SADNESS AND SOCIAL MEDIA: AN ANALYSIS OF THE EFFECTS OF SOCIAL MEDIA ON DEPRESSION IN YOUNG AFRICAN AMERICAN FEMALES

by

Rosa Lee Sutton

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

School of Behavioral Sciences

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ABSTRACT

Social media has the propensity to inadvertently cause the vicarious traumatization of its users due to their witnessing violent or distressing content. This current research proposes that African American social media users suffer vicarious traumatization via social media and suffer the effects of direct, historical, racialized trauma. In the past decade, through social media, Black Americans have vividly witnessed videos depicting several high profile, violent deaths at the hands of law enforcement, police brutality, racial violence, civil unrest, the birth of the Black Lives Matter movement, experienced blatant discrimination, engaged in racially divisive discourse, and have witnessed attempts to have their experience and existence invalidated. As beneficial and powerful social media can be used as a tool for news and creating connectedness for members of the African American community, social media has also been a tool for evoking depression and hopelessness. Historically, African Americans have used intergenerational coping mechanisms as protective factors in family, friends, and the church. However, due to the rapidity of social media development, the dialog and audience have changed; new coping mechanisms should be explored or incorporated.

Keywords: social media, social networking, African Americans, Black Americans, racism, trauma

Dedication

This dissertation is dedicated to my husband, Matthew, who has been a constant source of support and encouragement during the challenges of life, work, and school. I am truly thankful for having you by my side. This work is also dedicated to my two sons, Oliver and Gabriel, who have been my inspiration to persevere. Finally, to my mother, Olivia Webb, who has always loved me unconditionally and who taught me to work hard for the things that I aspire to achieve and to never give up, give in, or settle.

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List of Abbreviations

Beck Depression Inventory-II (BDI)

Black Lives Matter (BLM)

Daily Life Events (DLE)

Facebook Intensity Scale (FIS)

Racism and Life Events Scale (RaLES)

Social Networking Sites (SNS)

Statistical Package for Social Science (SPSS)

CHAPTER ONE: INTRODUCTION

Overview

This study sought to explore the impact of social networking on African Americans and asked whether social media usage elicits or exacerbates depression or feelings of hopelessness in young African Americans. Despite the high rate of suicidality in the demographic, minority populations are often overlooked in suicidality studies. Social media use is ubiquitous among young adults. Along with an increase in race-based incidents and harmful race-based content shared on social networking platforms, an increase in rates of depression in the African American population, it is essential to study social media usage and minorities for purposes of possibly implementing stricter monitoring and regulations of what is allowed to be posted on social media. Also, it is integral to study social media to create programs to address safe social media use and address increased protective factors for at-risk groups.

Background

In the past half-decade, the concept of a "post-racial society" has been challenged by an increase in political dialogue, an increase in blatant divisive and exclusionary rhetoric, an increase in publicized race-based police brutality, and a newfound racial justice movement (Umaña-Taylor, 2016). Much of this racialized rebirth has been openly exhibited in the realm of social media. For this study, social media was defined as networking websites that provide space online where individuals can create their profiles and connect to others with shared interests to construct their own unique, personal network construct profiles that can be connected to others to create a private network (Cheung et al.,2011). Umaña-Taylor (2016) argued that marginalization and the increase in perceived discrimination and racism result in negative consequences (e.g., mental health and physical health symptoms) for minority youth.

Race has become a highly politicized, emotional topic over the past five years (2015-2020). Issues about race, deaths of unarmed African American men and women at the hands of police, and racial unrest have become centralized, polarizing politics, inciting protest and debate, and sharply dividing public opinion (Greenberg, 2015; Horowitz et al.2015; Muhammad, 2016). America has departed from its "post-racial" utopian agenda and is being forced to reconcile with and redefine its own ugly historical truths and what race and relations mean in this modern day.

Many of these events, which had been overlooked in the past, have been brought to the forefront by the universality of social media and the ubiquity of its users, becoming the most commonplace form of communication used by young adults worldwide (Chaffey, 2021). Cheung et al. (2011) defined social media as any social network website that offers space online where people can create private profiles and connect to others to construct an individualized private network.

Social media has potentially reopened supposedly healed racial wounds of the past in that its user-created content reveals that racism, which was once thought to be on the verge of demise, is indeed an alive, well, and oppressive system. The collective experience of racism had been well recognized in the literature as physiologically and psychologically damaging (Blank et al.,1970; Higginbotham, 2013). However, the consequences of chronic exposure to racism online and via social media by minority populations were still unknown. How does viewing racism on social media affect African Americans?

Millions of social media users utilize newsfeeds, personal timelines of user-generated content, networking platforms such as Facebook, Twitter, Instagram, or media-based platforms such as YouTube or TikTok to public discourse circulate race-related issues (Benedict, 2016; Norton, 2016; Steele, 2016). According to Vega (2016), social networking sites (SNS) are the

primary source for race-related information dissemination. It can be argued that if it were not for the sharing of viral videos on Facebook or the retweeting of such hashtags as #BlackLivesMatter or #SayHerName, many non-minorities would believe racism to be a figment of minorities' imaginations.

This present study attempted to contribute to the existing literature in that it: a) sought to explore the constructs of racism and discrimination as traumatic experiences; b) examined the impact of social media usage on the young African American population during periods of increased societal stress; b) identified significant physical and mental health implications. In the following literature review, this researcher reviewed current research on social media usage, perceived discrimination and racism, race-related stress, general stress, and depression, measured as hopelessness, to better frame the goals of this study. The consequences of repetitively viewing racially related events on social media sites and engaging in related discourse on such platforms are still not clear, and the question remains as to what extent are young African Americans, in this case, particularly young African American females impacted.

The current study focused on African American female young adults and college students due to access and prevalence of social media use regarding the specific target population.

Teenagers and children have access to social media but are hypothetically limited due to parental constraints on usage; thus, young adults and college students were more likely to access a broader, less constricted range of social media. Also, although there had been several high-profile adolescent victims of police brutality and discrimination (e.g., Tamir Rice and Trayvon Martin, as well as a recent host of school-aged victims of school resource officers), many of the victims of police brutality and profiling, and discrimination are young African American adults (Laughland et al., 2015).

Young African American females tend to use social media more than males and maintain a more definitive vocal presence online. Besides, females tend to be more focal in the social justice movement online, as evidenced by the Black Lives Matter (BLM) movement and BLM hashtag. Young African American females also witnessed the deaths of Sandra Bland and Breonna Taylor and may have realized that they are also vulnerable to the same systemic racial violence as their male counterparts, no longer in the background as a sister or significant other or voice on the sidelines, but now just as vulnerable. As such, it is possible for young African American females to more readily identify with the victims. Also, young adults and college students comprise most social justice and Black Lives Matter protestors (Anderson, 2015). As a result, this age group is more likely to have shared race-based content with similarly aged peers or friends than adolescents or elders (Maxwell, 2016).

Research has found that gender also plays a role in stress response, with women reportedly experiencing higher levels of stress than men (Stein & Nyamathi, 1998), and are more apt than their male counterparts to make use of emotion/avoidance-focused coping techniques as opposed to problem-focused strategies (Madhyastha et al.,2014; Ptacek et al.,1994; Tamres et al., 2002), Women experience higher levels of chronic stress and minor daily stressors. In one study, Matud (2004) found that women identified family and health as stressful, whereas men identified their top stressors as relationships, money, and work. Women are also more likely to seek social support (Ptacek et al.,1992). Sexism and social pressure to conform to societal beauty standards also play a role in women's stress levels (Madhyastha et al., 2014; Perloff, 2014). As such, there is the possibility that women may be at higher risk of experiencing increased levels of stress when viewing racism online.

This study was critical because it added to the theoretical framework. The African American experience of stress is unique. Researchers had hypothesized that the primary association between stress and the perception of racism and discrimination is so robust that race-based stress is its own distinct construct with its own categorization: acute, short-term, stress, or chronic, long-term stress (Belgrave & Allison, 2010). It was essential to identify additional sources of stress and identify if social media is a conduit of stress for African Americans, given the magnitude of use in the Black community in order to develop culturally specific positive coping strategies.

This study also examined the impact of social media on young African American women. African Americans tend to make extensive use of social media. A 2014 Pew research study found that 67% of African American adults used Facebook, 27% used Twitter (Duggan et al., 2015). Another Pew study indicated that 55% of African Americans between the ages of 18-49 posted pictures on social media to support activism in the African American community, while 51% used social media to research protest events and rallies near them (Auxier, 2020).

Benbow (2019) stressed that as physically and mentally taxing viewing racism on social media is for the African American community, the experience is more so "triggering" for African American women. She argued that, in addition to seeing police violence perpetrated against Black youth and viewing protests and racial commentary, African American women are also subjected to race-based sexism. It is not uncommon to see African American women stereotyped as "welfare queens" or to use child support to "glow up" or deriding sex-positive African American women as "hoes." Simultaneously, while undergoing this stark level of degradation, African American women on the internet are still at the forefront of the anti-racism movement.

Problem Statement

Historically, young African American females maintained the lowest suicide rates of any demographic in the United States (Abrams, 2020). According to the Center for Disease Control, African American females have had the lowest rates of suicidality for several decades, spanning 1950-2010 (2012). However, a recent large-scale study on suicide with over 68.000 participants, Price and Khubchandani (2019), found that between 2001-2017, the suicide rate of young African American females under 20 rose 182%, which was found to be the highest increase of any racial or gender group. Spates and Slatton (2017) argued that there was a paradox in the study of suicidality in the African American community and suggested that the historical representation of African American women and low suicidality is potentially a result of solid religiosity and social support within the African American community and that within the Black community, women tend to seek and provide support for the whole community, and as such can maintain a low suicide rate. However, the study had a small sample size of 33.

Price and Khubchandani (2019) argued that these statistics, e.g., those from the CDC, miscalculated the valid rate of suicide and suicidality and are erroneous and, as such, misrepresent the actual level of suicidality in the African American community. African Americans are less likely to recognize mental health symptoms as mental health symptoms and are less likely to seek therapeutic support than other racial groups (Price & Khubchandani, 2019). As a group, African American females tend to use social media for support more than other racial groups for support (Spates & Slatton, 2017), but social media can also have adverse effects. The problem is that, with newer research indicating that young African American females experience high levels of depression and suicidality, identifying potential correlations for that rate (Price & Khubdanchani, 2019). Simultaneously, large-scale research also suggested

an association between the time spent on social media usage and symptoms of depression (Andreassen et al., 2016; Kross et al.; 2013, Lin et al., 2016; Woods & Scott, 2016)

Purpose Statement

The purpose of this study was to assess the effects of social media, for this study identified as Facebook, on depression in young, i.e., college-aged, African American females. This study sought to determine if there was an effect on depression and if that effect is mediated by the experience of perceived racism by the African American user. The dependent variable in this study was depression. The independent variable was social media use, with a proposed mediating variable of perceived racism. In short, this study proposed to determine if the young African American female experience of social media increased their depression and if the experience of perceived racism exacerbated those symptoms. This study aimed to utilize multivariate and mediation analysis to examine the effects of social media use on depressive symptoms in young African American females.

Significance of the Study

This study was significant because it sought to distinguish a relationship between social media use and depression in young African American females. The suicide rate for young African American females has risen 182% over the past decade and a half (Price & Khubchandani, 2019). This study was critical because it had been historically believed that this demographic maintained the lowest suicide rates (Spates & Slatton, 2017). As such, this population had not been seen as a priority focus in depression studies. Spates and Slatton (2017) also argued that African American women relied on social support to increase resiliency. This study contended that, although social media is one of the main sources of social support for the African American community, that same social media may negatively affect African Americans.

Over the past five years, the African American community has witnessed violence, death, racism, and oppression at the touch of their fingertips or scroll of a mouse online. Social media use has been linked to increased anger and rage presentations in young African Americans (Maxwell, 2016). This current study was critical because it sought to identify a link to depression and if that rage and anger masked underlying depression. This is important for resource provision in African American communities.

Research Ouestion

This study addressed the direct and indirect effects of perceived racism and discrimination on the relationships between depression and social media use for a specific population. Research has consistently supported the ideology that racism can be perceived as traumatic for minorities while also supporting the theory that social media use is related to depression. The research questions were as follows:

RQ1: Does social media use contribute to or exacerbate feelings of hopelessness and depression in young African American females?

RQ2: Does perceived racism contribute to and exacerbate depression in young African American females?

RQ3: Is the relationship between social media use and depression mediated by perceived racism for African American females?

Definitions

Beck Depression Inventory (BDI) – The BDI is a 21-item self-report scale developed by Beck et al. (1961), revised in 1996. The BDI measures symptoms and attitudes associated with depression.

The Daily Life Experience (DLE) - subscale of the Racism and Life Experiences Scale. The

DLE is a self-report scale that assesses daily encounters with microaggressions (Harris, 1997). Facebook Intensity Scale (FIS) - The Facebook Intensity Scale (FIS; Ellison et al., 2007) will be used to measure the frequency and intensity of social media use.

Social media - any social network website that offers space online where people can create private profiles and connect to others to construct an individualized private network (Cheung et .al, 2011), also known as social networking sites (SNS).

Summary

With newer research indicating that young African American females experience high levels of depression and suicidality, identifying potential correlations for that rate had been the problem. This study intended to utilize multivariate mediation analysis to examine the effects of social media use on depressive symptoms in young African American females. This study was critical because it sought to identify a to depression and, if previously identified, rage and anger masked underlying depression. In short, this study sought to identify if the young African American female experience of social media increased depression and if the experience of perceived racism increased those symptoms. This is important for resource provision in African American communities.

CHAPTER TWO: LITERATURE REVIEW

Overview

For over 20 years, research has sought to explore the overall encumbrance that perceptions of discrimination and racism have on African Americans' daily lives and physical and mental health (Belgrave & Allison, 2010). Racism and perceived racism are similar but separate constructs. For this study, perceived racism was defined as the self-reported exposure to stress-inducing racial discrimination and racism (Carter & Reynolds, 2011). Discrimination and perceived discrimination are different from racism in that racism is a belief, whereas discrimination is an action. Jones and Carter (1996) defined perceived discrimination as the negative behaviors and actions focused on a group or member of a group due to their marginal social status or characteristics that define / status. However, in this study, perceived discrimination and perceived racism were used interchangeably based on the study referenced.

Conceptual or Theoretical Framework

Cognitive Appraisal in Stress and Coping Theory (Folkman et al., 1986) takes a phenomenological approach to stress, stress appraisal, and coping. According to the theory, there are two processes: cognitive appraisal and coping, which serve as mediators of stress in the person-environment relationship and outcomes, both immediate and long-term. This cognitive appraisal consists of two subprocesses, primary and secondary appraisal. In primary appraisal, the individual evaluates the level of risk and stakes in pursuing the encounter. For example, the person may analyze the potential harm and benefits to personal values, goals, and esteem or if engaging in an encounter places a friend or family member at risk. If perceived as unfavorable, the event is then analyzed for: a) current damage (harm); b) future damage (threat); and c) potential to overcome (challenge). Simultaneously, the person enters the secondary appraisal

process in which the person evaluates possible solutions or alternative outcomes for harm reduction. During this stage, coping abilities are internally assessed (e.g., altering the situation, accepting it for what it is, and seeking clarification of information). At this time, the person determines if they possess the internal resources for coping needed for the potential harm, threat, or challenge.

Coping has defined a person's continuously changing behavioral and cognitive efforts to manage specific internal and external challenges assessed as external and internal demands that are appraised as overloading the person's internal and resources (Folkman et al., 1986). Coping has two well-documented primary functions: changing the person-environment relation to reducing stress (problem-focused coping) and emotion regulation during the stressful event (emotion-focused coping).

Coping is contextual. Whether or not an event is perceived as stressful depends upon the individual's primary and secondary appraisal. If an experience is appraised as a threat with the potential to cause harm and coping competencies are low, the person experiences stress.

