it made them feel after consistently spending time using it. Based on student's comments, it appears as though an equal number were affected by its use as those who are unaffected. These comments shared by students illustrate how in tune students are regarding their feelings and mental health. Despite the varying viewpoints that were shared, the 9<sup>th</sup> grade students overall appear to have healthy feelings of self-worth, when using social media sites. The researcher then asked for the participants if there were any other comments/perceptions that were not already captured that they wished to share. The

researcher noticed that the four female students made comments that self-esteem had to do with a beauty standard that society established. The female students all shared that at some point they struggled with their self-esteem. They also struggled at times with posts on social media where their beauty or body was shamed, thus having a declining effect on their self-esteem. The male students all scored in the high to average self-esteem range and seem to have no struggles with their self-esteem at all. The young men all stated they social media did not affect their self-esteem but in fact it inspires them to do better. They also stated that the time spent on social media affected their studies and grades.

Participant E stated that parents should "restrict our social media use and our phone use to only two hours per day." He feels that this would help with the social media concerns.

Overall, student comments were consistent regarding their perceptions and effects of social media use. The 9<sup>th</sup> grade students appear to have positive perception and are aware of the negative effects that social media may sometimes have. They appear to enjoy the time and the various activities that they engage in on social media.

#### Conclusion

This chapter presented the analysis of qualitative and quantitative data collected from surveys and interviews, participant demographics, and processes of answering each research question. In the next chapter, findings will be presented to compare what was found throughout this study with existing literature. Implications of this study in education and future research will be discussed.

#### CHAPTER V:

## SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the influence of social media use on adolescent mental health. The attitudes and perceptions of students toward social media use have been well documented in research literature. This chapter presents conclusions from this mixed-methods study including a summary of key research findings. Also included are implications for practice and recommendations for future research. This section closed with the limitations of the study and conclusions.

To quantify student attitudes toward social media use, 136 students enrolled in a high school within a single large suburban school district in Southeast Texas completed the *Pew Internet Research Survey and the Rosenberg Self-Esteem Inventory*, during the Spring of 2021. The high school also participated in structured interviews, in which qualitative data enriched the understanding of perceptions and attitudes regarding social media use and how it affects mental health and well-being. Within this chapter, the findings of this study were contextualized in the larger body of research literature. Implications for school administrators, counselors, and parents as well as recommendations for future research are also included.

## **Summary of Findings**

This mixed-methods study incorporated quantitative data collected from a sample of students who took the PEW Internet Survey and the Rosenberg Self-Esteem Scale. The researcher hypothesized that through a deeper understanding of the social media sites adolescents accessed, the frequency of use on social media, the activities that they participated in on social media, and the adolescent perceptions of their self-esteem, the researcher would be able to analyze the influence and relationship social media use played on adolescent mental health. For the first research question, patterns, trends, and

demographic data were discussed to establish insight into each participants' background. The second research question demonstrated a statistically significant relationship between social media usage and depressed mood. The third research question revealed that there was not a statistically significant relationship between social media usage and self-esteem. The fourth research question also revealed that there was not statistically significant. Social media usage does not have an influence on academic achievement. Lastly, qualitative data was gathered from the fifth research question using semi-structured interview questions to ascertain student perspectives, of eight selected participants, on the impact of social media on their mental health. The research questions addressed whether there was a relationship between social media use and mental health and wellbeing. The following research questions guided this study:

R1: What are students' perceptions of their social media usage?

R2: Is there a relationship between social media and depression?

R3: Is there a relationship between social media usage and self-esteem?

R4: Does social media usage influence academic performance?

R5: What do adolescents think about social media and its relevance to mental health and well-being?

The trend in the overuse of social media is growing among teens. To address these areas, this next section will include: (a) depression (b) self-esteem (c) academic performance, and (d) adolescent perspectives. The researcher examined the relationship and influence that social media had on these areas in each research question.

