#NOFILTER: EXAMINING THE RELATIONSHIP AMONG ONLINE PHOTO
MANIPULATION AND MENTAL HEALTH VARIABLES OF AFRICAN AMERICAN
WOMEN

A Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Philosophy
in Counseling Psychology

by

Amanda Long

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**Title:** #NoFilter: Examining the Relationship Among Online Photo Manipulation and Mental Health Variables of African American Women **Background:** The way in which media images are being presented to the public has transformed within the last 15 years as more individuals are gaining internet access and using online social networking sites as a primary tool to communicate societal expectations of beauty. Users also help maintain these expectations by posting personal images that reflect similar ideas. Photo-based activities such as posting "selfies" (photos one takes of oneself) or "usies" (photos of oneself that includes others) have shown a correlation with women endorsing greater thin ideal internalization, self-objectification, and drive for thinness. **Purpose:** There is minimal research that explores how engagement in specific online activities can help perpetuate beliefs about cultural standards of beauty. Current research only examines the impact of usage habits (i.e., duration/frequency) among samples of predominately white women. Considering the increasing popularity of social media, it is important to explore the relationship between exposure and engagement in specific social networking activities and body dissatisfaction among Black women. As a result of an absence of literature that examines the impact of specific entities or activities of social media on body image concerns, this study posed the following research question: What is the relationship among engagement in photo-related activities, including photo investment and photo manipulation, body dissatisfaction, appearance anxiety, appearance comparison, and skin color satisfaction among a sample of Black women? **Methods:** This study recruited 333 Black women between the ages of 18 and 34 years old that reported having an Instagram or Facebook account. Participants completed a self

reported survey, and four multiple regressions analyses were conducted with photo investment and photo manipulation as the predictor variables and Body Dissatisfaction, appearance anxiety, online physical appearance comparison, and skin color satisfaction as the criterion variables. **Results:** Photo investment and photo manipulation appeared to make unique and distinct contributions in the various domains of appearance related concerns among a sample of Black women. These findings support the notion that having more investment in the types of photographs that are posted along with modifying pictures prior to posting actually contributes to a cyclical process that helps to maintain dissatisfaction with one's body.

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**Chapter I**

**Introduction**

Although a person's physical appearance is determined by many factors, Western society has created a very rigid ideal of what is considered beautiful. Specifically, there is a pressure for women to attain the Western "thin ideal," in which attractiveness is determined by how slender and thin a woman can appear (Meier & Gray, 2014). In the United States (U.S.) and other Western societies, both traditional (e.g., television, magazine, newspapers, movies, etc.) and non-traditional (e.g., social networking sites, blogs, video streaming platforms, etc.) media outlets provide a platform that offers a reflection of socio-cultural beauty standards by promoting images that fit within these culturally-limited ideals of beauty (Monro & Huon, 2005). The pressure to conform to these ideals is thought to be a major contributing factor to the prevalence of body image dissatisfaction (Meier & Gray, 2014). Body image dissatisfaction can be referred to as the "unhappiness with one's overall appearance or a particular area of one's body" (Herbozo, 2004, p. 1), and is thought to result from an internal discrepancy that exists between personal and societal standards of appearance (Cohen & Blaszczynski, 2015). An endorsement of higher levels of body dissatisfaction is considered to reflect greater dissatisfaction and distress with one's body, with individuals falling at the extreme end of the spectrum having been found to exhibit eating disturbances and considerable impairment in social functioning (Herbozo, 2004, Thompson, Heinberg, Altabe, Tantleff-Dunn, 1999). Although there is overwhelming research that reflects a clear existing association between eating disordered populations and endorsement of body image

dissatisfaction, research has also indicated that body dissatisfaction is quite prevalent

among all women, and should be recognized as "normative discontent" (Herbozo, 2004).