Negative stress responses can be emotional (e.g., depression), physiological (e.g., behavior), or cognitive (e.g., easy distractibility) (Taylor, 2010). According to Outlaw (1993), as an ethnic group, African Americans are exposed to various stressors at levels that other ethnic groups do not experience, including racism and discrimination. African Americans also suffer disproportionate rates of physiological disorders such as hypertension, cardiac disease, and obesity and mental health disorders such as depression, anxiety, and drug and alcohol abuse—all illnesses that have been linked to stress.

Research found that gender also plays a role in stress response, with women reportedly experiencing higher levels of stress than men (Stein & Nyamathi, 1998), and are more apt than

their male counterparts to make use of emotion/avoidance-focused coping techniques as opposed to problem-focused strategies (Madhyastha et al.; 2014; Ptacek et al., 1994; Tamres et al., 2002). Women experience higher levels of chronic stress and minor daily stressors. In one study, Matud (2004) found that women identified family and health as stressful, whereas men identified their top stressors as relationships, money, and work. Women were also more likely to seek social support (Ptacek et al.1992). Sexism and social pressure to conform to societal beauty standards also play a role in women's stress levels (Madhyastha et al., 2014; Perloff, 2014). As such, there is the possibility that women may be at higher risk of experiencing increased levels of stress when viewing racism online. Coping is essential in the framework of racially stressful events (Harrell, 2000) and may be an instrument by which racially demanding events affect the internalized safety of individuals (Harrell, 1997). Coping mechanisms may assist in managing discrimination-induced stress (Hoggard et al., 2012).

This study was critical because it added to the theoretical framework. The African American experience of stress is unique. Researchers have hypothesized that the primary association between stress and the perception of racism and discrimination is so robust that race-based stress is its own distinct construct with its own categorization: acute, short-term, stress, or chronic, long term stress (Belgrave & Allison, 2010). It was essential to identify additional sources of stress and identify if social media is a conduit of stress for African Americans, given the magnitude of use in the Black community in order to develop culturally specific positive coping strategies.

Essed (1990) stated that in the United States, African Americans have become hypervigilant to where they have come to expect to experience racism and plan their daily lives around the expectation. This anticipation, in and of itself, can be stressful. Race-based stress is

the outcome of the transaction between people and their active appraisal of their immediate environmental conditions, their evaluation of their options, and failures or successes of coping and is rooted in the active experience of navigating around racism and its daily expectations (Outlaw, 1993). Kessler and McLeod (1984) explained that network events or vicarious exposure to others' experiences with racism induce stress in the original victim and those who witness or are adjacent to the respondent and the respondent's social network as a friend or family member.

It was essential to study the impact of social media on African American women because women tend to social support to cope. As such, the issue becomes one of what happens to the individual when the means of coping - using social media as a source of social support - is simultaneously the primary source of stress, social media as a conduit for racism and sexism.

Related Literature

Social Networking

The study of the effects of media on human behavior is not a new ideology. Since the nascent of newspaper circulation and radio communication over a century ago, social science has developed a cursory preoccupation with human behavior and media consumption. Studies have been conducted on media and self-esteem (Holstrom, 2004; Stice & Shaw, 2004), crime (Chiricos et al., 1997), and perceptions of police (Chermak et al., 2006). However, as valuable as the contributions of this research has been to the field, much of this research has focused on more traditional media sources (e.g., magazines [Nellis, & Savage, 2012] and television [Holbert et al., 2003]). Personal communication within society has become more complex, and emerging research has transitioned its focus to developing and evolving social media and its various platforms (Liu & Liu, 2020; Lowery, 2004).

According to the media dependency theory, the more complex interpersonal communication becomes, individuals and societies rely more on mass communication and less on interpersonal communication to interact, with reliance on mass communication peaking during times of perceived high mass societal stress and social disruption (Liu & Liu, 2020; Lowery, 2004). Modern studies on social media have focused on collective traumatization (e.g., September 11th, the Boston Marathon Bombing) and vicarious traumatization (e.g., reading about the worldwide effects of the COVID-19 pandemic) and their effects on mental health (Holman et al., 2020; Liu & Liu, 2020).

According to a recent Pew research study, 72% of American adults used social media within the past year (Schaefer, 2019). Social networking, which is defined in this study as Facebook, Twitter, Instagram, Snapchat, and Other, is prevalent among the 18-24-year-old age group, with 90% of internet users in that age range reporting using social media, with roughly three-quarters of Facebook, Instagram, and Snapchat users independently and respectively in that age group (Perrin, 2015; Schaefer, 2019). Nearly three-quarters of young adults, 74%, report checking Facebook daily, with a little more than 60% perusing Instagram daily (Schaefer, 2019). Among racial and ethnic groups, there is no significant difference in social media usage, with 65% of whites, 65% of Hispanics, 56% of African Americans using social media platforms (Perrin, 2015).

Social media is a platform for personal and group identity development and management. (Sanderson et al., 2016). The average young adult spends an average of more than eight hours each day exposed to digital technology or more than one-third of their average day (Davis et al., 2015). Sanderson et al. (2016) identified six primary themes for social media use and posting: 1) commentary on life and society, including racial discourse; 2) criticism of self and others; 3)

attacking of others or cyberbullying; 4) presenting "facts" about the self or others or events; 5) renunciation or condemnation of support of figures or ideologies, and 6) seeking solidarity and belief-confirmation. As such, conflict is often inevitable, stemming from the lack of control of others and their responses (Davis et al., 2015).

African Americans are apt to engage in online racial discourse, with the sharing of racially derived hashtags, words or phrases denoted with a # to categorize topics of Tweets on Twitter or posts on Facebook or Instagram (e.g., #BLM, #SayHerName), or viral videos that depict systemic violence against African Americans (e.g., George Floyd, Ahmaud Aubury, Eric Garner, and Tamir Rice). (Chappell, 2016). African American social media users have collectively expressed righteous anger about the perception of systemic racism and discrimination, abuse, and terrorism (e.g., church arson, police killings [Greenberg, 2015; Horowitz et al., 2015]). According to Freelon et al. (2016), African Americans online constantly subvert the idea that racism is a fallacious ideology. In essence, the question becomes, what impact does social media use have on the African American experience, vicarious or personal, of discrimination? This study explores young African American females' 1) experiences with race-related stress, 2) expressions of depression, and 3) perceptions of racism and discrimination.

Coming to prominence in the early 2000s, social media is now an embedded, oft preferred methodology of communication among adolescents and younger adults (Fuchs, 2014). The past two decades have witnessed a metaphorical explosion in technological accessibility in the form of more affordable computing technology and the ready availability of cellphones. As such, there has been a simultaneous increase in the use of social media, especially Facebook, Twitter, and Instagram (Fuchs, 2014). In 2015, Facebook boasted 1.5 billion monthly users. Put into perspective, this usage equates to approximately 1/5th of the world's population as users of

Facebook alone, inclusive of 87% of all adults with internet access (Duggan et al., 2015). At the same time, Instagram maintained a base of 300 million users, or slightly less than the United States' entire population (Duggan et al., 2015). Social media plays an integral role in youth and young adults' daily lives and identity development (Sihvonen, 2015). This omnipresence of social media has not been ignored by the social science community, with more research being focused on the potential psychological, physiological, emotional, and social effects of social media (Charoensukmongkol, 2014; Fuchs, 2014; Kaplan & Haenlein, 2010). Of import to many researchers is the impact on the mental health of social media users, including the influence of such on the perceptions and well-being of users. Research on various topics related to social media has been conducted, such as the effects of social networking on emotional health (Ferrara & Yang, 2015; Hudson, et al., 2015), frequency of use (Cheung et al., 2011; Vishwanath, 2015), and the practical purposes of social media (e.g., job searches [Baker, 2015]). Social media presents researchers with a novel way to evaluate social media and technology's influence on youth (Best et al., 2014).

In a study of 217 European American and African American college students, Tynes and Markoe (2010) examined responses to racially-based content and social media. The students were presented with depictions of two race-themed parties: 1) a "Latino landscaper" party in which attendees were depicted as mocking Hispanic stereotypes and 2) a Martin Luther King, Jr., party, at which attendees wore blackface. After viewing photos of attendees, they were tasked with formulating fictional social media posts on a friend's Facebook wall or MySpace page. The authors then sought to categorize responses by themes ranging from "not bothered at all" to "bothered." Regression analyses divulged that 84% of African Americans were either "bothered-ambivalent" or "bothered," with posts describing the parties as "disgraceful" and "shameful" and

"disrespectful to the Black race...." Among European American students, most responses were found within the ambivalent categories, indicating that African Americans are more sensitive to social media depicted racism. (Tynes & Markoe, 2010).

Mental Health and Social Media Use

When the internet was created, it was deemed to be destined to be a digital raceless utopia in which users could escape from the injustices of the natural world (Daniels, 2015; Kang, 2015). Daniels (2015) scrutinized 15 years of digital data and discovered that in lieu of these attempts to relegate the internet to be a domain as a "race-free" space, the contrary became more so an undeniable reality, especially amongst minority groups, who have come to utilize the internet as a construct to affirm their unique racial identity in addition to searching for like-minded communities. Simultaneously, racial hate groups have come to view the internet as a haven and tool to promote their own biased agenda and hate speech. Though the internet has become ubiquitous in use, without empirical research, the effects of extensive exposure to hate online remain dubious.

With an increasing number of youth and young adults spending approximately half of their daily waking hours engaged in digital technology use, researchers have become interested in the effects on the mental health of social media users. This is especially true now, being that many young adults are spending more time in isolation during the COVID-19 pandemic, with social media being their primary source for news and outlet for communication (Liu & Liu, 2020). Liu & Liu (2020) found that in the early stages of the COVID-19 pandemic, Chinese citizens spent an additional 1-3 hours on social media each day seeking information and attempting to make sense of the situation, identifying social media as the primary way to satisfy this innate need per media dependency (Lowery, 2004). However, researchers have discovered

that although during a crisis, people tend to spend more time on social media, time invested in social network site (SNS) use is a positive predictor of depressed mood and anxiety in adolescents and young adults (Blomfeld Nera & Barber, 2014; Liu & Liu, 2020; Lowery, 2004).

There are well-documented health consequences associated with the individualized perception of racism. Researchers across multiple disciplines have diligently sought to uncover the frequency, antecedents, and consequences of racial discrimination directed towards African Americans (Pieterse et al., 2012). Long-term exposure to racial discrimination has a cumulative effect which has been found to endorse a stress reaction (Pieterse et al., 2012) which can precipitate adverse physical and mental health outcomes (Belgrave & Allison, 2010), inclusive of depression (Hunter et al., 2016), lowered self-esteem (Utsey et al., 2001), cognitive and somatic anxiety (Lee et al.2015), psychiatric and physical distress (Pieterse et al.2012), and cardiovascular disorders (Everson et al., 1998).

Extensive exposure to stress can have detrimental physiological and mental health effects on human development (Maxwell, 2016). Prolonged glucocorticoid release can alter brain structures that control emotions, neurodevelopment, and memory (Lupien et al., 2009). Prenatal stress exposure can affect lifelong development, including behavior, learning (Vallee et al., 1997), increased risk for drug use (Barbazanges et al., 1996), and increased risk of developing mental health disorders such as anxiety and depression (Lupien et al., 2009).

African American and ethnically mixed youth have been found to use social media to support and garner health education (Altshuler et al., 2014). In a study of 14 pregnant women, researchers discovered that it was not uncommon for Black women to immediately seek out social support online before and after birth and reach out to peers and family online for education (Asiodu et al., 2015). Social media as a therapeutic tool has also been used to develop HIV

education and substance use interventions among racial and ethnic minority communities (Young et al., 2014). Research on race-related stress has linked perceived discrimination and racism to decreased self-esteem (Utsey et al., 2001) and diminished quality of life (Utsey et al., 2002). As such, research on the capacity for augmented social media uses to affect stress levels in young African American females has significant health repercussions.

There is a putative relationship between mental health outcomes and social media usage in adolescents and young adults, with depression being the most prevalent outcome (Keles et al., 2020). There is a strong association between depression and social media use for young adults in the United States. Social media has been linked to declines in the sense of well-being, life satisfaction, a negative mood, along with an increase in feelings of self-inferiority (Lin et al., 2016) for female users. Blomfeld Nera and Barber (2014) found that social network site users who invest more time maintaining their online presence and network profiles reported significantly higher levels of depressed mood and lower self-esteem than those who do not with tone of feedback, specifically negative feedback being linked to more depressive symptoms. Adolescents and young adults who reported five or more hours of internet usage per day had a significantly higher risk for depression (Messias et al., 2011).

Internet users with low self-esteem were more likely to use social media more often than their peers with higher levels of self-esteem to compare themselves to others, even though it harms their perception of self (Vogel et al., 2015). It is not uncommon for adolescents and young adults to seek external validation and popularity through social media (i.e., likes, views, and the number of friends empirically quantify popularity). Social media plays a salient role in identity development and valuation of the self. Negative criticism on social media leads SNS users to question self-efficacy, decrease concentration, and increase anxiety (Davis et al., 2015). Social

media becomes an obsessive focus and detracts from other, more positive sources of development as a tool for social comparison and identity development, creating an impracticable projection that peers are competitors. As such, SNSs may play a discordant role during a critical stage of social development.

There is a strong positive relationship between adolescent social networking use, depressed mood, and externalizing behaviors, e.g., sleep disturbance, increased number of sexual partners, suicidal ideation, and suicide attempts (Sedgwick et al. 2019; Stevens-Watkins et al., 2011; Twenge et al., 2018; Vernon et al., 2017). Of note, in a meta-analysis, Sedgwick et al. (2019) found a similar relationship between online gaming, depression, and suicidal ideation, suggesting it was the social component, inclusive of feedback and tone, that correlates with mental health outcomes.

However, not all research supports a negative relationship between social media and mental health outcomes. Yang and Lee (2020) discovered that for first-year college students living away from home for the first time, using social media to interact with in-person or real-life friends or local peers they had met on campus and family members resulted in more positive social and mental health outcomes than using social media to interact with online-only or distant friends. Social media usage in moderation was found to have a similar effect. Sedgwick et al. (2019) analyzed nine studies about social media use and depression and suicidality and found that two studies, or a little more than 20% of studies, revealed that moderate social network usage reduced depressive symptoms suicidality.

Social media has potentially positive and negative consequences of use in how young adults connect and the world and how they view their self-worth (Cookingham & Ryan, 2015; O'Keeffe & Clarke-Pearson, 2011). Social media platforms can quantify individuals' worth in

the form of "likes," "retweets," the number of followers, and friends. According to Perloff (2014), the inimitable dichotomous nature of social media, in which the user is both the sender and recipient of information, modifies the experience for each unique user in that each user determines for themselves which information to absorb, share, and subsequently let influence their absolute beliefs about self. In a meta-analysis of 43 studies about social networking and young women, Best et al. (2014) identified multiple benefits of social media use, including increased social support, increased self-worth, increased self-esteem, safe space for self-disclosure, and safe space for identity exploration. Of note, while most of the studies in the meta-analysis sought to identify adverse effects of social media use, most either found mixed or no effects on well-being stemming from social media use (Best et al., 2014).

A positive relationship has been found between social media use and decreased perceptions of body image and body satisfaction (Perloff, 2014; Tiggemann & Slater, 2014). Fardouly and Vartanian (2015) replicated these findings and identified a positive relationship between Facebook usage and body image trepidation. The study found that young women who spent longer on Facebook experienced more negative mood sets than the control group, who visited an alternate website. These women reported perceiving themselves as having more physical flaws than those in the control group.

Few studies have been conducted on African American females, body ideology, and social media. African American women present with a complexity of identity in both race and gender. Online, the ideal Black woman is presented as lighter brown-skinned, curvy, with longer hair (Stokes et al., 2016), which is quite distinct from the more socially acceptable Caucasian archetype which has traditionally defined the standard of beauty in Western society

(e.g., thin, paler skinned, long hair [Perloff, 2014]). Although this juxtaposition exists, few studies have explored this intersectionality related to social media (Maxwell, 2016).