## **Research Question 1**

The following research question was addressed during the investigation, *What are students' perceptions of their social media usage?*, was answered using frequencies and percentages to determine demographic, categorical information regarding patterns, and

the habits of youth on social media. The student responses from the PEW Internet Survey were used to gather students' perceptions on preferred social media platforms, frequency of use, and the content and activity posted on social media. Of the 136 students surveyed, findings suggest that the majority of the adolescents accessed TikTok, Snapchat and Instagram, while very few used Facebook. One student stated that they did not use social media at all. The addition of TikTok has recently emerged as a site that is accessed more frequently than any of the others. In order to understand the frequency of participant time spent on the various social media sites, the researcher asked the survey respondents to identify the amount of time spent on social media each day and per week. Findings suggest that the most of the participants spent 10 or more hours per week on social media. The researcher was able to determine the amount of activity that students had on social media. The participants seldom used social media to post their personal problems or what they were doing. They mostly used it to share videos and note their accomplishments. The findings regarding the media of choice was consistent with the research of Lovejoy (2020), who noted that TikTok became the most popular app in the world overtaking Facebook and WhatsApp.

By examining student's perception of how much time and the patterns and trends regarding social media, will help the reader gain context and insight to the participants.

## **Research Question 2**

Research question number two was addressed during the investigation, *Is there a relationship between social media usage and depressed mood?*, was answered using frequencies and percentages from the *PEW Internet survey* and cross-tabulation results from the Chi-Square test of Independence. Quantitative analysis demonstrated there was there was a statistical significant relationship between student's time spent on social media and student depressed mood. Qualitative findings also indicated there was

evidence of a positive relationship between student's mood after spending social media. Findings reveal that students do not feel connected when using social media.

Not only did the quantitative analysis include findings indicative of a statistically significant relationship, but the qualitative interview responses provided by the students brought to light their personal feelings about their mood after spending excessive hours using social media. The interview responses disclosed that students feel sad, overwhelmed, and worse about their life.

Social Media Usage and Depressed Mood. Findings from this study are consistent with research on the relationship between time spent on social and well-being. Research on Facebook depression was illuminated by Guernsey (2014). The term "Facebook Depression" has become a mass media headline suggesting detrimental effects of social networking sites (Guernsey, 2014). The need to conduct research to determine the extent of differences between social media use and depression will result in mental health professionals being better prepared and more equipped to address situations that involve individuals with depression. If depression is left untreated, this can lead to increased distress or even death. Furthermore, Woods and Scott (2016) provided evidence in support of a link between social media use and various aspects of adolescent well-being, including sleep and mental health. The study also examined how adolescent social media use relates to psychological well-being.

Consistent with Woods and Scott (2016), further research by Lin (2016), notes as stated previously, there was a statistically significant relationship between social media use and depressed mood. Based on the quantitative findings of this current study, this is also consistent with the findings of Lin (2016), which found that there was a relationship between time spent on social media and depression. Students aged 11 to 19 took the *PROMIS* to assess if whether after extended social media use left them feeling hopeless,

worthless, or depressed. More specifically, as a student's time on social media increases, his or her mood decreases.. The students responded to statements from the *Patient-Reported Outcomes Measurement Information system (PROMIS) Depression Scale*, which asked participants if they have felt hopeless, worthless, helpless, or depressed in the past 7 days. The results revealed that the greater the frequency, as well as the amount of time spent on social media, the more an individual is likely to be depressed. This could indicate that more frequent use of social media leads to depression. However, it could potentially reveal that individuals who are depressed and possess low self-worth, resort to using social media to gain validation. Twenge (2017) found that teens who spend five or more hours a day online or on social media were more likely to have at least one suicide risk factor (depression, suicide ideation, or attempting suicide).

In a contradictory study, the research by Weinstein (2018) suggests that students stated that they felt more connected to friends while using social media. In her study of 568 high school students at a suburban public high school, students reported that they felt more connected to friends while using social media. Instead, students feel especially overwhelmed and worse about life. This suggests that parents and teachers should consistently monitor and/or limit the amount of time that students have access to social media.

## **Research Question 3**

For the current study, the third research question isolated the student's self-esteem. To answer the question "Is there a relationship between social media and self-esteem. Quantitative findings suggested there was not a statistically significant relationship between time spent on social media and self-esteem. The students participated in the Rosenberg Self-Esteem Scale in an effort to further understand the self-esteem of adolescents. Findings from the current study indicated that participants

responded with either high levels of self-satisfaction, belief that they are a person of worth, and at least on an equal plane with others. Additional questions revealed feelings of low self-worth. Participants also responded and disagreed that they believed that had a positive attitude towards themselves. The *Rosenberg Self-Esteem Scale* was used to determine an actual score allowing the participants to determine whether they had high, normal, or low self-esteem. Overall, out of the 136 students who participated in the study, a great majority was classified as having normal self-esteem.