**Black Women and Body Dissatisfaction**

Traditionally, Black women have been thought to have greater satisfaction with

their bodies and an overall more positive body image (Fujioka, Ryan, Agle, Legaspi, &

Toohey, 2009; Sanderson, Lupinski, & Moch, 2013) because they have been postulated

to hold a broader, more comprehensive concept of beauty, which in turn is connected to a

positive body image. In fact, studies have been conducted with African American

women in college and this research has in part, supported this idea that Black women

have a more positive body image than Caucasian women (Hesse-Biber, Howling, Leavy,

& Lovejoy, 2004; Sanderson et al., 2013). However, a shortcoming of this work has been

that while Black women may be less susceptible to possessing body image disturbances,

this does not mean that they are completely exempt from internalizing societal messages

regarding their appearance (Kelch-Oliver, & Ancis, 2011). Recently, there has been an

emergence of conflicting findings in which studies have found little to no significant

differences in body image attitudes between ethnic groups within the U.S., suggesting

that not all Black women are insusceptible to body image disturbance by sole virtue of

their race (Capodilupo & Kim, 2014). In fact, Black women may be impacted more

significantly due to a larger discrepancy between typical Afrocentric features and the

Eurocentric features (i.e., hair texture, skin color, lip size) used to determine

attractiveness in the mainstream culture (Harris, 1994; Kelch-Oliver & Ancis, 2011). As

such, it is suggested that by being a woman and subjected to sociocultural messages that

emphasize women's beauty and appearance above other dimensions of self, Black

women are also subjected to and impacted by these messages of beauty norms. As such, it is imperative to take a closer look into the underlying factors that are influential in how women see themselves and respond to daily messages about beauty, as well as how these messages are being received, transmitted and maintained.

**Mass Media and Photo Sharing**

Mass media has always played a significant role in communicating cultural stereotypes that convey specific standards of beauty for women (Perloff, 2014). Reports from the American Psychological Association and scholars have argued that exposure to media images that emphasize thin ideals serve as an essential contributor to body dissatisfaction, acceptance of thin body ideals, and eating disorder symptomatology in women (Ferguson et al., 2011). Although studies have focused heavily on mass media outlets, such as magazines and television ads, statistics have shown that this is no longer the primary media that attracts young adult women (Perloff, 2014). The way in which media images are being presented to the public has transformed within the last 15 years as more individuals are gaining internet access and using online social networking sites and news outlets as primary sources of information.

Social networking sites (SNS) or social media can be defined as "… web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system" (Kalnes, 2013, p. 15). Examples of social networking platforms include, Instagram, Facebook, Twitter, Pinterest, LinkedIn, and, Snapchat (Pew, 2015).[1] The average gap

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[1] It should be noted that the term social networking sites and social media will be used interchangeably throughout this proposal to reflect its similar usage in academic and lay literature.

between the proportion of men and women who use social networking sites is 8%,

suggesting that women are more likely to use SNS across all social media platforms.

Currently, more than 80% of 18-29 year olds in the United States use wireless Internet,

and 90% of those individuals engage in social media usage (Perloff, 2014; Pew, 2016).

Racial and ethnic groups have similar usage figures, with 69% of whites, 74% of

Hispanics, and 66% of African-Americans engaging in social media usage.

  While perusing these sites, social media consumers are being inundated with

thousands of images on a daily basis that offer insight into societal expectations of beauty

while also maintaining these expectations by posting images that reflect similar ideas

(Lee, Lee, Choi, Kim & Han, 2014).  As of late, researchers have attempted to examine

social networking usage more in-depth by investigating the relationship between

participating in specific social media activities and how women recognize "beauty" and

reflect these standards online.  Specifically, engaging in picture posting is a common

practice online, with at least 67% of adults reporting posting photos of themselves (Pew,

2012).  Photo-based activities such as posting "selfies" (photos one takes of oneself) or

"usies" (photos that include oneself with others) have shown a correlation with greater

thin ideal internalization, self-objectification, and drive for thinness (Meier & Gray,

2013). Additionally, social media sites such as Instagram and SnapChat, as well as, photo

editing programs allow users to manipulate photo elements (e.g., brightness, contrast, or

photo saturation) as well as altering people's features prior to sharing, typically in an

attempt to hide any blemishes or "unattractive flaws" (McLean, Paxton, Wertheim, &

Masters, 2015). This *photo manipulation* is thought to be a direct reflection of an

individual's level of photo investment (McLean et al., 2015).  *Photo investment* reflects a

person's concerns about photo quality, how a photo portrays an individual, and reflects the overall effort associated with choosing self-photos before sharing (McLean et al., 2015). McLean and colleagues examined photo investment and photo manipulation among adolescent girls and revealed that girls who manipulated photos of themselves more frequently prior to posting and reported more investment in their photos, reported greater body-related and eating concerns ((McLean et al., 2015). This is concerning, primarily because communication has been a key factor in the formation and maintenance of body image perceptions, and online images that encourages and reinforces a thinness ideal may be impacting women's attitudes towards their body while also influencing the types of photos that are being shared (Lee et al., 2014). Acknowledging the way in which self-objectification serves as an underlying framework influencing if and how certain pictures will be posted is imperative in understanding beliefs and consequential behaviors related to photo investment and manipulation.