Of note, there has not been a consensus as to the relationship between social media and depression or if such a quantifiable relationship does, indeed, exist. While some studies were not able to identify the existence of a conclusive relationship (Moreno et al., 2011), others have found the existence of "Facebook depression." Wright et al. (2012) identified a positive correlation between time spent on social media, specifically Facebook, and depressive symptoms. Other studies have found a negative association (Kross et al., 2013; Labrague, 2014), no association (Gerson et al., 2016; Valenzuela et al., 2009)

Racism and Discrimination as Trauma

There are currently no extant studies that have directly explored African American women and the influence of social media on how they perceive race. However, there have been several which have examined the online African American response to racism. In an analysis of 731 pages, constituting 81 websites and blogs about Hurricane Katrina and its aftermath, Brock (2008) found that African American bloggers and vloggers: 1) felt neglected by the federal government and that more attention was focused on preserving White communities; 2) pledged allegiance to their race during the crisis; 3) used culturally-based web design to better attract African American readers for support, and 4) self-identified as refugees instead of citizens. These results are significant because they highlight the use of online platforms by African Americans to bring attention to their plight to address perceptually systemic racism and white socio-political supremacy while forging an online collective Black identity (Maxwell, 2016).

Liu and Liu (2020) argue that social media is a catalyst of vicarious traumatization during periods of crisis. Unlike traditional media sources (e.g., radio, print media), the internet allows

for almost instantaneous sharing of unfiltered news as it happens, with social networking being one of the primary tools for sharing. In recent years, the world has witnessed several high-profile deaths of African Americans, such as Ahmaud Arbery, Breonna Taylor, George Floyd, Trayvon Martin, Eric Gardner, Freddie Gray, and Sandra Bland, to name a few. Some of these deaths were at the hands of law enforcement, endorsing the ideology for African Americans that the criminal justice system supports the tenets of police brutality and racial profiling, confirming a bias that validates systemic racism and structural anti-Blackness (Linscott, 2017). Other prominent deaths, such as Trayvon Martin and Ahmaud Arbery, were caused by private citizens, with the offenders, at the time of commission, receiving little repercussions, sanctioning for some in the African American community that their lives, as African Americans, do not matter (Ince et al., 2017; Linscott, 2017).

Also, during the COVID-19 pandemic, the African American community has suffered an overwhelmingly disproportionate number of deaths from the disease and endured higher unemployment rates than their European American counterparts and working on the frontlines in lower-paying jobs. The Black Lives Matter movement has come to the forefront of national attention, and social media has become a catalyst of the embrasure, but an of hate and blatant anti-Black racism. As stated earlier, nearly 60% of African Americans use social media (Perrin, 2015). Through social media, users can concurrently be privy to exposure to Afro-pessimism and Black optimism (Linscott,2017). Sanderson et al. (2016) identified six primary themes for social media use and posting: 1) commentary on life and society, including racial discourse; 2) criticism; 3) attacking of others or cyberbullying; 4) presenting "facts"; 5) renunciation or condemnation of support of figures or ideologies, and 6) seeking solidarity and belief-

confirmation. As such, conflict is often inevitable, stemming from the lack of control of others and their responses (Davis et al., 2015).

Although Liu and Liu (2020) argue that social media is a harbinger of vicarious traumatization, this author proposes that, in addition to vicarious traumatization, African Americans also experience direct traumatization from their social media experiences. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013) defines trauma as witnessing or experiencing actual or threatened death, serious injury, or sexual violence. However, Helms et al. (2012) criticize the APA's definition of trauma and argue that racism, discrimination, and ethno-violence may be seen as chronic, historical trauma (2010). McGee and Stovall (2015) stated that there are long-term physical, psychological, emotional, and mental effects of enduring racism and discrimination in a society characterized by majority privilege.

Racism has been allowed to thrive online (Daniels, 2015). The bulk of research on cyberracism has been confined to the domain of hate-based and home-grown terrorist groups (e.g., skinheads, NeoNazis) and their websites and the effects on their minority targets (Daniels, 2015; Hargrave & Livingstone, 2006; Gerstenfeld et al., 2004; Kolko et al., 2003). These traditional race-based websites were found to have little to no effect on African Americans or other minorities due to the limitations of indirect access; the sites have to be actively searched, and very few minorities actively search for hate-based websites. (Leets, 2001). However, with the advent of social networking, African American youth can no longer actively avoid online or real-world racism. They merely need to log on to their account or tap a screen to access an app to be assaulted with innumerable, oft shared amongst friends, racist and discriminatory content in which they view themselves or people who look like the victims. Williams and Marquez (2015)

found that young African Americans were more likely than youth of other races to share articles related to race amongst their peers, more likely to express concern, and more likely to be recipients of articles or media related to race from their friends or family members.

According to Maxwell (2016), the expansion of social media platforms has consequently resulted in augmented exposure to racism. In April of 2015, Google reported that 10% of all searches in the United States that month were for the term "police brutality." Similar trends have been found on social networking sites. Following the death of Michael Brown, #ferguson was retweeted over 21 million times in the subsequent 12-month period, #michalebrown/#mikebrown was retweeted 9.4 million times, and #blacklivesmatter/#blm, 4.3 million times (Freelon, McIlwain, & Clark, 2016).

The mental health consequences of racism remain a substantial concern for public health officials in the United States and worldwide (Parides et al., 2015; Williams & Mohammed, 2009). Racism can be explicit (e.g., ethnophaulisms) or subtle, such as microaggressions (Sue et al., 2008). The experience can be individual (e.g., discrimination), institutional (e.g., redlining), or cultural (e.g., devaluation of one's own minority culture due to European ethnocentrism (Utsey et al., 2001).

Mental Health Effects of Racialized Trauma

Via social media, the African American community was also exposed to the deaths of Eric Garner, Ahmaud Arbury, and George Floyd, able to observe the complete account of the events in vivid detail, including watching them die on camera. Also, the Black community has borne witness to a myriad of race-based discriminatory acts recorded on a cellphone and posted on social media platforms (e.g., Christian Cooper and Amy Cooper, Central Park birdwatching incident). Regarding violent incidents, graphic depictions are more likely to evoke more negative

emotions and produce more significant psychological and physiologic distress and arousal than nongraphic images (Riddle, 2014).

Biopsychosocial models, minority stress theories indicate that individuals exposed to chronic discrimination are more vulnerable to adverse mental health outcomes, such as depression, anxiety, and distress (Pascoe & Smart Richman, 2009). Bogart et al. (2011) also suggest that discrimination manufactures a hostile living situation, increases wear and tear on mental health protective defense mechanisms, and decreases the capacity to cope with future stressors. Suicide rates for African American youth and young adults in the 15-24-year-old age group have increased more than any racial group (Matlin et al., 2011). This age group is also the most likely to use social media. Depression is the most significant risk factor for suicidality. According to the 2010 Youth Risk Behavior Survey (YRBS), 27.7 % of African American youth reported feeling depressed, sad or hopeless almost every day for two or more weeks in a row, the highest percentage reported for any racial or ethnic group (Centers for Disease Control and Prevention, 2010).

Research documenting perceived racism and discrimination among African American women has also underscored the development and implementation of maladaptive coping strategies and negative health results (Maxwell, 2016). Carr et al. (2014) found that experiencing racism and discriminatory events has an inimitable and unequivocal effect on the well-being of African American women. The study revealed that coping with oppression through internalizing, such as avoidance and remaining silent, mediated the relationship between racist experiences and depression in African American women.

Online, African American women have been placed at the forefront of the counter-racism movement. Harrington et al. (2010) found that African American women have been historically

socialized from childhood to embody the culturally symbolic Strong Black Woman trope and are pressured to internalize their vulnerability and not express their depression. So, there is a presumed pseudo-assumption based on historicity that Black people do not feel pain. When African American women perceive themselves as not embodying the SBW image, there is an increased risk of developing adverse mental health outcomes, including shame, guilt, low self-esteem, and depression. Following trauma exposure, trauma survivors may experience symptoms of PTSD, anxiety, substance use, depression, and eating disorders. African American women exhibit externalization of their internalized trauma is via disordered eating as a coping mechanism (e.g., binge-eating). An estimated 8% to 34% of African American female trauma survivors develop eating disorders compared to the overall prevalence rate of 2% to 5%. Untreated disordered eating runs counter to the SBW image and ideal, unrealistic, Euro-Black woman image found online and puts Black women at risk for developing increasingly severe adverse mental health outcomes.

The link between racism, discrimination, and depression in African Americans is not novel and well-established (Assari et al., 2018; Stein et al., 2017). For African Americans, specifically, the experiences of racism and discrimination have been linked to physiological stress (e.g., cardiovascular disorders; Hill et al., 2017) and linked to negative mental health consequences, such as depression (Hudson et al., 2016), suicidality (Walker et al., 2017), and distress (Paradies et al., 2015). Experiencing racism and discrimination has been linked to a higher risk of developing a mood disorder throughout the lifetime and an increased risk of depressive symptomology (Chatters et al., 2015; Mouzon & McLean, 2017). In African Americans, this link has been associated with more inferior sleep quality and physiological

comorbidity. Of note, African Americans are also less likely to seek psychological treatment, resulting in increased emergency admissions for depressive symptoms (Henderson et al., 2014).

Contemporary research suggests an emerging association between internalized racism (i.e., supporting negative stereotypes of one's racial group) and poor mental health outcomes. In a national study (N=4,988) of African American and Afro-Caribbean adults, Molina and James (2016) found that African Americans were more apt to endorse adverse mental health outcomes, specifically major depressive disorder, within the previous 12-month period.

However, despite the extensive studies identifying the adverse outcomes associated with race-based stress, there is limited research that suggests the alternative. For example, a 2015 study found that in a sample of African American undergraduate college students (N = 185), race-based stress was a substantial predictor of whether or not participants decided to participate in activism, creating a more robust cultural identity (Szymanski & Lewis). More conclusive research is needed in this specific area to identify additional potential benefits of race-based stress.

Racism and Social Media

Not all African Americans are members of or endorse social justice movements like Black Lives Matter; 56% of African Americans use social media. Social media participation has become a necessary means to contest perceived government-sanctioned violence and media silence for racialized populations (Bonilla & Rosa, 2015). Many Black Americans perceive police brutality as an extension of enduring systematic racism perpetuated for several centuries without absolution or resolution. Traumatic events in the public domain only serve to perpetuate and endorse frustration in racial minorities (Carlson et al., 2017).

Online, many ethnic and racial minorities report experiencing racism and discrimination, indirect or direct verbal attacks, memes, media, gaslighting, and racist speech. Racist speech is harmful but online, and on social networks, there is no identifiable "threshold of harm," no defined boundary between speech based on religion, race, ethnicity, or nationality, and no identification between tolerable and intolerable. (Mason & Czapski, 2017). There is no referee, and there are no rules. Matamoros-Fernàndez (2017) argues that racism is sanctioned in the context of social media. Platformed racism is defined as racial discourse developed, manipulated, and escalated on social media that replicates social inequalities in mainstream society. (Matamoros-Fernàndez, 2017). Social media provides an often times anonymous outlet for users to express their views and an arena for support and solidarity with those views.

The frequency of social media use is positively related to accepting select themes such as overt racist content. SNSs proffer affirmation and ready acceptance of counter-culture ideology and provide a private, supportive haven for users embracing negative and anti-Black racist belief systems. Users seeking information can discriminate between rejecting racist content and accepting egalitarian content (Rauch & Schanz, 2013).

SNS also operates as a juncture in which social comparison is readily endorsed. For young African American females, self-esteem about appearance and body satisfaction ae negatively influenced by internalizing the ideal media image of a Black woman with long, straight hair and light skin or European-like traits (Capodilupo, 2015). These young women and girls are discouraged from embracing their natural physical traits and strive to subscribe to physical standards of beauty established and standardized by European tropes. Following Barack Obama's election and subsequent reelection, it was not uncommon to observe anti-Black racist depictions of Michelle Obama portrayed as a monkey or called an 'ape,' preaching a narrative

for African American females that their physical characteristics equate to that of an animal, an oft used, historical, racism-based mischaracterization that dehumanizes African Americans and the Black experience (Joseph, 2011).

People of color and indigenous people experience microaggressions, racism, and discrimination that affect their mental and physical health, negatively (Alvarez et al., 2009; American Psychological Association, 2016) and elevate their risks for developing mental and physical health problems (Carter & Reynolds, 2011; Clark et al.., 1999, Harrell, 1997; Pieterse et al., 2012). Many Latinx, Asian, and Indigenous populations experience race-based stress and discrimination, but African American and Black people are unduly affected, resulting in higher rates of clinical depression. (Wu et al., 2012). Chronic discrimination has been described as culminating in ongoing "racial battle fatigue" that exhausts the emotional and mental resources of people of color (Smith et al., 2011).

In a study of common mental disorders, inclusive of generalized anxiety disorder, panic disorder, social anxiety, separation anxiety, major depressive disorder, post-traumatic stress disorder, conduct disorder, attention-deficit hyperactivity disorder, oppositional defiant disorder, drug use, and alcohol abuse, using a national sample (N=5,191), Rodriguez-Seijas et al. (2015), found a positive association between perceived racial discrimination and *each* of the 12 mental health disorders for African American and Afro-Caribbean adults. Chronic exposure to microaggressions within a racially charged political climate (Potok, 2017) epitomizes substantial stress for members of minority communities and may result in racial trauma (Litam, 2020).

Racial trauma, defined by Carter (2007) as danger and events associated with actual or perceived racial discrimination, including humiliating or shameful events, threats of injury or harm, and witnessing harm to other members of the POCI community due to perceived or real

racism, may induce in its victims' symptoms parallel to other trauma-based disorders such as post-traumatic stress disorder and acute stress disorder (Litam, 2020). Through social media, African Americans have been privileged to inestimable exposure to uncensored acts of police brutality, political attacks, race-based terrorism, microaggressions, counter-protestation, and racial invalidation, and in the case of George Floyd, bore witness to death, at the tap of a screen or the click of a link.

Although African Americans bear witness to daily incidents of cyber racism, very few studies have examined the relationship between social media and the effects of cyber racism on that population (Maxwell, 2016). Incidents of police brutality against African Americans continue to be exceedingly broadcast on social media platforms. As such, therein lies the potential for young African Americans that partake in this form of media to become increasingly anxious or fearful due to and perceptions of exposure to and vicarious traumatization by these events. As a result, research on traditional media sources may potentially yield some discernment about how anxiety stemming from race-based social media may also activate an anxiety response among people of color.

Additional research suggests that people experience anxiety inconsistent with their perceived risk of being victimized due to the level of influence conveyed by the source of information (Lane & Meeker, 2003; Nellis & Savage, 2012; Skogan & Maxfield, 1981).

Although African American adolescents and young adults may not personally become victims of race-related discrimination or police brutality, online content about such incidents, either shared by friends, family members, or activist groups, may circuitously affect how these young people respond emotionally; African American youth may use social media depictions of race as their primary gauge for measuring racism and react accordingly. In one media study predating social

media, it was determined that watching television events about race-related incidents produced more of an emotional response than reading about them in the newspaper or magazine (Chiricos et al., 1997). This study was critical because it indicates that people tend to be more emotionally responsive to contemporary media than traditional media. Although the study was based on television viewing, television was the more modern source of news. Social media have replaced television.