Findings from prior research by Motl and DiStefano (2002) concluded that upward social comparison underlies the relationship between Facebook and well-being. The initial study included people who had the most chronic exposure to Facebook (e.g., used it frequently) had lower self-esteem. This is not congruent with the results of the current study. There was not a statistically significant relationship between time spent on social media and self-esteem.

As past and current research consistently shows, social comparison has a direct negative influence on self-esteem. Self-esteem, is affected by the comparison with others and by whether we are accepted by them or not. Social media enable their users to create spaces to highlight social comparison with others. Previous researchers have addressed the role of Facebook and the ability to socialize, and the role that socializing online plays in supporting self-esteem and various forms of social capital (Gonzales & Hancock, 2011).

For the current study, however, there was no relationship between social media usage and self-esteem. It appears that students are not equating their time on social media as affecting their self-esteem. Their level of self- esteem may be connected to the relationship with their peers at school as well as the friends with whom they associate with on social media. Students' survey responses indicated that they had normal self-

esteem no matter the time that they spent using social media. This indicates that students do not connect social media use to self-esteem. The current studies results are consistent with the idea that if students engage in and receive positive feedback while on social media, it has been shown to enhance self-esteem, while negative feedback has been shown to have the reverse effect (Valkenburg, 2017).

Additionally, qualitative findings from the student interviews, also concluded that student's perceive that social media can have a negative and positive effect on self-esteem.

# **Research Question 4**

As with the previous research questions, there was no statistical significance found and the time spent on social media does not influence academic performance. Findings indicate that social media use had no influence on whether students passed or failed the Reading or Math STAAR End Of Course exams. The student STAAR EOC scores were collected as the percent correct and were used to gather information on students' overall academic success in the classroom. The passing percent score for the STAAR Reading test is 56%. The passing percent score for the STAAR Math test is 37%.

Quantitave findings revealed that out of the students who failed the Reading STAAR EOC, 30.0% spent one to four hours on social media, 30.0% spent five to nine hours on social media, and 40.0% spent 10 or more hours on social media. Out of the students who failed the Math STAAR EOC, 60.0% of students reported spending one to four hours on social media, while 40.0% reported spending 10 or more hours on social media. Although, based on findings concluded from the current studies qualitative investigation there was evidence that shows students perceive that the time spent on social media did in fact influence their academic performance and achievement. There is

no connection between students who passed the STAAR EOC exam and the time that they spent on social media. However, those students who failed the ELA STAAR EOC, showed as having spent significant time using social media.

Social media and student achievement. There was not a statistical significant relationship between social media use and academic achievement. (Pasek, 2009) examined and also found that there was no significant relationship between Facebook and academic performance. Correlations were examined to evaluate the relationship between Facebook frequency-of-use measure and time spent preparing for class and how it was a predictor of a student's overall GPA. This notion is incongruent with conclusions from the previous research of Flanigan and Babchuk (2015). This pilot study concluded that social media affected a variety of academic activities, diminishes achievement, reduces how much information students retain, and increases the time it takes to complete tasks.

One explanation for the difference in results could be that a student's GPA is based on a number of other factors and is based on an accumulation of grades for four years. As the student ages, factors such as social media distractions may decrease. The current qualitative study found factors related to the students' perception that time spent on social media caused them to lose focus on their academic assignments. This factor could explain the difference in results between the current study and previous research. Findings from the current study suggest that students perceived their day to day academia to be affected more than the cumulative collection of GPA and STARR EOC scores.

## **Research Question 5**

Research question five, "What do adolescents think about social media and its relationship to mental health and well-being?, was answered using a deductive thematic coding process based on a semi structured interview with students from the participating high school campus. Responses were organized into two major themes: student

perceptions and self-esteem implications. Student responses to the interview questions pertaining to perception were consistent among all participants. Emphasis was placed on the following subthemes, time spent on social media and activity on social media. Overall, students shared their experiences and the time that they spend daily and weekly using various social media sites. They also shared the activities that they typically participate in and the reasons that they engage in social media use. The participants shared that the amount of time spent using social media did in fact influence the development of their mood and feelings. Students also shared feedback regarding how the amount of time did contribute to depressed mood, being overwhelmed, and feeling worse about their life. Students expressed positive perceptions about having opportunities to highlight their accomplishments and engage in to work that allows them to work closely with their peers.