Social Media and Ethnic and Racial Minorities

Examining the impact of social networking on young African American females' perceptions is essential for many reasons. In 2014, Pew Research found that 67% of African Americans with internet access used Facebook, with 27% of the same population using Twitter. For Twitter, the African American demographic usage was higher than any other racial or ethnic group measured, with 25% for Hispanics and 21% for Whites (Duggan et al., 2015). On Facebook and Twitter, the most popular searched for or tweeted about, or trending topics among African American users focused on race relations, diversity, and racism in America (Demby, 2016; Freelon et al., 2016). Being that the topics of race and discrimination are discussed more frequently amongst African American social media users more so than other groups, and being that African Americans have a high rate of usage, it is laudable to explore further the impact of social networking on the African American perception of race and racism.

Social science and psychology literature have already identified factors that impact racial identity and perception that individuals who score higher in ethnic identification and centrality are apt to report increased levels of perceived discrimination (Sellers & Shelton, 2003; Operario & Fiske, 2001). Another influential factor is age and developmental stage. African Americans become more acutely aware of their racial identity and perceived racism and discrimination as

they progress from adolescence to adulthood (Greene et al., 2006). Additional constructs that influence African American perceptions and identity formation include depth of socialization (Harris-Britt et al., 2007), skin tone and colorism (Ladrine & Klonoff, 2004) and gender (Perry et al., 2013). In seeking to determine if social media is an additional influential factor in racial perception, this study adds to the current literature that aids in understanding what social and environmental factors create the African American experience of racism and forged reactions.

Social media provides minority youth with access to engagement in a transnational discussion about oppression. Young Black women are active in discourse against racial violence but are often overlooked as debatable subjects, leading to increased marginalization (Carney, 2016). Before the death of Breonna Taylor, racial oppression, violence, and systemic discrimination were viewed as social maladies primarily reserved for young Black males. However, SNS have provided a voice for the young Black female as the activist. Although there is an increase in accessibility to technology for youth of color, the same accessibility is associated with increased risk and vulnerability. (Carney, 2016).

Social media developers do not entirely understand the dynamics of racism as platformed racism challenges the notion that social media is inherently neutral (Matamoros-Fernàndez, 2017). Platformed racism negates the presumptive neutrality of social media. Social media users ascertain that social media provides a platform for expressing their First Amendment right to protected free speech.

Kang (2015) explored African Americans' perceptions of and reactions to microaggressions and structural racism on the social media platform Tumblr. The author, undertaking discourse analysis, perusing and dissecting the content of 100 posts by African American users, sought to analyze the expression of these emotional reactions in an online

setting. Four central themes were discovered: 1) creation of an "us" versus "them" environment; 2) compulsion to resist; 3) identified obstacles to resistance, and 4) incapacity to resist, digitally or physically (Kang, 2015). In the study, resistance was seen as an active reaction to users feeling disrespected and excluded, and Tumblr was viewed as creating a digital safe space for shared emotional expression (Kang, 2015).

Identity Development

In a study of 83 college students of varying races, Grasmuck et al. (2009) found that upon reviewing their Facebook profile pages, the African Americans, those with Indian ancestry, and Hispanic students had a higher number of online friends they knew in real life, were more likely to display cultural symbolism on their pages, and had a higher number of uploaded profile pictures, all being indicative of increased investment in online identity formation. Of note, African Americans were also more apt to include more biographical minutiae (e.g., favorite movie). These inclusions and devotion to identity formation are seen to serve as open defiance mechanisms to the notion of color-blind stereotypy (Grasmuck et al., 2009; Williams & Marquez, 2015).

To date, there have been few studies researching the young African American response to racially biased content and social media. In a study evaluating 15 years of research, Daniels (2015) discovered that, instead of early attempts to relegate the internet as a neutral domain free of racial identity, users, predominantly minority racial and ethnic groups, have utilized the internet to create and confirm a racial identity, and seek out like-minded communities. However, the author also denotes that achieving these goals can be difficult, as political struggles over racial meaning, knowledge, and values often occur online. As the reviewed studies have shown, the use of "other" as a racial category burdens, and at times, exiles some minority Internet users.

Its inherent ambiguity problematizes the use of race as an identifier, and further, as a causal variable in technological research—as it is often measured matter-of-factly and without consideration of contextual information.

When controlling for income and education levels, Kwate et al. (2003) found that African Americans share the experience of racism, regardless of background. In an earlier study of African American and Afro-Caribbean women, women with multicultural identities were one standard deviation below the mean. They were more prone to experiencing race-based stress and depressive symptoms than those with less pronounced attitudes toward their racial identities (Jones et al., 2007)

Social Support and Coping

Following the officer-involved shooting death of Michael Brown in 2014, Twitter users were more likely to express solidarity with activists through hashtags (Ince et al., 2017). African Americans are some of the most influential Twitter users (Graham & Smith, 2016). As a group, African American Twitter users have created their robust sub-sector platform, Black Twitter, which has taken on a life of its own. Black Twitter has substantiated a national discourse on defining what it means to be a Black social media user in an era of civil oppression and politically supported anti-Black racism. Through hashtags, Black Twitter has contextualized what it means to Black in America in the 21st century. Black Twitter has become more visible due to the prevalence of African American users on the platform, creating a substantial network of users who express similar concerns, share tastes, culture, and experience (Florini, 2014). Young African Americans have found a unique platform on Twitter that allows them to appropriate a disparate agenda than mainstream users that allows them to occupy a place of

dominance on Twitter while simultaneously creating a Black cultural identity (Florini, 2014; Manjoo, 2010).

Although initially developed for Twitter, Hashtags are used on social media to catalog keywords to make posts more easily searchable. A user enters a #keyword into the built-in search engine, and their screen is populated with posts that have used that keyword. Although Black Twitter is often used for culturally relevant witty repartee, the sub-platform also streams the latest news content and serves as a digital soapbox for social activism (Williams & Marquez, 2015). The hashtag #BlackLivesMatter was created as a counter-public movement to the deaths of Michael Brown in Ferguson, Missouri, and Eric Garner in New York, both deaths caused by law enforcement. Other prominent hashtags of Black Twitter are #ICantBreathe, referencing Eric Gardner's last words and more recently George Floyd, and #SayHisName/#SayHerName, also more recently referencing Breonna Taylor, validating that African Americans are people and their deaths are not solely statistics (Graham & Smith, 2016; Hill et al., 2017).

However, Graham and Smith (2016) also note that the pro-public movement also exists, and as Black Americans seek support from Black Twitter as a counter-public, the Black oppression movement continues to exist. For example, #UniteBlue, #BlueLivesMatter, and #AllLivesMatter were created to devalue and vilify the #BlackLivesMatter movement, whereas #TCOT, Top Conservatives of Twitter, began in response to the perceived liberal and minority dominance on the platform.

Gender and Support

Frison and Eggermont (2016) found that minority female youth and young adults were more likely to perceive social media as offering more online support than males. The authors found that active public Facebook use, defined as an account posting to the public at large

instead of using a private account, is a negative predictor of depression in females and a positive predictor for males. It is not surprising that females started the #BlackLivesMatter movement on Twitter when females see social media as providing a source of support. Males tend to report a more negative experience with social media.

Women have ensconced the roles as leaders in the social justice movement to combat anti-Black racism and discrimination online. Since slavery, African American women have sought to embody the role thrust onto them in the trope of the "Strong Black Woman" ideology. The construct of the SBW was created out of defiance to the derogation African American women faced during slavery and afterward. The SBW was and is seen as capable, independent, nurturing, and above all else, resilient. The SBW is a "superwoman" who can overcome any obstacle. Strength in the face of adversity has become the prominent identifier that defines the crux of what it means to be a Black woman in America (Morgan, 1999; Harrington et al., 2010).

However, the SBW ideology presents Black Women with a double-edged sword. From childhood, African American girls are socialized, if not, pressured to become SBW. This pressure is internalized and results in shame, decreased self-esteem, guilt, and depression. The SBW is not allowed to feel pain or be vulnerable, limiting the response spectrum (Harrington et al., 2010). Black women are at the forefront of the social media counter-public, movement but in being traumatized, either directly, vicariously, or historically, they are not allowed to experience their trauma. Instead, due to cultural socialization, they expected to persevere, which results in the internalization of trauma and negative mental health symptoms.

Gaps in Research

In 2020, the United States, along with the rest of the world, has experienced a COVID-19

pandemic, which has increased levels of extended social isolation, increased use of internet social media for youth and young adults, essentially redefining social relationships. Young people are now attending school online, spending upwards of eight hours online, completing college courses solely online, or working from home. As such, many have been removed from their physical support systems. During this isolation, there have also been several high-profile killings of African Americans (e.g., Ahmaud Arbury, George Floyd, Breonna Taylor), resulting in much social unrest.

There has been recent research on the effects of increased social media use and mental health during the pandemic resulting from COVID-19, but due to its emergent, readily evolving nature, there has been little research on the African American population and the effects on the Black community online. Liu & Liu (2020) found that social media use has increased anxiety among Chinese citizens in China due to COVID-19. There is a need for research on the African American community in the US to determine the effects of social media, isolation, and mental health outcomes for this specific group due to social problems unique to this population.

Notably, very few studies had researched African American female identity development as it pertains to social media. Social media identity research has primarily focused on young males or African Americans as a group (Grasmuck et al., 2009).

Summary

This study explored the impact of social networking on African Americans and asked whether social media usage elicited or exacerbated depression or feelings of hopelessness in young African American women? Despite the high rate of suicidality in the demographic, minority populations are oft overlooked in depression. Due to the ubiquity of social media usage among young adults, along with an increase in race-based incidents and harmful race-based

content shared on social networking platforms, an increase in rates of depression in the African American population, it was essential to study social media usage and minorities for purposes of possibly implementing stricter monitoring and regulations of what is allowed to be posted on social media, creation of programs to address safe social media use and to address increase protective factors for at-risk groups.

CHAPTER THREE: METHODS

Overview

In this section, this author provides an overview of the methodology utilized in my dissertation research. This researcher presents the research design and explains why that specific design is appropriate for this study. Also, this author addresses the research questions along with an in-depth definition of the independent and dependent variables. Next, this author discusses the actual procedure, how participants were recruited, the measures this author utilized, and procedures for statistical analysis. This writer also addresses any challenges to the validity and clinical significance of the theoretical outcome.

Design

A non-experimental multivariate correlational cross-sectional mediation analysis was utilized in this study. This particular design was chosen because neither the independent variable, social media use, nor the dependent variable, level of depression, was manipulated, and there were only two variables, excluding the mediator. In a non-experimental research design, the variables are not manipulated, measured, and analyzed to determine whether the variables are related in ways that correlate with the researcher's expectations (Warner, 2020). As such, this design was most appropriate for the type of research this author was conducting. However, of note, nonexperimental research does have potential flaws, most importantly, weak internal validity, as often, even if a strong correlation is found, there may be confounding variables, requiring more extensive research (Warner, 2020).

Research Questions

The research questions were:

RQ1: Does social media use contribute to and exacerbate depression in young African American females?

RQ2: Does perceived racism contribute to and exacerbate depression in young African American females?

RQ3: Is the relationship between social media use and depression mediated by perceived racism for African American females?

Hypotheses

The null and alternate hypotheses for this study are:

H_a1: Social media consumption predicts depression in African American females.

H₀1: Social media consumption does not predict depression in African American females

H_a2: Perceived racism predicts depression in African American females.

H₀2: Perceived racism does not predict depression in African American females.

H_a3: The relationship between social media use and depression in African American females will be mediated by perceived racism.

H₀3: The relationship between social media use and depression in African American females is not mediated by perceived racism.

Participants and Setting

The current study was a cross-sectional study. African American females ranging in age from 18-34 completed an online survey using a SurveyMonkey designed studied distributed via Amazon Mechanical Turk (M- Turk). The survey contained measures of variables that assessed the direct and indirect effects of perceived racism on the relationships between social media use, and depression. The Institutional Review Board at Liberty University approved the methods for the current study.

Recruitment. A national sample of participants was recruited from various locations across the United States through Amazon M-Turk. Amazon M-Turk is an online arena for piece work and the completion of Human Intelligence Tasks (HITs). M-Turk is becoming increasingly popular in survey research as a valid method to recruit participants (Chandler, & Ipeirotis, 2010; Mason & Suri, 2012; Paolacci, 2012). M-Turk is a rapidly growing, inexpensive recruiting tool that offers diversity in sampling of participants more so than typical American college and university samples. In addition, data resulting from M-Turk is at least as reliable as those obtained via traditional methods (Buhermester, Kwang, and Gosling, 2011).

M-Turk recruitment procedure. M-Turk relies on self-selection for recruitment. To participate in a study, M-Turk users, called "workers", log into M-Turk's Amazon.com-based website with a secure user ID and password. Once logged in, M-Turk workers can browse a sundry list of HITs (e.g., research surveys, data entry tasks, etc.) which are uploaded by M-Turk requesters. HITS can be viewed and filtered based alphabetized title, compensation rate, completion time, or criteria required to complete HIT. The HIT for this study was described as, "a study seeking young African American female adults to complete a survey about social media use and experiences with and reactions to discrimination." The HIT for this study was open, meaning that anyone could click on it. Once accepted, participants were greeted with the IRB-approved study descriptions and eligibility criteria (see below). Participants were notified that all data would be kept confidential and completion of the study would take between 15-20 minutes.

When analyzing the number of participants needed, when performing a G*Power Statistical Power analysis for a normal multivariate correlation, with one independent variable with a medium effect size at $\alpha = .05$, at a covariate power of 0.95, a sample size of 74 was suggested (Faul et al., 2007). The researcher added 20% to this sample size estimate to account

for anomalous or missing data for a target study sample size of 89. The final sample consisted of 112 female African Americans ranging from ages 18 to 34.

Inclusion and exclusion criteria.

This study focused on the perceptions of young African American females; thus, those who did not identify as African American or female were excluded, as were who are younger than 18 and older than 34. The third criterion for inclusion is social media use status, as the study focuses on the effects of social media use. Of the 457 original respondents, 345 workers were rejected for not meeting the inclusionary criteria, resulting in an N=112 sample size.

Instrumentation

Dependent Variables

Beck Depression Inventory (BDI)

The BDI is a 21-item self-report scale developed by Beck et al. (1961), revised in 1996. The BDI measures symptoms and attitudes associated with depression. The BDI is available in varying formats, including computer, card a shortened 13-item format (Beck et al.,1996). The BDI requires those being assessed to have at least a fifth-grade reading level to understand the questions and takes approximately 10 minutes to complete. Internal consistency for the BDI is high, ranging from .73 to .92, with a mean of .86. (Beck et al., 1988). The BDI has alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations, respectively (Beck et al., 1988).

The BDI is self-scoring and uses a 0 to 3 scale for each question. For example," 0 = I do not feel sad. 1 = I feel sad, 2 = I am sad all the time, and I can't snap out of it. 3 = I am so sad and unhappy that I can't stand it. (Beck et al., 1961)." Scores on the BDI can range from 0 to 63 points. A score of 0 is the lowest score and would indicate the client has no characteristic

symptoms of depression. The highest score is 63, meaning that the participant falls within the over 40 [points] range, indicating extreme depression.

Independent Variables

Frequency of social media use. The Facebook Intensity Scale (FIS; Ellison et al., 2007) will be used to measure the frequency and intensity of social media use. The FIS will be modified to include questions about Twitter due to its popularity among the African American population and the emergence of "Black Twitter" (Duggan et al., 2015). The measure consists of eight overall items. The first six items are comprised on a Likert-like scale with responses ranging from 1=strongly disagree to 5 = strongly agree. The final two questions may be modified as open or closed-ended, dependent upon conversion to ordinal scale or coding (Ellison et al., 2007). Intensity score is calculated by finding the mean of all scale items. The following scale items measure the intensity of use: 1) Facebook is part of my everyday activity, 2) I am proud to tell people I'm on Facebook, 3) Facebook has become part of my daily routine, 4) I feel out of touch when I haven't logged onto Facebook for a while, 5) I feel I am part of the Facebook community, 6) I would be sorry if Facebook shut down. The following two items measure socialconnectedness and frequency of use: 1) Approximately how many TOTAL Facebook friends do you have? 8) In the past week, on average, approximately how much time PER DAY have you spent actively using Facebook? Cronbach's alpha values for the FIS are persistence.79; selfexpression, .74; boredom, .85; overuse = .76; total, .88. There are no measures for validity recorded for this measure yet.

Mediating Variables

The Daily Life Experience (DLE) subscale of the Racism and Life Experiences Scale (RaLES; Harrell, 1997) will be used to assess personal experiences with discrimination and

racism based on personal interactions. The DLE is a self-report scale that assesses daily encounters with microaggressions. Participants will be presented with 18 experiences and will be asked to indicate how often they were discriminated against because of their race (" (0 = never, 1 = once, 2 = a few times, 3 = about once a month, 4 = a few times a month, 5 = once a week or more). Sample items include: "Not being taken seriously" and "Having been ignored." Scores are summarized through the mean, with higher scores being indicative of more experiences with racism. The RaLES has been shown to have concurrent internal consistency and validity above 0.80.

Procedures

A proposal for the study was presented to the Institutional Review Board in conjunction with an application. A 31-question survey consisting of questions, adapted from the Beck Depression Inventory-II, RaLes Daily Life Experience scale, and the Facebook Intensity Scale, was created and uploaded to Amazon's M-Turk. Upon agreeing to participate, the participant was directed via the embedded link in the description to a survey to be completed via SurveyMonkey online survey creator. Once a participant arrived on the SurveyMonkey site, the participant was presented with three inclusionary questions to confirm eligibility. The first question was, "How do you self-identify?" with participants being presented with the following options: a) Male b) Female c) non-binary c) Other d) Prefer not to answer. If "female" was selected, participants were directed to the second inclusionary page, while all other participants were directed to the disqualification page, explaining disqualification rules and thanking them for their interest in participating.

The second question was "How do you self-identify ethnically/racially?" The following options were proffered: a) White/Caucasian b) Black/African American c) Hispanic/Latino(a) d)

Asian/Pacific Islander e) Native American/Indigenous f) Other. If Black/African American was selected, participants were directed to the second inclusionary page, while all other participants were directed to the disqualification page, explaining disqualification rules and thanking them for their interest in participating. The third question for inclusion asked, "What is your age range?" Options offered included: a) 12-17 b) 18-34 c) 35-49 d) 50-64 and e) Other. If the participant selected "18-34," they were directed to the beginning page of the actual study, while all other respondents were be directed to the disqualification page.

If participants met the inclusion criteria, they received the following response: "Thank you for meeting the criteria for this study!

You will be participating in a study that will examine social media use among young African American females.

This study should take approximately 20-30 minutes to complete. All answers will be confidential and will not be linked in any way to any information that personally identifies you. Additionally, please remember that there are no right or wrong answers; please provide your honest response. You may stop participating at any time. If you have any questions before participating, please feel free to contact the researcher(s) at

Measures were presented in the order they appeared in the survey (see Appendix C). The survey was configured in such a manner that participants were unable to proceed unless they provided an answer. However, a "not applicable" (N/A) option was provided. Participants were given the option to opt out and terminate at any time. Upon completion of the survey, participants were thanked for their participation and instructed to enter their unique M-Turk worker ID as a unique identifier in order to receive compensation of \$.50 per completed survey.

Ethical Considerations

Belmont Report (1978) principles of respect for persons, beneficence, and justice were followed. Participants were provided with informed consent (see Appendix B), indicating the purpose of the study, notifying them that participation is voluntary, duration of the study, and procedures (see Appendix A). Participants were informed of any potential benefits or risks of participation. Participants were presented with the option to withdraw from the study at any time without penalty. Participants were also informed of data storage. The researcher stored the data collected from this study in a secure, passcode protected, digital location. The researcher and the researcher's dissertation chair were the only people with access to this location.

In addition, of import, another ethical consideration were cultural bias and assumption in the form of confirmation bias. This researcher is African American and, as such had to be cognizant of any conscious or unconscious bias in studying participants of the same demographic and potential bias in interpretation. To control for cultural and confirmation bias, research was purposefully designed to be mediation analysis utilizing bootstrapping with results blindly analyzed multiple times and with the utilization of multiple random resampling to ensure that results were randomized and not intentional.

Data Analysis

Data was analyzed using The Statistical Package of the Social Sciences (SPSS) Graduate edition. As the study was a mediation regression analysis utilizing bootstrapping, traditional assumptions for normality were not assessed as bootstrapping does not automatically assume normality and relies upon multiple random resampling, 5,000, for this study, from the respective dataset to estimate population parameters, with the dataset acting as the identified population. Bootstrapping relies on upper and lower confidence intervals for statistical estimates indicating the likely value of the actual parameter (Hayes, 2018).

In conjunction with bootstrapping, this researcher assessed for linearity utilizing scatterplots and homoscedasticity.

Homoscedasticity

Homoscedasticity assumes that variance is the same at all observation points for a continuous variable or that all data points will be equally dispersed around the regression line. A scatterplot will be created to test homoscedasticity for each variable. For this study, the Cribari-Neto model was utilized for testing homoscedacity. Cribari-Neto has been identified as a newer heteroskedasticity-consistent covariance matrix estimator for the linear regression model (Cribari-Neto & da Silva, 2011).

Multivariate Analysis

This study sought to examine the relationships between hopelessness, race-related stress, perceived discrimination and racism, general stress, and social media use. A mediation analysis using bootstrapping was conducted. This study sought to observe moderating, predictive, and mediative relationships. Mediation analysis and simple linear regression were utilized to test each hypothesis.

To perform a simple linear regression, raw data was extrapolated from SurveyMonkey, upon transfer to SPSS, data was encoded, and any responses missing values were eliminated. Survey responses were recoded utilizing Transform > Recode into Different Variable function in SPSS classified into their respective variables, BDItotal, SMtotal, and PRtotal. Beck Depression Inventory Responses were recoded into BDItotal, Daily Life Events RaLes Subscale responses were encoded as PRtotal, and Facebook Intensity Scale responses were collected and encoded as SMtotal.

Linear regression analysis was conducted in SPSS, utilizing Hayes (2011) PROCESS macro, found in SPSS under Analyze>Regression>PROCESS v4.0 by Andrew Hayes. Mediation Model 4 was selected, with at the 95% confidence level, with 5,000 bootstrap samples. BDItotal was assigned as the Y, or dependent variable; SMtotal was assigned to the X, or dependent variable, and PRtotal was selected as a mediator. Under Options, Heteroscedacity-consistent inference, HC4 (Cibari-Neto) was selected. Show total effects was selected, as total effect of mediation, in addition to direct and indirect effects, was analyzed. Standardized effects, in addition to "test for X by M interaction" was also selected as an option. Upon selecting Continue and OK, mediation analysis was run and results output was generated.

Linearity

Data was entered into SPSS, and a scatterplot was generated, utilizing Graphs>Legacy>Scatter, choosing Simple scatter. This researcher initially visually determined if a linear relationship did exist between variables. Mediation analysis results were compared to scatterplots.

Hypothesis Testing: Multivariate Analyses

This study sought to examine the relationships between social media use, perceived racism, and depression. Precisely, this study examines predictive and mediating relationships. Linear regression was simultaneously conducted in conjunction with mediation analysis through the use of Hayes' PROCESS macro.

According to Laerd (2015), simple linear regression assesses the linear relationship between two continuous variables and is used to predict the value of a dependent variable based on the value of an independent variable. Specifically, linear regression serves four purposes: (a) determines whether the linear regression between both variables is statistically significant; (b) determines how much the independent variable explains the variance in the dependent variable;

(c) assists the researcher to understand the magnitude and direction of any relationship; and (d) uses the values of the independent variable to predict the values of the dependent variables (Laerd, 2015).

Bootstrapping was conducted to assist in testing for mediation. Bootstrapping relies heavily upon confidence intervals. According to bootstrapping, if assumptions of linearity and homoscedacity are met, if zero falls between the confidence intervals, than the result is insignificant and vice versa.

Data analysis plans for each hypothesis follow:

Hypothesis 1: Social media consumption predicts depression.

Simple linear regression as part of mediation analysis with bootstrapping, with 5000 random resamplings was utilized with social media consumption (i.e., Facebook use) as a predictor variable was conducted to test if social media consumption (i.e., Facebook use) predicts depression.

Hypothesis 2: Perceived racism predicts depression.

In order to test the second hypothesis, simple linear standard regression analyses as part of mediation analysis with bootstrapping with 5000 random resampling, was conducted to determine if perceived racism, measured by the RaLES and Everyday Discrimination scale (EDS), predicts the dependent variable.

Hypothesis 3: The relationship between social media use and depression is mediated by perceived racism.

Baron and Kenny (1986) define a mediator variable as a variable that explains the relationship between the dependent variable and a predictor variable (Baron & Kenny, 1986). In this study, social media consumption (measured by Facebook use) was the predictor variable,

perceived racism (measured by the RaLES) was assessed as the mediating variable, and depression (as measured by the Beck Depression Inventory-II) was the dependent variable. Mediation analysis using bootstrapping and measuring X by M interaction was utilized.

Threats to Validity

Nonexperimental research does have potential flaws, most importantly weak internal validity, as often, even if a strong correlation is found, there may be confounding variables requiring more extensive research (Warner, 2020). That being said, this design is most appropriate for the type of research this author is conducting

Bootstrapping

According to Hayes (2018), bootstrapping does not rely upon the more traditional assumptions of normality and instead relies on random resampling from 1,000 to 10,000 resamples. However, as such, Hayes states that this random resampling poses a threat to study internal and external validity in that the resampling is random. As such, repeat studies, including those by the original researcher, likely will not yield the same confidence intervals. Hayes suggests using seeding or saving the data set and resamples as a way to remedy this (2018)

Errors in Research Design

Another error often encountered is unequivocal causation or the assumption that X causes Y, which can lead to longitudinal errors when variables not measured in the same instance lead to error. Longitudinal measures are often not considered when performing cross-sectional research, despite the prevalence of longitudinal errors. Pek and Hoyle (2016) suggest manipulating data or using newer extensions or multilevel models to solve this error.

Threats to Statistical Validity

Heppner et al. (2016) also note that variance in the experimental setting also threatens statistical validity. For this study, participants did not complete the study in a controlled lab setting. Since the surveys for this study were completed online, it was possible for participants to complete the questionnaire anywhere, and as such, there was potential for participants to be influenced by external stimuli as a distraction. External factors were accounted for in the implementation of the study and outliers, (e.g., surveys that display responses consistent with choosing the same answer repetitively) were eliminated.

Summary

This method section was written to provide the reader with a detailed overview of the current study. The study questions whether there is a relationship between social media use, perceived racism, and depression in young African American females, with the ultimate goal being to determine if social media use exacerbates depression in the select population and to determine if the relationship is mediated by perceived depression experienced while using social media.

There were three proposed hypotheses: Hypothesis 1: Social media consumption predicts depression in young African American females; Hypothesis 2: Perceived racism predicts depression in young African American females; Hypothesis 3: The relationship between social media use and depression in young African American females is mediated by perceived racism by young African American females. A non-experimental multivariate correlational design will be used in this study, using linear regression and mediation analysis.

African American females between the ages of 18-34, were recruited for participation and using SurveyMonkey via Amazon M-Turk, participants were asked to complete the Beck Depression Inventory, Facebook Intensity Scale, and The Daily Life Experience (DLE) subscale of the Racism and Life Experiences Scale. Results were analyzed using multivariate analysis

through linear regression and mediation analysis via SPSS statistical software. Assumptions of linearity and homoscedasticity were assessed.

Each of the three hypotheses was analyzed using SPSS Statistical software using regression analysis specific to that hypothesis. Results will be presented to the Liberty University Dissertation Committee.

CHAPTER FOUR: FINDINGS

Overview

To date, no investigation has been conducted to explore if this distress manifests as depression. In this section, data analysis is the process of measuring, assessing, and testing hypotheses and research questions to address problems presented in a particular study. This chapter includes the results of the data analyses utilized to answer the posed research questions and to test their corresponding null hypotheses. First, sample characteristics are presented, followed by descriptive statistics inclusive of frequencies, means, modes, and measures of variance. Next, the results of assumption testing are reported, in addition to the conclusions for each hypothesis. Finally, a chapter summary and transition to the next chapter is included.

Data Screening and Analysis

To create an electronic data set, data was imported from Survey Monkey into The Statistical Package of the Social Sciences (SPSS). Data accuracy was verified via proofreading questionnaires completed by participants against data file (Tabachnick & FIdell, 2013). In SPSS, data was screened for missing data and accuracy utilizing the Analyze > Descriptive Statistics > Explore option to include actual cases in analysis to check for missing variables, check for missing data, and to determine if scores were within range, in addition to providing information on kurtosis and skew.

Missing data was reviewed in SPSS utilizing Data> select cases > if command. All variables were entered into conditional "if" field. Condition was set utilizing function (NMISS), variables were selected with less than "1" as the condition. Of the original 596 potential participants, 157 completed the initial survey on SurveyMonkey and were included in the SPSS analysis. Delete unselected cases was checked to remove cases from analysis, resulting in cases being reduced from 157 to 112.

Descriptive Statistics

One hundred fifty-seven individuals completed the survey, but 45 were deleted for missing data. G-power analysis indicated that a sample size of 95 was necessary to complete study. To determine the internal consistency of the scales and subscales, Cronbach's alpha coefficient values were calculated for the modified Beck Depression Inventory-II (BDI-II), which measured depressive symptoms, the Daily Life Experience subscale of the RaLES (DLE), which measured perceived racism, and the Facebook Intensity Scale. Cronbach's alpha coefficient values ranged from acceptable to good for the Beck Depression Inventory-II (.96), the Daily Life Experience subscale (.91), and the Facebook Intensity Scale (.69).

Table 1 below shows the descriptive statistics tables of the variable subscales for the participants who completed the surveys.

The Facebook Intensity Scale (FIS). The mean score for the FIS was 8.56 (SD= 2.75). As scores range from 4-20, the level of Facebook interactive use among participants was moderate **Descriptive Statistics for Dependent Variables.**

Depression. A modified Beck Depression Inventory-II was used to measure depression (BDI; Cohen, Kamarck, & Mermel- stein, 1983). Using a Likert scale from 1-4 with 15 items, scores on the BDI range from 15-60. The mean score for participants was 29.85 (SD=11.30), indicating a moderate level of perceived stress.

Descriptive Statistics for Mediating Variables

Perceived racism. The Racism and Life Experiences Brief Scale (RaLES; S. P. Harrell, 1997) was used to measure perceived racism and was modified from a 9-item to a 5-item scale. The mean score was 25.22 (SD= 9.50). Because scores range from 10-45, participants exhibited moderate levels of perceived racism.

Descriptive Statistics

Table 1.

Demographic Informational Data

	N Statistic	Range Statistic	Maximum Statistic	Minimum Statisic	Mean Statistic	Mean Std. Error	Std. Deviation Statistic	Variance Statistic	Skewness Statistic	Skewness Std. Error	Kurtosis Std. Error
Age	0										
BDItotal	112	45.00	15.00	60.00	29.848	1.068	11.304	127.788	.273	.228	420
PRtotal	112	35.00	10.00	45.00	25.223	.899	9.502	90.283	274	.228	-1.011
SMStotal	112	1600	4.00	20.00	8.563	.260	2.750	7.564	1.479	.228	4.103

Table 2.

<u>Correlation Matrix Demonstrating Pairwise Associations Between Study Variables</u>

		BDItotal	PRtotal	SMtotal
BDItota	Pearson	1	.570**	045
	Correlation			
	Sig (2-		<.001	.637
	tailed)			
	N	112	112	112
PRtotal	Pearson	.570**	1	304**
	Correlation			
	Sig (2-	<.001		.001
	tailed)			
	N	112	112	112
SMStotal	Pearson	.045	304**	1
3141313131	Correlation	.015	.501	-
	Sig (2-	.637	.001	
	tailed			
	N	112	112	112

**Correlation is significant at the 0.01 level (2-tailed)

Results

Hypotheses

- H_a1: Social media consumption predicts depression in African American females.
- H₀1: Social media consumption does not predict depression in African American females
- H_a2: Perceived racism predicts depression in African American females.
- H₀2: Perceived racism does not predict depression in African American females.
- Ha3: The relationship between social media use and depression in African American

females will be mediated by perceived racism.