The second theme was self-esteem implications. Students shared their views about the meaning of self-esteem and how they felt social media affected their self-esteem. The majority of the students felt that they had normal self-esteem. Out of the eight students who were interviewed, only three reported recognizing issues or having low self-esteem. The eight participants understood the meaning of self-esteem. All participants agreed that it was how you feel about yourself.

Sub themes related to self-esteem implications were (a) feelings after use, and (b) TikTok is the media of choice. Students shared experiences about how they felt after using social media for extended periods of time. The female students all share that they felt that social media made them feel as if they needed to meet a certain image, fit a certain body type and uphold the beauty standard set by society. A few of the girls also indicated that they experienced a negative affect toward their self-esteem and self-worth after spending time on social media. The boys all commented that they did not feel that

social media affected their mood, however, they all agreed that time spent on social media affected their academic performance.

TikTok emerged as a sub theme due to the overwhelming similarities in the comments by the participants. The participants commented that they mostly shared and viewed videos on this site. They also stated that this media site allowed them to express themselves. During this period of adolescence, students concern themselves with how they appear to others. According to Anderson & Jiang, (2018), adolescents reported pressure from peers to post specific content such as self-images. The students in the current study state that the social media TikTok forum is merely for entertainment and not a forum for downward comparison in their lives.

Student Perceptions. In a qualitative study, Burnette, Kwitowski, and Mazzeo (2017), explored how young adolescent females used social media and their related body image perceptions and experiences while using social media. This research supports the current study's findings and interview responses regarding feelings after use shared by the participants. Social media subconsciously influenced adolescents' self-perception simply by participating in the various platforms. Both the quantitative and qualitative questions allowed participants to share their likes and dislikes about social media. Specifically, when individuals experienced more negative effects on their well-being, it may dampen or heighten their ability to enjoy social interactions. Overall, students expressed negative perceptions when given the opportunity to provide student-input in establishing their views of social media. In regards to perception concerning self-esteem implications, and social media use, students expressed positive perceptions.

## **Connection to the Theoretical Framework**

The Social Comparison theory states that social comparison has many effects on everyday life, including body perception, learning in schools, self-esteem, exercise

habits, and balance (Festinger, 1954). The theory was selected because it addresses the social comparison that takes place on social media and its effects on self-esteem, body perception, and academic achievement, all of which are addressed in this study. While there were no quantitative connections, the information the students shared in the qualitative interviews supported Festinger's theory. Although, Research question number two, time spent on social media and depressed mood was the only statistically significant relationship, the qualitative findings confirmed the theory in areas of self-esteem as well.

There was one significant quantitative finding, social media does have a relationship with depressed mood. The social comparison theory states that humans have the ability to compare themselves with others and thus affecting self-esteem. However, the findings did indicate that were neither a statistical relationship between time spent on social media and self-esteem, nor time spent on social media and academic achievement.

The following qualitative finding were directly connected to the theoretical framework. The female students stated that they felt like there were beauty and body standards set by social media users. The young girls compared themselves to those they felt were superior individuals. They also stated that they felt worse about themselves and experienced feelings of low self-esteem when they did not measure up after comparing themselves to the standard set on social media. The quantitative and qualitative research questions coupled with the literature reviewed, were all aligned with the Social Comparison Theoretical framework.

## **Implications**

As a result of this study's examination of students' perceptions regarding social media and mental health, implications for school districts, teachers, students and parents emerged. For school districts, this research revealed the critical need for leaders to create open dialogue and clear communication with students and parents regarding the need to

establish clear boundaries for students when engaging in various social media sites.

Research shows that to improve or sustain your mental health, social media time should be reduced to 30 minutes a day or less (Hunt, Marx, Lipson, & Young, 2018).

## **Implications for School Districts**

School administrators play a critical role in influencing the school culture and climate. The culture is the set of established or not established norms that your organizations operates and exists. Strengthening the school community and building upon a culture that promotes literacy and learning in all areas that students face, should be the district goal. School districts have a greater responsibility today to respond to the issue regarding social media than they did just two years ago. The issue needs to be addressed from the district level so that the recommendations will be consistent across all campuses in the entire district.

There are several recommendations that can be implemented at the secondary level. The need for emphasis in the area of Social Emotional Learning lends itself to the educational program could provide guidance, support, and skills on how to navigate the area of social media. The need to incorporate lessons for students at this level is critical. Students are seeking validation through the use of these sites. When adolescents interact over social media for prolonged periods of time, they feel compelled to seek validation through updates, "likes", or comments. Psychologists refer to this external validation as intermittent reinforcement (Silva, 2017). Administrators can provide time during the instructional day to engage in the Social Emotional Learning lessons and incorporate open conversations about social media and healthy ways to seek validation outside of negative interactions on social media. The administrator's role involves engaging teachers and staff in meaningful activities geared towards establishing a school culture

focused on building relationships with students and designing meaningful lessons that also encourage socialization.

School districts can also utilize the guidance counselors. When students see their counselor for issues that arise from negative interactions on social media they will have someone to confide. Counselors can form focus groups for students that focus on mindfulness strategies and interpersonal communications skills. This will help to boost their self-esteem, and allow them to attempt to resolve issues before they escalate to more serious concerns. As noted in the qualitative results, the female students seem to struggle with their activity and self-esteem after using social media. Counselors can also establish female focus groups that can help teenage girls discern what they browse on social media and also help them understand that information and activities on social media should not define their identity and self-worth (Chau & Chang, 2016).

# **Implications for Teachers**

Teachers also have a vested interest in ensuring that students do not experience the negative effects of social media use. They understand that students learn best when they feel good about themselves and have a healthy level of self-esteem (Barrett, 2018).

Teachers should be equipped with tools to recognize the signs of harmful social media use in students. Teachers can incorporate literary texts for students to read and reference that address the signs and symptoms of the negative effects. Students learn as they read. So, incorporating texts that are focused on how to deal with issues of low self-esteem, depression, and the negative effects of social media use, can be a valued resource for students.

Teachers can also develop and implement lessons that encourage student discourse and verbal communication and refrain from activities that are heavy technology and social media integration. The term "social" media is misleading. The more time

teens spend on social media, the lonelier and more anxious they are (Twenge, 2017). When a lesson or activity has a technology or social media integration, teachers should use resources and programs that promote safe practices and increase engagement. If unhealthy signs are consistently exhibited, teachers should contact a parent or counselor immediately.

## **Implications for Students**

Educating teens and adolescents on the negative effects and the dangers that the unsafe use of social media is critical to their mental health. There are a number of strategies that can be used to equip students on safe and healthy social media use.

Adolescents should monitor and set limits on the time spent on social media. Studies show that students who limit their media use to 30 minutes per day decreases feelings of loneliness and depression and increases positivity and better self-images (Hunt, Marx, Lipson, & Young, 2018). Students should also be taught to self-monitor and be aware of how using social media makes them feel. To reject feelings of insecurity and negative social comparison, students must realize that what they see on social media is not reality (Hogue & Mills, 2019). They should also refrain from measuring their self-worth based on what others think as well as creating a false sense of who they are in an attempt to be accepted among others in the social media world.

# **Implications for Parents**

Regarding parents, it is critical that they train and model good judgment and self-awareness regarding posting and information viewed on social media. Healthy social media habits can be modeled by limiting their use of social media while spending time with your adolescent. Parents should provide opportunities to engage in open dialogue concerning social media use. Parents should also create a supportive environment in

which students feel comfortable discussing how they feel before, and after spending time on social media.

The participants who engaged in the qualitative interviews stated that they felt they needed their screen time monitored and regulated by their parents. This was due to the amount of time spent and how they felt after spending that amount of time on the social media sites. Parents can create boundaries for their adolescent by encouraging them to engage in face to face activities outside of using social media. Adolescents should spend time doing activities that validate and boost their confidence and perhaps they won't search for this validation on social media. When they learn to feel good about themselves, and not worry about how they look online, they may be happier and more fulfilled. Naturally, this may create an upward rise in self-esteem and self-worth.

## **Implications for Governmental Agencies**

Mental health disorders have become an economic burden on societies (Rehm, Trautmann, Wittchen, 2016). Approximately one in five teens between the ages of twelve and eighteen suffer from one mental health disorder, and the number continues to grow (Acknowledgement, 2019). Students with undiagnosed or untreated mental health issues rank among the most pressing concerns in schools. Research also indicates that there is a strong link between consuming too much social media and mental health problems (Hogue & Mills, 2019).