H₀3: The relationship between social media use and depression in African American females is not mediated by perceived racism.

Research Questions

- RQ1: Does social media use contribute to or exacerbate feelings of hopelessness and depression in young African American females?
- RQ2: Does perceived racism contribute to and exacerbate depression in young African American females?
- RQ3: Is the relationship between social media use and depression mediated by perceived racism for African American females?

Hypothesis I. Social media consumption predicts depression in African American females.

The first hypothesis postulated that social media use, as measured by Facebook use,

would predict depression (as measured by the Beck Depression Inventory- II).

Facebook use was entered into SPSS PROCESS regression analysis as an independent variable to determine if it predicted depression as the independent variable. Bootstrapping with 5,000 estimates was utilized.

Results revealed that there was no significant direct path between social media use and depressive symptoms. Total effect of X on Y, social media use on depression yielded the following results. Effect = .-.1851, se(HC4) = .4005, t= -.4623, p = .6448, CI (-.9788, .6085). Findings did not provide support for this hypothesis. Facebook use did not significantly predict depressive symptoms with the 0 integer falling between confidence intervals of -.9788 and .6085, indicating that there is not a pathway between variables. As such, the null hypothesis for Hypothesis I was accepted, with no support for the alternative hypothesis.

Hypothesis II: Perceived racism predicts depression.

In order to test the second hypothesis, simple linear standard regression analyses with bootstrapping resampling was conducted to determine if perceived racism, measured by the RaLES and Everyday Discrimination scale (EDS), predicts the dependent variable, depression, as measured by the BDI-II.

Perceived Racism (RaLES)

The path between perceived racism and depressive symptoms was positive and significant. Utilizing perceived racism measured by the RaLES as the independent variable, analyses revealed Effect = .7297, se(HC4) = .0851, t= 8.5736, p = .0000, CI (.5610, 0.8984).

Hypothesis III. The relationship between social media use and depression in African American females will be mediated by perceived racism Regarding the *b* pathway, the relationship between the mediator, perceived racism and the dependent variable, depression in the presence of social media use (M|X>Y), results from mediation analyses revealed the indirect effect of X on Y: Effect--.7657, se=.2447, CI (-1.3229, -.3626). The result was statistically significant, providing support for hypothesis that perceived racism mediates the relationship between social media use and depression, suggesting that social media use works indirectly through perceived racism to affect depression. See Figure 1.

Figure 2 and 3 provide a visual representation of these results. Figure 2 depicts a visual representation of the nonlinear relationship between social media use and depression., indicating no relationship. Figure 3 depicts the visual representation of the linear relationship between perceived racism and depression inclusive of the strength of the relationship.

Table 3.

Total, Direct, and Indirect Effects of X on Y

Total effect of X on Y Effect LLCI **ULCI** se t p c_cs .3915 -.4729 .6372 -.1851 -.9610 .5907 -.0450 Direct effect of X on Y Effect LLCI ULCI c'_cs se t p .5806 .3348 1.7341 .0857 -.0830 1.2442 .1413

Indirect effect(s) of X on Y:

Effect BootSE BootLLCI BootULCI
PRtotal -.7657 .2487 -1.3399 -.3678

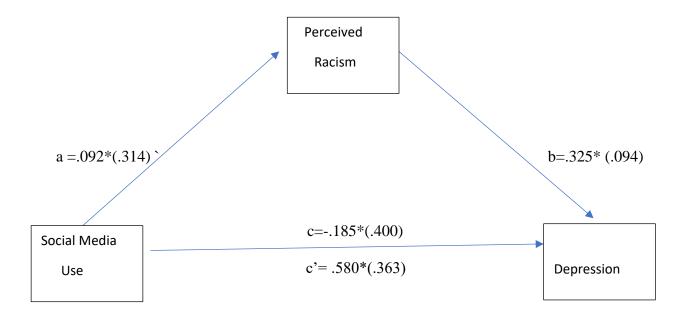
*Level of confidence for all confidence intervals in output: 95.000

**Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

Assumption Tests

Bootstrap resampling was utilized in this study. Bootstrapping eschews assumptions of normality, is based on sample size, and relies heavily on confidence intervals. As such, parametric assumptions of normality are not directly tested, but instead provide additional support or non-support for the hypotheses. With bootstrapping, the null is not accepted or rejected, but instead results are read as statistically or not statistically significant (Hayes, 2018).

With bootstrapping, and the need to not test for normality, other assumptions tested include homoscedacity and linearity. Homoscedacity was tested using the Cribari-Neto matrix estimator (Cribari-Neto & da Silva, 2011), measured as (HC4). Linearity was measured via scatterplot design with independent and dependent variables entered into SPSS Legacy dialogs > Scatterplot function.



*p<.05

Figure 1. Regression coefficients for the relationship between social media usage and depression as mediated by perceived racism. Simple mediation diagram: a, b, c and c' are coefficients representing unstandardized regression weights and standard errors (in parentheses). The c path represents the total effect of social media use on depression. The c-prime path coefficient refers to the direct effect of social media use on self-reported depression.

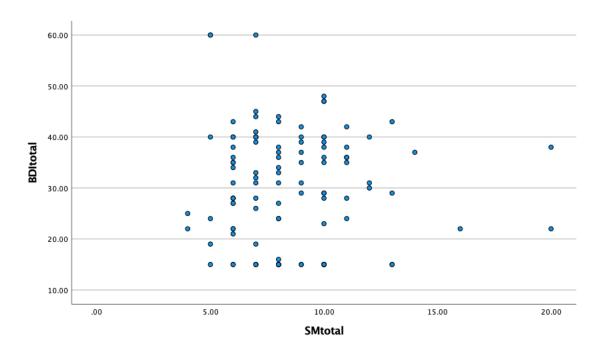


Figure 2. Scatterplot depicting non-linear relationship between social media use and depression.

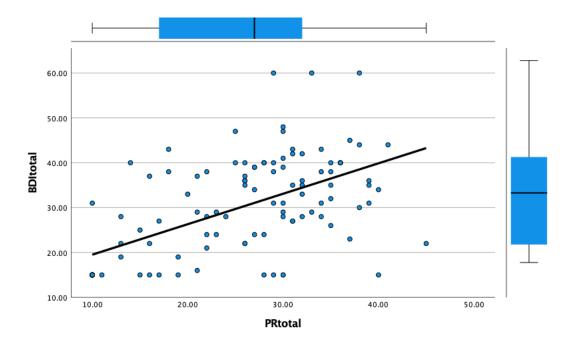


Figure 3. Scatterplot depicting linear relationship between perceived racism and depression.

Summary

This chapter provided a detailed description of the analysis conducted. I concluded that the relationship between social media use and depression in young African American females is not statistically significant. However, when perceived racism was considered as a mediator for the relationship between social media and depression with this particular demographic, the relationship was found to be significant, indicating that depression resulting from social media use works through perceived racism as a mediator for young African American females.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this study was to assess the effects of social media, for this study identified as Facebook, on depression in young, i.e., college-aged, African American females. This study sought to determine if there was an effect on depression and if that effect is mediated by the experience of perceived racism by the African American user. The dependent variable in this study was depression. The independent variable was social media use, with a proposed mediating variable of perceived racism. In short, this study proposed to determine if the young African American female experience of social media increased their depression and if the experience of perceived racism exacerbated those symptoms. In this chapter, the major findings in relation to the research questions are discussed, in addition to the limitations of this study, and recommendations for future research.

Discussion

This study was conducted to assess the effects of social media, for this study identified as Facebook, on depression in young, i.e., college-aged, African American females. Overall results did indicate that perceived racism does mediate the relationship between social media use and depression in that although there was no significant relationship between social media use and depression, there was a significant relationship between perceived racism and depression.

The first research question posited in this study was, "does social media use contribute to and exacerbate depression in young African American females?" Hypothesis I purported that social media contributes to an increase in depressive symptoms in young African American females. Contrary to results of previous studies which found that social media use has a negative relationship to mental health outcomes (Sedgwick et al. 2019; Stevens-Watkins et al., 2011;

Twenge et al., 2018; Vernon et al., 2017), within this study, no support was rendered for a relationship between social media and depression.

There are a few explanations for this finding. First, depression was obtained via self-report, which may not have accurately assessed participants 'depression symptom. Second, social media has no defined rules for usage, especially Facebook, as users use the media to connect, share, garner information, post pictures, obtain their news, advocate, and many other uses. While some individuals may use Facebook to keep in touch with family or friends, others may use it to share memes, join interest groups, or obtain information, and other typically unhurried activities. Oresmus (2016) argues that Facebook inundates users with advertisements and content that reflect their individual interests. As such, users receive tailored positive content that may negate any negative effects of social media usage.

With an increasing number of youth and young adults spending approximately half of their daily waking hours engaged in digital technology use, researchers have become interested in the effects on the mental health of social media users. This is especially true now, being that many young adults are spending more time in isolation during the COVID-19 pandemic, with social media being their primary source for news and outlet for communication (Liu & Liu, 2020). Liu and Liu (2020) found that in the early stages of the COVID-19 pandemic, Chinese citizens spent an additional 1-3 hours on social media each day seeking information and attempting to make sense of the situation, identifying social media as the primary way to satisfy this innate need per media dependency (Lowery, 2004). In addition to the worldwide pandemic, young people of color have also been inundated, during the same period, with an online influx of negative race-based material such as viral videos of police brutality, the deaths of George Floyd and Breonna Taylor, and far right and white supremacist content. Researchers have discovered

that during a crisis, people tend to spend more time on social media to connect and identify with like-minded individuals, but simultaneously, the same findings indicate that time invested in social network site (SNS) use is a positive predictor of depressed mood and anxiety in adolescents and young adults (Blomfeld Nera & Barber, 2014; Liu & Liu, 2020; Lowery, 2004).

There are well-documented health consequences associated with the individualized perception of racism. Researchers across multiple disciplines have diligently sought to uncover the frequency, antecedents, and consequences of racial discrimination directed towards African Americans (Pieterse et al., 2012). Long-term exposure to racial discrimination has a cumulative effect which has been found to endorse a stress reaction (Pieterse et al., 2012; Maxwell, 2016) which can precipitate adverse physical and mental health outcomes (Belgrave & Allison, 2010), inclusive of depression (Hunter et al., 2016), lowered self-esteem (Utsey et al., 2001), cognitive and somatic anxiety (Lee et al.2015), psychiatric and physical distress (Pieterse et al.2012), and cardiovascular disorders (Everson et al., 1998).

Extensive exposure to stress can have detrimental physiological and mental health effects on human development (Maxwell, 2016). Prolonged glucocorticoid release can alter brain structures that control emotions, neurodevelopment, and memory (Lupien et al., 2009). Prenatal stress exposure can affect lifelong development, including behavior, learning (Vallee et al., 1997), increased risk for drug use (Barbazanges et al., 1996), and increased risk of developing mental health disorders such as anxiety and depression (Lupien et al., 2009).

African American and ethnically mixed youth have been found to use social media to support and garner health education (Altshuler et al., 2014). In a study of 14 pregnant women, researchers discovered that it was not uncommon for Black women to immediately seek out social support online before and after birth and reach out to peers and family online for education

(Asiodu et al., 2015). Social media as a therapeutic tool has also been used to develop HIV education and substance use interventions among racial and ethnic minority communities (Young et al., 2014). Research on race-related stress has linked perceived discrimination and racism to decreased self-esteem (Utsey et al., 2001) and diminished quality of life (Utsey et al., 2002). As such, research on the capacity for augmented social media uses to affect stress levels in young African American females has significant health repercussions. As demonstrated in this current study, the content viewed on social media has purportedly detrimental negative mental health effects for African American females, with a demonstrated increase in depressive symptoms.

There is a putative relationship between mental health outcomes and social media usage in adolescents and young adults, with depression being the most prevalent outcome (Keles et al., 2020). There is a strong association between depression and social media use for young adults in the United States. Social media has been linked to declines in the sense of well-being, life satisfaction, a negative mood, along with an increase in feelings of self-inferiority (Lin et al., 2016) for female users. Blomfeld Nera et al. (2014) found that social network site users who invest more time maintaining their online presence and network profiles reported significantly higher levels of depressed mood and lower self-esteem than those who do not with tone of feedback, specifically negative feedback being linked to more depressive symptoms.

Adolescents and young adults who reported five or more hours of internet usage per day had a significantly higher risk for depression (Messias et al., 2011).

Internet users with low self-esteem were more likely to use social media more often than their peers with higher levels of self-esteem (Vogel et al., 2015). It is not uncommon for adolescents and young adults to seek external validation and popularity through social media

(i.e., likes, views, and the number of friends empirically quantify popularity). Social media plays a salient role in identity development and valuation of the self. Negative criticism on social media leads SNS users to question self-efficacy, decrease concentration, and increase anxiety (Davis et al., 2015). Social media becomes an obsessive focus and detracts from other, more positive sources of development as a tool for social comparison and identity development, creating an impracticable projection that peers are competitors. As such, SNSs may play a discordant role during a critical stage of social development.

There is a strong positive relationship between adolescent social networking use, depressed mood, and externalizing behaviors, e.g., sleep disturbance, increased number of sexual partners, suicidal ideation, and suicide attempts (Sedgwick et al. 2019; Stevens-Watkins et al., 2011; Twenge et al., 2018; Vernon et al., 2017). Of note, in a meta-analysis, Sedgwick et al. (2019) found a similar relationship between online gaming, depression, and suicidal ideation, suggesting it was the social component, inclusive of feedback and tone, that correlates with mental health outcomes. This is similar to findings in the current research, indicating that the social context and human interaction online correlates with mental health outcomes.

However, not all research supports a negative relationship between social media and mental health outcomes. Yang and Lee (2020) discovered that for first-year college students living away from home for the first time, using social media to interact with in-person or real-life friends or local peers they had met on campus and family members resulted in more positive social and mental health outcomes than using social media to interact with online-only or distant friends. Social media usage in moderation was found to have a similar effect. Sedgwick et al. (2019) analyzed nine studies about social media use and depression and suicidality and found

that two studies, or a little more than 20% of studies, revealed that moderate social network usage reduced depressive symptoms suicidality.

Social media has potentially positive and negative consequences of use in how young adults connect and the world and how they view their self-worth (Cookingham & Ryan, 2015; O'Keeffe & Clarke-Pearson, 2011). Social media platforms can quantify individuals' worth in the form of "likes," "retweets," the number of followers, and friends. According to Perloff (2014), the inimitable dichotomous nature of social media, in which the user is both the sender and recipient of information, modifies the experience for each unique user in that each user determines for themselves which information to absorb, share, and subsequently let influence their absolute beliefs about self. In a meta-analysis of 43 studies about social networking and young women, Best et al. (2014) identified multiple benefits of social media use, including increased social support, increased self-worth, increased self-esteem, safe space for self-disclosure, and safe space for identity exploration. Of note, while most of the studies in the meta-analysis sought to identify adverse effects of social media use, most either found mixed or no effects on well-being stemming from social media use (Best et al., 2014).

A positive relationship has been found between social media use and decreased perceptions of body image and body satisfaction (Perloff, 2014; Tiggemann & Slater, 2014). Fardouly and Vartanian (2015) replicated these findings and identified a positive relationship between Facebook usage and body image trepidation. The study found that young women who spent longer on Facebook experienced more negative mood sets than the control group, who visited an alternate website. These women reported perceiving themselves as having more physical flaws than those in the control group. Findings from the current study reinforced this

ideology that social media content, not usage, has potential to affect the user's mental health and perception.