The federal government should work in partnership with states and counties to address mental health. The government plays a critical role in regulating systems and providing funding for other governmental entities to be able to implement programs and services that will help schools to combat these issues (Barrett, Eber, & Weist, 2013). Funding is the universal concern as to why schools are not fully equipped to combat the rising mental health concerns. County mental health agencies can contract with local

school districts to provide mental health services. County-employed individuals can develop partnerships with the school districts to have permanent or visiting county employees provide assessment and treatment services on the actual school campuses. The government agencies could also help to establish school community based mental health services through community providers. Individual practitioners and mental and behavioral health practitioners from local agencies can also be an available option and integral resource for our students.

### **Recommendations for Future Research**

Findings from this study involved obtaining feedback (quantitative and qualitative) from students. Although the findings provided data and information about students' perceptions, recommendations for future research will help expand the knowledge on this topic. The following recommendations are based on data and findings from this study.

This study took place in one participating high school campus from a suburban school district located in the southeast region of Texas, therefore results are only applicable to similar campuses and districts in terms of size and demographics. Data collection from a larger populations and sample may produce different results. A recommendation for future research would be to include more high schools, or conduct the study in a wider age range. The current study sample group is 14 and 15 year olds. There are a number of studies that explore social media use among University aged students. However, the relationship between social media and mental health has been minimally explored at the adolescent age range (Lai, Chou, Miao, Wu, Lee, & Jwo, 2015).

Future research could also focus efforts on examining the affect that social media use has on girls versus boys. The data trend revealed itself to be a trend when examining

the results of a few of the research questions. This type of research could provide more insight in regards to examining student's perceptions of the effects of social media. Research can also be expanded to Middle School aged adolescents (11-14). This is the age when true access to social media begins and has the most detrimental effects including but not limited to cyberbullying (Martin, Wang, Petty, Wang, & Wilkins, 2018)

#### Conclusion

This study examined the influence of social media on adolescent mental health. The study explored the experiences of students' social media practices and habits and the relationship and influence on mental health. Survey, interview, and achievement data were analyzed regarding students' perceptions of time spent on social media, activity on social media, depressed mood after using social media, and academic achievement. The data was analyzed using Frequencies and Percentages, Chi-Square Test of Independence, and a One-Way Analysis of Variance (ANOVA). Quantitative analysis resulted in statistically significant relationships between times spent on social media and depressed mood. The findings did not indicate any other statistically significant relationships between time spent on social media and self-esteem, and time spent on social media and academic achievement. However, qualitative analysis illustrated the eight ninth grade students' perceptions of how adolescents think about social media and its relevance to mental health and well-being. Sub themes of time spent on social media, activity on social media, and the preferred social media sites, were discovered through individual interviews with eight students. The themes were important for gaining a deeper understanding of the research constructs according to student perceptions.

In conclusion, this study contributes to existing research on social media use and the influence of mental health, such as self-esteem, depression, and academic achievement.

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#### APPENDIX A

## PEW INTERNET RESEARCH SURVEY

- 1. Which of the following social media do you use, if
  - any? (Check all that apply) Twitter
  - o Instagram
  - o Facebook
  - o Snapchat
  - o Tik Tok
  - o I do not use social media
- 2. In general, which of the following statements comes closest to describing how you see yourself compared with other people your age where you live?
  - o I tend to fit in pretty easily
  - o I tend to stand out
- 3. In a typical week, how often do you get together with friends in person (outside of school or school-related activities)?
  - o Everyday
  - o 3-4 times per week
  - o 2-3 times per week
  - o Less Often
  - o Not at all
- 4. In a typical week, how often do you get together with friends online (including on your cellphone, on social media, or through online gaming)?
  - o Every day
  - o 3-4 times per week
  - o 2-3 times per week
  - o Less Often
  - o Not at all
- 5. In a typical week, how many hours do you spend on social media?
  - o 10 or more hours per week
  - o 5-10 hours per week
  - o Less than 5 hours per week
  - o No time at all

- 6. In general, how much time would you say you spend with your friends IN PERSON outside of school?
  - o 10 or more hours per week
  - o 5-10 hours per week
  - o Less than 5 hours per week
  - o No time at all
- 7. Which of the following, if any, is a reason why you do not spend MORE time with your friends in person outside of school?
  - o Your parents will not let you
  - o It's hard to find transportation
  - o It's easier to keep in touch with people online or on your phone
- 8. How many people do you consider to be your close

friends?

- o None
- 0 1-5
- 0 6-10
- o More than 10
- 9. How often, if ever, do you post the following things on social media?
  - Selfies and pictures
    - o Everday
    - o 3-4 times per week
    - o 2-3 times per week
    - o Less often
  - o Videos you've recoded and created
  - o Every day
  - o 3-4 times per week
  - o 2-3 times per week
  - o Less often
  - o Updates on where you are or what you're doing
  - o Every day
  - o 3-4 times per week
  - o 2-3 times per week
  - o Less Often

0

- o Things that only your closest friends would understand
- o Every day
- o 3-4 times per week
- o 2-3 times per week
- o Less Often

O

- o Things you want to go viral
- o Every day
- o 3-4 times per week
- o 2-3 times per week
- o Less Often
- 10. Which of the following things, if any, do you ever post about on social media?(Check all that apply)
  - o Your accomplishments
  - o Your dating life
  - o Your family
  - o Your political beliefs
  - o Personal problems you're having
  - o Your religious beliefs
  - o Your emotions and feelings
  - o None of these
- 11. In general, does what you see on social media make you feel. ...
  - o Worse about your own life
  - o Overwhelmed because of all the drama
  - o Pressure to post content that will get lots of comments or likes
  - o Pressure to only post content that makes you look good to others
  - o Happy to connect with friends and family
  - o None of the above

12. Here are a few pairs of words that are opposites. For each pair, please select the one that most closely matches how you feel when using social media-even if neither is exactly right.

Does social media make you feel more....

- o Authentic
- o Fake
- o Confident
- o Insecure
- o Reserved
- o Outgoing
- o Included
- o Excluded

Thinking about your experience on social media, how often, if ever, do you do each of the following?

- o Organize your feed to only see certain types of content
- o Delete or restrict access to things you post because you are concerned they could negatively impact you later in life
- o Delete or restrict access to things you post because you don't want your parents to see them

Which of the following is a reason that you do not spend more time on social media?

- o Your parents will not allow it
- o It interferes with your studies
- o Your parents monitor your screen time
- o You feel sad after using it
- o None of the above

# APPENDIX B

# ROSENBERG SELF-ESTEEM SURVEY

	STATEMENT	Strongly Agree	Agree	Disagree	Strongly Disagree	
1.	I feel that I am a person of worth, at least on an equal plane with others.	0	0	0	0	0
2.	I feel that I have a number of good qualities.	0	0	0	0	0
3.	All in all, I am inclined to feel that I am a failure.	0	0	0	0	0
4.	I am able to do things as well as most other people.	0	0	0	0	0
5.	I feel I do not have much to be proud of.	0	0	0	0	0
6.	I take a positive attitude toward myself.	0	0	0	0	0
7.	On the whole, I am satisfied with myself.	0	0	0	0	0
8.	I wish I could have more respect for myself.	0	0	0	0	0
9.	I certainly feel useless at times.	0	0	0	0	0
10.	At times I think I am no good at all.	0	c	0	0	0

Your score on the Rosenberg self-esteem scale is:

Scores are calculated as follows:

• For items 1, 2, 4, 6, and 7:

Strongly agree = 3

Agree=2

Disagree = 1

Strongly disagree = 0

• For items 3, 5, 8, 9, and 10 (which are reversed in valence):

Strongly agree = 0

Agree = 1

Disagree = 2 Strongly disagree = 3

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

#### APPENDIX C:

#### INFORMED CONSENT/ASSENT

#### **Adolescent Participant Assent Form to Participate in Education Research**

You are asked to help us in the project described below. Your parents or guardian have given their okay, but you get to decide if you want to be in this study or not. You may stop or quit the study at any time by telling one of us and it is okay. If you want to know more about the study, it is okay to ask questions.