In addition, another explanation for the results of this study not endorsing a relationship between social media use and depression is that few studies have been conducted on African American females and social media, alone, and how the experience for African American females is unique to them. For example, research has found that when using social idealism as a predictor, African American women present with a complexity of identity in both race and gender in comparison to their non POC counterparts (Stokes et al., 2016; Perloff, 2014).

Although this juxtaposition exists, few studies have explored this intersectionality related to social media (Maxwell, 2016).

Of note, there has not been a consensus as to the relationship between social media and depression or if such a quantifiable relationship does, indeed, exist. While some studies were not able to identify the existence of a conclusive relationship (Moreno et al., 2011), others have found the existence of "Facebook depression." Wright et al. (2012) identified a positive correlation between time spent on social media, specifically Facebook, and depressive symptoms. Other studies have found a negative association (Kross et al., 2013; Labrague, 2014), no association (Gerson et al., 2016; Valenzuela et al., 2009).

Upon further interpretative analysis, it can be reframed that although historically there has not been a defined consensual link between social media use and depressive symptoms, social media use is subjective. This current study found that, yes, the utilization of social media, as a communications tool, does not strictly endorse a relationship to depressive symptoms. However, the results of this study can be interpreted as the content of social media, in this case, perceived racism and discrimination, is the catalyst for depressive symptoms. So, while the results indicate

that there is no relationship between social media usage and depression, the results may be subjective based upon interpretation of social media utilization as there is a difference between mere usage and content.

The second research question posed was, "Does perceived racism contribute to and exacerbate depression in young African American females?" The second hypothesis was that perceived racism would predict depression. Findings supported this hypothesis. The RaLES has historically predicted that perceived racism predicts negative mental health outcomes in that the more perceived racism experienced by participants, the increased likelihood of experiencing detrimental outcomes (Kessler et al., 1999). In light of the historical and contemporary experiences of African Americans in the United States, from the trans-Atlantic slave trade, to "Jim Crow," to the civil rights movement, to contemporary race relations replete with racial tension, these findings come as no surprise. Racism in the United States has been exhibited in church arsons, police brutality and shootings, segregation, and blatant acts of discrimination. As such, it's reasonable to expect perceived racism to predict negative mental health outcomes. The finding that the perception of racism predicted depression was consistent with historical findings.

According to Borrell (2006), among African Americans, perceived racism is more prevalently reported among those with higher educational attainment and is more often reported by men than women. It is theorized and empirically evidenced that perceived racism increases the risk of depression (Carter et al, 2017, 2019; Williams & Mohammaed, 2013) and that these perceptions are more commonly reported by men than women, although women are more likely to experience depressive symptoms than men (Jang & Johnson, 2005; Seawell et al, 2014). Females were found to have a larger relationship between poor mental health outcomes and racism than their male counterparts. Men are more likely to externalize their stress experiences

and often express their stress as anger, whereas women are more likely to internalize and ruminate, leading to depressive symptoms (Castle et al., 2019; Jang & Johnson, 2005; Seawell et al., 2014). Another possibility is that females openly endorse mental health symptoms more so than males, so are more likely to readily report mental health symptoms (Castle et al., 2019).

The link between racism, discrimination, and depression in African Americans is not novel and has been well-established (Assari et al., 2018; Stein et al., 2017). For over 20 years, research has sought to explore the overall encumbrance that perceptions of discrimination and racism have on African Americans' daily lives and physical and mental health (Belgrave & Allison, 2010; Carter & Reynolds, 2011). For African Americans, specifically, the experiences of racism and discrimination have been linked to physiological stress (e.g., cardiovascular disorders; Hill et al., 2017) and linked to negative mental health consequences, such as depression (Hudson et al., 2016), suicidality (Walker et al., 2017), and distress (Paradies et al., 2015). Experiencing racism and discrimination has been linked to a higher risk of developing a mood disorder throughout the lifetime and an increased risk of depressive symptomology (Chatters et al., 2015; Mouzon & McLean, 2017). In African Americans, this link has been associated with more inferior sleep quality and physiological comorbidity. Of note, African Americans are also less likely to seek psychological treatment, resulting in increased emergency admissions for depressive symptoms (Henderson et al., 2014).

The mental health consequences of racism remain a substantial concern for public health officials in the United States and worldwide (Parides et al., 2015; Williams & Mohammed, 2009). Racism can be explicit (e.g., ethnophaulisms) or subtle, such as microaggressions (Sue et al., 2008). The experience can be individual (e.g., discrimination), institutional (e.g., redlining),

or cultural (e.g., devaluation of one's own minority culture due to European ethnocentrism (Utsey et al., 2001).

Biopsychosocial models and minority stress theories indicate that individuals exposed to chronic discrimination are more vulnerable to adverse mental health outcomes, such as depression, anxiety, and distress (Pascoe & Smart Richman, 2009). Bogart et al. (2011) also suggest that discrimination manufactures a hostile living situation, increases wear and tear on mental health protective defense mechanisms, and decreases the capacity to cope with future stressors. Suicide rates for African American youth and young adults in the 15-24-year-old age group have increased more than any racial group (Matlin et al., 2011). This age group is also the most likely to use social media. Depression is the most significant risk factor for suicidality. According to the 2010 Youth Risk Behavior Survey (YRBS), 27.7 % of African American youth reported feeling depressed, sad or hopeless almost every day for two or more weeks in a row, the highest percentage reported for any racial or ethnic group (Centers for Disease Control and Prevention, 2010).

Research documenting perceived racism and discrimination among African American women has also underscored the development and implementation of maladaptive coping strategies and negative health results (Maxwell, 2016). Carr et al. (2014) found that experiencing racism and discriminatory events has an inimitable and unequivocal effect on the well-being of African American women. The study revealed that coping with oppression through internalizing, such as avoidance and remaining silent, mediated the relationship between racist experiences and depression in African American women.

Contemporary research suggests an emerging association between internalized racism (i.e., supporting negative stereotypes of one's racial group) and poor mental health outcomes. In

a national study (N=4,988) of African American and Afro-Caribbean adults, Molina and James (2016) found that African Americans were more apt to endorse adverse mental health outcomes, specifically major depressive disorder, within the previous 12-month period.

However, despite the extensive studies identifying the adverse outcomes associated with race-based stress, there is limited research that suggests the alternative. For example, a 2015 study found that in a sample of African American undergraduate college students (N = 185), race-based stress was a substantial predictor of whether or not participants decided to participate in activism, creating a more robust cultural identity (Szymanski & Lewis). More conclusive research is needed in this specific area to identify additional potential benefits of race-based stress.

Research has found that gender also plays a role in stress response, with women reportedly experiencing higher levels of stress than men (Stein & Nyamathi, 1998), and are more apt than their male counterparts to make use of emotion/avoidance-focused coping techniques as opposed to problem-focused strategies (Madhyastha et al.; 2014; Ptacek et al., 1994; Tamres et al., 2002). Women experience higher levels of chronic stress and minor daily stressors. In one study, Matud (2004) found that women identified family and health as stressful, whereas men identified their top stressors as relationships, money, and work. Women are also more likely to seek social support (Ptacek et al.1992). Sexism and social pressure to conform to societal beauty standards also play a role in women's stress levels (Madhyastha et al., 2014; Perloff, 2014). As such, there is the possibility that women may be at higher risk of experiencing increased levels of stress when viewing racism online. Coping is essential in the framework of racially stressful events (Harrell, 2000) and may be an instrument by which racially demanding events affect the

internalized safety of individuals (Harrell, 1997). Coping mechanisms may assist in managing discrimination-induced stress (Hoggard et al., 2012).

This study supports the theoretical framework. The African American experience of stress is unique. Researchers have hypothesized that the primary association between stress and the perception of racism and discrimination is so robust that race-based stress is its own distinct construct with its own categorization: acute, short-term, stress, or chronic, long-term stress (Belgrave & Allison, 2010). It is essential to identify additional sources of stress and identify if social media is a conduit of stress for African Americans, given the magnitude of use in the Black community in order to develop culturally specific positive coping strategies.

Essed (1990) states that in the United States, African Americans have become hypervigilant to where they have come to expect to experience racism and plan their daily lives around the expectation. This anticipation, in and of itself, can be stressful. Race-based stress is the outcome of the transaction between people and their active appraisal of their immediate environmental conditions, their evaluation of their options, and failures or successes of coping and is rooted in the active experience of navigating around racism and its daily expectations (Outlaw, 1993). Kessler and McLeod (1984) explain that network events or vicarious exposure to others' experiences with racism induce stress in the original victim and those who witness or are adjacent to the respondent and the respondent's social network as a friend or family member.

It is essential to study the impact of social media on African American women because women tend to social support to cope. As such, the issue becomes one of what happens to the individual when the means of coping - using social media as a source of social support - is simultaneously the primary source of stress, social media as a conduit for racism and sexism.

The third and final research question was, "Is the relationship between social media use

and depression mediated by perceived racism for African American females?" postulating that perceived racism would mediate the relationship between social media and depression.

Pertaining to indirect effects, support was rendered for hypothesis III, in that perceived racism had an indirect effect on the relationships between social media use and experiences with depression.

Daniels (2013) defined social networking sites as places where racism and race interact in often disturbing ways. Research has grown increasingly interested and concerned with hatespeech and racism online due to the rise of far-right leadership in countries like the United States, United Kingdom, India, and Brazil and the weaponization by said leadership and white supremacists of social media and digital platforms. Racism flourishes on social media through the utilization of subversive tactics such as the creation of false online personas to intentionally incite racist hatred (Farkas et al. 2018) weaponized memes (Lameriches et al. 2018), the creation of far-right channels by extremist influencers on YouTube (Murthy and Sharma 2019; Johns 2017) racist subcultures on Reddit (Chandrasekharan et al 2017; Massanari 2015), and seemingly innocuous practices such as the utilization of emoji and GIFs (Matamoros-Fernandez 2018; Jackson 2017).

Social media underwrites racist undercurrents through their acceptance of policies, algorithms, and senior-level decisions (Matamoros-Fernandez 2018). Instagram and Snapchat have been targeted for distributing filters that endorse "digital blackface" for white users (Jackson 2017) and automatic skin-lightening for non-white users (Jerkins 2015). Through tracking user activity, Facebook allowed marketing partners to disqualify users based on their African American or Hispanic affinity (Angwin and Parris 2016). This demonstrates that social media technology has reshaped institutional race-based, gender-based, and sexuality-based

oppression (Bivens ad Haimson 2016; Chun 2009; Nakamura 2008; Noble and Tynes 2016).

Via social media, the African American community was also exposed to the deaths of Eric Garner, Ahmaud Arbury, and George Floyd, able to observe the complete account of the events in vivid detail, including watching them die on camera. Also, the Black community has borne witness to a myriad of race-based discriminatory acts recorded on a cellphone and posted on social media platforms (e.g., Christian Cooper and Amy Cooper, Central Park birdwatching incident). Regarding violent incidents, graphic depictions are more likely to evoke more negative emotions and produce more significant psychological and physiologic distress and arousal than nongraphic images (Riddle, 2014).

Online, African American women have been placed at the forefront of the counter-racism movement. Harrington et al. (2010) found that African American women have been historically socialized from childhood to embody the culturally symbolic Strong Black Woman trope and are pressured to internalize their vulnerability and not express their depression. So, there is a presumed pseudo-assumption based on historicity that Black people do not feel pain. When African American women perceive themselves as not embodying the SBW image, there is an increased risk of developing adverse mental health outcomes, including shame, guilt, low self-esteem, and depression. Following trauma exposure, trauma survivors may experience symptoms of PTSD, anxiety, substance use, depression, and eating disorders. African American women exhibit externalization of their internalized trauma is via disordered eating as a coping mechanism (e.g., binge-eating). An estimated 8% to 34% of African American female trauma survivors develop eating disorders compared to the overall prevalence rate of 2% to 5%. Untreated disordered eating runs counter to the SBW image and ideal, unrealistic, Euro-Black woman image found online and puts Black women at risk for developing increasingly severe

adverse mental health outcomes.

In 2014, Pew Research found that 67% of African Americans with internet access used Facebook, with 27% of the same population using Twitter. For Twitter, the African American demographic usage was higher than any other racial or ethnic group measured, with 25% for Hispanics and 21% for Whites (Duggan et al., 2015). On Facebook and Twitter, the most popular searched for or tweeted about, or trending topics among African American users focused on race relations, diversity, and racism in America (Demby, 2016; Freelon et al., 2016). Being that the topics of race and discrimination are discussed more frequently amongst African American social media users more so than other groups, and being that African Americans have a high rate of usage, it is laudable to explore further the impact of social networking on the African American perception of race and racism.

Social science and psychology literature have already identified factors that impact racial identity and perception that individuals who score higher in ethnic identification and centrality are apt to report increased levels of perceived discrimination (Sellers & Shelton, 2003; Operario & Fiske, 2001). Another influential factor is age and developmental stage. African Americans become more acutely aware of their racial identity and perceived racism and discrimination as they progress from adolescence to adulthood (Greene et al., 2006). Additional constructs that influence African American perceptions and identity formation include depth of socialization (Harris-Britt et al., 2007), skin tone and colorism (Ladrine & Klonoff, 2004) and gender (Perry et al., 2013). In seeking to determine if social media is an additional influential factor in racial perception, this study adds to the current literature that aids in understanding what social and environmental factors create the African American experience of racism and forged reactions.

Social media provides minority youth with access to engagement in a transnational discussion about oppression. Young Black women are active in discourse against racial violence but are often overlooked as debatable subjects, leading to increased marginalization (Carney, 2016). Before the death of Breonna Taylor, racial oppression, violence, and systemic discrimination were viewed as social maladies primarily reserved for young Black males. However, SNS have provided a voice for the young Black female as the activist. Although there is an increase in accessibility to technology for youth of color, the same accessibility is associated with increased risk and vulnerability. (Carney, 2016).

Social media developers do not entirely understand the dynamics of racism as platformed racism challenges the notion that social media is inherently neutral (Matamoros-Fernàndez, 2017). Platformed racism negates the presumptive neutrality of social media. Social media users ascertain that social media provides a platform for expressing their First Amendment right to protected free speech.

Kang (2015) explored African Americans' perceptions of and reactions to microaggressions and structural racism on the social media platform Tumblr. The author, undertaking discourse analysis, perusing and dissecting the content of 100 posts by African American users, sought to analyze the expression of these emotional reactions in an online setting. Four central themes were discovered: 1) creation of an "us" versus "them" environment; 2) compulsion to resist; 3) identified obstacles to resistance, and 4) incapacity to resist, digitally or physically (Kang, 2015). In the study, resistance was seen as an active reaction to users feeling disrespected and excluded, and Tumblr was viewed as creating a digital safe space for shared emotional expression (Kang, 2015).

In a study of 83 college students of varying races, Grasmuck et al. (2009) found that upon reviewing their Facebook profile pages, African Americans, those with Indian ancestry, and Hispanic students had a higher number of online friends they knew in real life, were more likely to display cultural symbolism on their pages, and had a higher number of uploaded profile pictures, all being indicative of increased investment in online identity formation. Of note, African Americans were also more apt to include more biographical minutiae (e.g., favorite movie). These inclusions and devotion to identity formation are seen to serve as open defiance mechanisms to the notion of color-blind stereotypy (Williams & Marquez, 2015; Grasmuck et al., 2009).

To date, there have been few studies researching the young African American response to racially biased content and social media. In a study evaluating 15 years of research, Daniels (2015) discovered that, instead of early attempts to relegate the internet as a neutral domain free of racial identity, users, predominantly minority racial and ethnic groups, have utilized the internet to create and confirm a racial identity, and seek out like-minded communities. However, the author also denotes that achieving these goals can be difficult, as political struggles over racial meaning, knowledge, and values often occur online. As the reviewed studies have shown, the use of "other" as a racial category burden, and at times, exiles some minority Internet users. Its inherent ambiguity problematizes the use of race as an identifier, and further, as a causal variable in technological research—as it is often measured matter-of-factly and without consideration of contextual information.

When controlling for income and education levels, Kwate et al. (2003) found that African Americans share the experience of racism, regardless of background. In an earlier study of African American and Afro-Caribbean women, women with multicultural identities were one

standard deviation below the mean. They were more prone to experiencing race-based stress and depressive symptoms than those with less pronounced attitudes toward their racial identities (Jones et al., 2007)

Following the officer-involved shooting death of Michael Brown in 2014, Twitter users were more likely to express solidarity with activists through hashtags (Ince et al., 2017). African Americans are some of the most influential Twitter users (Graham & Smith, 2016). As a group, African American Twitter users have created their robust sub-sector platform, Black Twitter, which has taken on a life of its own. Black Twitter has substantiated a national discourse on defining what it means to be a Black social media user in an era of civil oppression and politically supported anti-Black racism. Through hashtags, Black Twitter has contextualized what it means to Black in America in the 21st century. Black Twitter has become more visible due to the prevalence of African American users on the platform, creating a substantial network of users who express similar concerns, share tastes, culture, and experience (Florini, 2014). Young African Americans have found a unique platform on Twitter that allows them to appropriate a disparate agenda than mainstream users that allows them to occupy a place of dominance on Twitter while simultaneously creating a Black cultural identity (Florini, 2014; Manjoo, 2010).

Although initially developed for Twitter, Hashtags are used on social media to catalog keywords to make posts more easily searchable. A user enters a #keyword into the built-in search engine, and their screen is populated with posts that have used that keyword. Although Black Twitter is often used for culturally relevant witty repartee, the sub-platform also streams the latest news content and serves as a digital soapbox for social activism (Williams & Marquez, 2015). The hashtag #BlackLivesMatter was created as a counter-public movement to the deaths

of Michael Brown in Ferguson, Missouri, and Eric Garner in New York, both deaths caused by law enforcement. Other prominent hashtags of Black Twitter are #ICantBreathe, referencing Eric Gardner's last words and more recently George Floyd, and #SayHisName/#SayHerName, also more recently referencing Breonna Taylor, validating that African Americans are people and their deaths are not solely statistics (Graham & Smith, 2016; Hill et al., 2017).

However, Graham and Smith (2016) also note that the pro-public movement also exists, and as Black Americans seek support from Black Twitter as a counter-public, the Black oppression movement continues to exist. For example, #UniteBlue, #BlueLivesMatter, and #AllLivesMatter were created to devalue and vilify the #BlackLivesMatter movement, whereas #TCOT, Top Conservatives of Twitter, began in response to the perceived liberal and minority dominance on the platform.

Gender and Support

Frison and Eggermont (2016) found that minority female youth and young adults were more likely to perceive social media as offering more online support than males. Women have ensconced the roles as leaders in the social justice movement to combat anti-Black racism and discrimination online. The authors found that active public Facebook use, defined as an account posting to the public at large instead of using a private account, is a negative predictor of depression in females and a positive predictor for males. It is not surprising that females started

Implications

This study was fundamental and successful in addressing contemporary issues regarding social media usage and the African American community and gender. Very few studies have addressed the impact of social media on African American females, with the majority focusing primarily on African Americans as a race or young men. Or with studies focusing on females,

but not particular demographics. The findings in this study are of import because they establish that, contrary to previous studies, that social media use, in and of itself, does not correlate strongly to depressive or other mental health symptoms for African American females. Instead, for that demographic, it's the content of that social media. This is integral because, although social media use is ubiquitous, with Facebook alone having over 2 billion subscribers, or enough to equate to almost 1/3 of the world's population, more policies and safeguards can be implemented to monitor the content.

This study revealed that the presence of perceptually racist and discriminatory content on social media has a detrimental effect on the mental health of young African American women. Other studies have addressed that social media leads to externalized anger and aggression, particularly in African American males (Maxwell, 2016), but this study revealed that social media leads to silent, internalized symptoms in young African American women. This is also of import for policy creation in academic environments to monitor mental health of their student bodies more acutely or for mental health providers to more openly assess for depression. From a mental health and public health perspective, this study also provides insight into young African American females and their mental health, which has been often ignored. With the majority of youth carrying around a mobile device with ready access to social media at any given time, given the link between racist content and depressive symptoms, this study provides psychoeducation to providers and educators about not only what young females are experiencing online, but how they are experiencing it.

From a Christian worldview, this study has implications as the church plays and has played a pivotal role in the African American community. This study is important in that the negativity that African American youth encounter on social media can be refuted from a

community and spirituality-based perspective. Creating spirituality based "safe spaces" on social media to provide support and to provide outlets for youth and young people. The African American community is more likely to seek help from religious leadership than from therapists and given the history of religious leadership and African American religious institutions during slavery and the civil rights movement, involving the church in absolving and confronting the racism encountered by youth on social media is a natural progression.

Limitations

There were several limitations encountered in this study. Although a g-power analysis indicated that only 95 participants would be required to effectively complete the study, the sample size was relatively small at 110 viable participants who are meant to be representative of a larger demographic consisting of millions. As such, as is the limitation of many studies, representation may not be entirely accurate and poses a threat to both, internal and external validity of the study. African American females meeting study criteria were difficult to obtain via M-Turk. To combat this limitation, as financial constraints limited the number of participants available, additional funding sources and/or data collection sources should be explored.

Another threat to internal validity was the lack of inclusion of additional demographic variables in the analysis. Due to limitations on survey size, demographic variables such as education level and income level were excluded, which would have allowed for a more in-depth analysis. This lack of inclusion of additional demographic variables affects the currently study in that perceived racism has been documented in various studies to be a function of educational attainment (Maxwell, 2016), with increased levels of education be more apt to perceive racism and discrimination. This omission in my variables could affect the results, as of the 110

participants, there is nothing known about their educational attainment. If my sample is skewed towards heavily educated, results could possibly be skewed towards experiencing more perceived discrimination and not a true representation of the representative population and vice versa. In the future, assessment questions can be reduced to include more demographic variables and still maintain the integrity of the study.

Lastly, another limitation, a threat to internal validity, was that bootstrapping was used for analysis. Hayes (2016) states that a large limitation of bootstrapping is that in repeating the study, there is increased likelihood that future researchers, including the original, will not achieve the same confidence intervals, on which bootstrapping is based, found in the original study due to the randomization of bootstrapped samples. To remedy this, Hayes suggests using seed selection, utilizing the same sample with each instance of bootstrapping, to reduce randomization errors.

Recommendations for Future Research

There is a dearth of research on young African American females and social media.

Future research in this area should focus on qualitative and quantitative approaches as a qualitative approach would be able to assess individual experiences with racism, social media, and depression. In addition, a cross-sectional analysis was able to provide succinct results, a longitudinal design may also be beneficial in assessing the effect of social media use over time.

This study was conducted during a pandemic and during a period in which the African American community had been recovering from not only the pandemic, but the aftermath of George Floyd, BLM protests, Ahmaud Arberry, Breonna Taylor, and a period of empowered white supremacy. In addition, the inclusion of additional demographic variables should be considered, such as socioeconomic status and education level.

Future research should also focus on identifying additional variables which may impact the user's experience online. This studied identified perceived racism as a harbinger of negative emotional states resulting from the social media experience, so it would suffice to explore additional research regarding other channels through which may give rise to negative mental health outcomes.

This study focused primarily on Facebook use, but as a demographic, although Facebook is the most popular social media site, young people are gravitating away from Facebook and utilizing more interactive forms of social media, such as YouTube, TikTok, and Instagram.

Research should be conducted to ascertain the effects of these visual storytelling-based social media applications, due to their increased popularity, especially amongst the youth. In addition, due to the ever-evolving nature of social media, there are very few instruments that have been validated to assess social media usage. The bulk of instruments focus primarily on Facebook, due to its popularity.

Summary

The suicide rate for young African American females has increased over 180% in the past decade, the highest rate for any racial or ethnic group. Also, during that same period, social media use has increased with nearly 1/3 of the people on the planet subscribing to a social networking site. Although social media was initially created to connect people, hence the name social networking, social media sites have increasingly been used for more nefarious purposes, such as the spread of hateful, racist rhetoric. Social media initially was designed a safe space for users to vent their frustrations, the same sites have also become a source for negative mental health outcomes. The purpose of this study was to assess the effects of social media on ewssz1nh bn there was not a direct link found between social media use and depression.

However, mediation analysis identified a mediated pathway, through perceived racism. Further research is needed to explore social media, gender, and the relationship to additional mental health outcomes for the sake of program development and policy implementation.

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APPENDIX A

Hello all:

My name is Rosa Sutton. As a doctoral student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for an Ed.D in Community Care and Counseling Traumatology cognate. The purpose of my research is to examine the effects of social media use on depression in young African American females, and I am writing to invite eligible participants to join my study.

Participants must be between the ages of 18 -34, be African American, and identify as female. Participants, if willing, will be asked to complete an online survey, which should take approximately between 10-15 minutes to complete. Participation will be completely anonymous, and no personal, identifying information will be collected.

To participate, please go to the following link:

A consent document is provided on the first page of the survey. The consent document contains additional information about my research. You do not need to sign and return the consent document.

Sincerely,

Rosa L. Sutton
Doctoral Student

APPENDIX B

Consent

Title of the Project: Social Media Use and Depression in Young African American Women **Principal Investigator:** Rosa L. Sutton, Doctoral Student, Liberty University

Invitation to be part of a Research Study

You are invited to participate in a research study. To participate, you must be African American, between the ages of 18-34, and identify as female. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to participate in this research project.

What is the study about, and why is it being done?

The purpose of the study is to examine the effects of social media usage on depression in young African American females. This study is being undertaken to determine if there is a relationship between the amount of social media usage and levels of depression in young African American women.

What will happen if you take part in this study?

If you agree to be in this study, I would ask you to do the following things:

1. To complete a 15-20 minute survey.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include garnering a better understanding of social media use and its possible effects on underserved or underrepresented groups to provide additional or improved mental health services in these communities.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life."

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

• Participant responses will be anonymous.

• Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free not to answer any questions or withdraw at any time before submitting the survey.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Rosa L. Sutton. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at You may also contact the researcher's faculty sponsor, Dr. Richard Stratton, at

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, or email at

Your Consent

Before agreeing to be part of the research, please be sure that you understand the study and what your participation entails. You can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

APPENDIX C

Thank you for meeting the selection criteria and agreeing to participate!

You will be taking part in a study examining the effects of social media use among young African American women.

This study should take approximately 15-20 minutes to complete. All of your answers will be kept entirely confidential and will not be linked in any way to any information that personally identifies you. You may opt out of the survey at any time. There are no right or wrong answers. Please, be as honest as possible when answering. If you have any questions before participating, please feel free to contact the researcher at Let's begin the survey!

Instructions: Please read the group of statements and choose the one which best applies to you over the past **two weeks**, including today. If more than one applies to you, please select the higher value.

- 1.
- 1 I do not feel sad.
- 2 I feel sad
- I am sad all the time and I can't snap out of it.
- 4 I am so sad and unhappy that I can't stand it.
- 2.
- 1 I am not particularly discouraged about the future.
- 2 I feel discouraged about the future.
- 3 I feel I have nothing to look forward to.
- 4 I feel the future is hopeless and that things cannot improve.
- 3.
- 1 I do not feel like a failure.
- I feel I have failed more than the average person.
- 3 As I look back on my life, all I can see is a lot of failures.
- 4 I feel I am a complete failure as a person.
- 4.
- I get as much satisfaction out of things as I used to.
- 2 I don't enjoy things the way I used to.
- 3 I don't get real satisfaction out of anything anymore.
- 4 I am dissatisfied or bored with everything.

12.

5.		
	1	I don't feel particularly guilty
	2	I feel guilty a good part of the time
	3	I feel quite guilty most of the time.
	4	I feel guilty all of the time.
6.		
	1	I don't feel I am being punished.
	2	I feel I may be punished.
	3	I expect to be punished.
	4	I feel I am being punished.
7.		
	1	I don't feel disappointed in myself.
	2	I am disappointed in myself.
	3	I am disgusted with myself.
	4.	I hate myself.
8.		
	1	I don't feel I am any worse than anybody else.
	2	I am critical of myself for my weaknesses or mistakes.
	3	I blame myself all the time for my faults.
	4	I blame myself for everything bad that happens.
9.		
	1	I don't have any thoughts of killing myself.
	2	I have thoughts of killing myself, but I would not carry them out.
	3	I would like to kill myself.
	4	I would kill myself if I had the chance.
10.		
	1	I don't cry any more than usual.
	2	I cry more now than I used to.
	3	I cry all the time now.
	4	I used to be able to cry, but now I can't cry even though I want to.
11.		
	1	I am no more irritated by things than I ever was.
	2	I am slightly more irritated now than usual.
	3	I am quite annoyed or irritated a good deal of the time.
	4	I feel irritated all the time.

	1	I have not lost interest in other people.
	2	I am less interested in other people than I used to be.
	3	I have lost most of my interest in other people.
	4	I have lost all of my interest in other people.
13.		
	1	I make decisions about as well as I ever could.
	2	I put off making decisions more than I used to.
	3	I have greater difficulty in making decisions more than I used to.
	4	I can't make decisions at all anymore.
14.		
	1	I don't feel that I look any worse than I used to.
	2	I am worried that I am looking old or unattractive.
	3	I feel there are permanent changes in my appearance that make me look unattractive
	4	I believe that I look ugly.
15.		
	1	I can work about as well as before.
	2	It takes an extra effort to get started at doing something.
	3	I have to push myself very hard to do anything.
	4	I can't do any work at all.
16.		
	1	I can sleep as well as usual.
	2	I don't sleep as well as I used to.
	3	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
	4	I wake up several hours earlier than I used to and cannot get back to sleep.
17.		
	1	I don't get more tired than usual.
	2	I get tired more easily than I used to.
	3	I get tired from doing almost anything.
	4	I am too tired to do anything.
18.	1	
	1	My appetite is no worse than usual.
	2	My appetite is not as good as it used to be.
	3	My appetite is much worse now.
	4	I have no appetite at all anymore.

19.		
	1	I haven't lost much weight, if any, lately.
	2	I have lost more than five pounds.
	3	I have lost more than ten pounds.
	4	I have lost more than fifteen pounds.
20.		
	1	I am no more worried about my health than usual.
	2	I am worried about physical problems like aches, pains, upset stomach, or constipation.
	3	I am very worried about physical problems and it's hard to think of much else
	4	I am so worried about my physical problems that I cannot think of anything else.
21.		
	1	I have not noticed any recent change in my interest in sex.
	2	I am less interested in sex than I used to be.
	3	I have almost no interest in sex.
	4	I have lost interest in sex completely.

APPENDIX D

Permissions

Beck Depression Inventory

From: "HAS-SAT Shared Dist. and Licensing" <pas.Licensing@pearson.com>

Date: March 16, 2021 at 10:28:01 AM EDT

To: ROSALSUTTON@gmail.com

Subject: Re: BDI-II

Dear Ms Sutton,

Thank you for your email. If you only want to use an existing, commercially-available version of one the BDI-II instrument in your research project without further adaptation, translation, or changes to the instrument, no additional permission or license is required from Pearson as long as you (or other qualified purchaser) purchase and use in your research an appropriate quantity of original materials (record forms etc) . Such use is subject to Pearson's Terms of Sale and Use and permission to use is inherent in the user qualifications. No reproduction is permitted of Pearson's copyrighted materials.

https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Personality-%26-Biopsychosocial/Beck-Depression-Inventory-II/p/100000159.html

Regards,

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Harrell, S. P. (1994). The Racism and Life Experience Scale-Revised. Unpublished manuscript.

Facebook Intensity Scale

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Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12, 1143-1168.