Title of Study: THE INFLUENCE OF SOCIAL MEDIA ON ADOLESCENT MENTAL HEALTH

Principal Investigator:

Student Researcher: Faculty Sponsor:
Aeniqua Flowers Michelle Peters, Ed.D

214-797-3434 aflowers@alvinisd.net (202) 321-3752; petersm@uhcl.edu

**Purpose:** The purpose of this study is to examine the influence of Social Media on Adolescent Mental Health.

Procedures: You are being asked to help in a research project called THE INFLUENCE OF SOCIAL MEDIA ON ADOELSCENT MENTAL HEALTH and the project is part of my doctoral dissertation at the University of Houston-Clear Lake. You will be asked to participate in completing a survey and a focus group. Your help will be needed for four weeks.

You do not have to help if you do not want and if you may stop at any time even after you have started, and it will be okay. You can just let the researcher know if you want to stop or if you have questions. If you do want to do the project, it will help us a lot. I will do everything to make sure that you will not be harmed in any way. I will be the only person who knows what you say and do.

If you understand what you are being asked to do and you decide to help, you are asked to sign your name below.

Printed Name and Signature of Assenting Adolescent	Date
Printed Name and Signature of Parent or Guardian (if applicable)	Date
Signature of Investigator	Date

THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281-283-3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT.

(FEDERALWIDE ASSURANCE # FWA00004068)

## APPENDIX D:

## ASSENT OF MINOR TO PARTICIPATE IN EDUCATION RESEARCH

# **Student Researcher:**

Aeniqua Flowers School of Manvel High School Phone: 281-245-3227

Address: 19601 Hwy 6, Manvel, TX 77511

Faculty Sponsor:
Michelle Peters, Ed.D
College of Education
2700 Bay Area Blvd., Houston, TX 77058
(202) 321-3752; petersm@uhcl.edu

You are being asked to help in a research project called THE INFLUENCE OF SOCIAL MEDIA ON ADOLESCENT MENTAL HEALTH, and the project is part of my doctoral dissertation at the University of Houston-Clear Lake. The purpose of this study is to examine the influence of social media 14-15 year old student's mental health. You will be asked to participate in completing one survey. Your help will be needed for 1 week.

You do not have to help if you do not want, and you may stop at any time even after you have started, and it will be okay. You can just let the researcher know if you want to stop or if you have questions.

Please keep the upper part of this page for your information. Thank you for your assistance.

*****************
Yes, I agree to (allow my child to) participate in the study (THE INFLUENCE OF SOCIAL
MEDIA ON ADOLESCENT MENTAL HEALTH)
No, I do not wish to (allow my child to) participate in the study (THE INFLUENCE OF
SOCIAL MEDIA ON ADOLESCENT MENTAL HEALTH)
Printed Name of Assenting Child
Signature of Assenting Child  Date
Printed Name of Parent or Guardian
Signature of Parent or Guardian Date
Printed name of Witness of Child's assent
Signature of Witness of Child's assent  Date

#### APPENDIX E:

## STUDENT INTERVIEW QUESTIONS

Time of filter view.
Date:
Place:
Interviewer: Aeniqua Flowers

Time of Interview:

Interview Participant:

The researcher will begin the interview by thanking the participant for attending and participating. The researcher will explain that the purpose of the interview is to understand the social media usage of high school students. The researcher will explain confidentiality to the participant and that the conversation is completely anonymous. The researcher will also explain that the interview will be recorded, but the recording will be deleted after transcription. The researcher will begin by requesting the participant introduce himself/herself and say a little about his/her interests.

## **Domain: Social Media Usage**

- 1. What social media platforms do you use most frequently?
- 2. How many hours do you spend on social media?
- 3. What are some reasons you use social media?
- 4. Who do you communicate with on social media?
- 5. What are you sharing on social media?
- 6. Please share your feelings regarding social media?

# **Domain: Identity**

- 7. How does what you share on social media represent who you are?
- 8. How often do you use "likes" on social media?
- 9. How do you feel when people like your posts?

- 10. How do you feel when people do not like your posts?
- 11. After using social media, do you ever experience feelings of depressed mood, decreased energy, low self-worth, loss of interest or pleasure, or poor concentration? Explain

# **Domain: Self-Esteem**

- 12. How do you view self-esteem as a whole?
- 13. What are some of the things that you attribute to developing or reducing self-esteem?
- 14. Define social media use and its context with self-esteem?
- 15. How can schools assist with supporting students' social media usage and positive self-esteem?
- 16. Conclusion: Is there anything you want to add that we did not discuss?