**Self-Objectification Theory**

Self-Objectification Theory serves as a working framework to help conceptualize how engagement in media may contribute to body dissatisfaction and other detrimental mental health concerns. Fredrickson and Roberts (1997) coined the term "self-objectification" which can be described as internalizing societal emphasis on attending to outward appearance rather than inner qualities (Choma, Visser, Pozzebon, Bogaert, Busseri, & Sadava, 2010). Frederickson and Roberts theorized that due to women in Western cultures being treated as objects and used by others, their bodies become associated with who they are as people (Lindner, Tantleff-Dunn, & Jentsch, 2012). This treatment leads to women engaging in self-objectification by adopting societal ideology

that they are viewed as collections of body parts predominately used for consumption by others (Lindner et al., 2012). Internalization of the concept that their worth is determined by their outward appearance women can become observers of their own bodies rather than simply being aware that they are being observed (Lindner et al., 2012). The emphasis that women place on the importance of their bodies is a key element that impacts how individuals respond to online media images, including photos posted on SNS that consciously or inadvertently reinforce stereotypical beauty standards. For instance, women who self-objectify may be more critical of how others perceive their outward appearance and more reluctant to post pictures without engaging in manipulation in order to reflect desired physical characteristics.

Photo investment and manipulation could be conceptualized as alternative models of appearance-focused behaviors that are similar to body surveillance, appearance anxiety, and appearance comparison, all serving as examples of the extent to which women actively think about how their body must look to others (de Vries & Kuhne, 2015; Lindner et al., 2012; McKinley & Hyde, 1996). Ultimately, the effects of exposure to and potential internalization of beauty standards via online photographs are complex, likely influencing both behavior and the development of mental health issues. The current study examines the relationship among photo investment and manipulation, and the undesirable outcome factors such as, appearance anxiety, body dissatisfaction, appearance comparison, that are influenced by how women engage in social media activities.

**Appearance Anxiety**

The tendency to value appearance over and above ability or other attributes can foster a host of mental health problems, including appearance anxiety (Monro & Huon, 2004; Fredrickson & Roberts, 1997). *Appearance anxiety* can be described as "fear of situations in which one's overall appearance may be evaluated by others" (Hart, Flora, Palyo, Fresco, Holle, & Heimberg, 2000, p. 49). Focus on appearance is heightened on social networking sites due to the overwhelming emphasis that is placed on the outward appearance of users (Monro & Huon, 2004). This environment fosters a condition in which the body is subjected to scrutiny, potentially increasing the anxiety users have around their appearance. Since it is unlikely that all women are affected by cultural stereotypes of beauty to the same degree, one may assume that women who are impacted the most have a stronger concern about how they are portrayed in photos, while also exerting more effort in altering their appearance before uploading photos of themselves. It should be noted that appearance anxiety, although correlated with body dissatisfaction, differs from body image concerns because it focuses on fears of being evaluated by others on one's overall appearance, rather than a general dissatisfaction in one's self-image because of body dissatisfactions (Monro & Huon, 2004). While one may have body dissatisfaction, appearance anxiety can be described as extensive rumination over perceived body imperfections especially in conditions where the body is subjected to scrutiny. This may provide a framework when conceptualizing the relationship between photo manipulation and investment and appearance anxiety, such that individuals who engage in photo-related activities manifest anxiety related to their overall appearance. Furthermore, due to appearance anxiety potentially increasing an individual's concern about her overall appearance online, the tendency to actively compare their appearance to

the appearance of others may be impacted in an attempt to control said anxiety (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015).

**Appearance Comparison**. Considering that upwards of 55 million photographs are uploaded to Instagram per day, the internet provides a platform for women to frequently engage in appearance-related comparisons, potentially contributing body image concerns among women (Fardouly et al., 2015; Instagram, 2013; Mayer-Schonberger & Cukier, 2013). *Appearance comparison* can be described as comparing personal physical attributes to the physical attributes of others. The act of appearance comparison serves as another way in which peers are influential on how women view their bodies, since studies have suggested that social comparisons are made with peers rather than media figures (Ferguson et al., 2011; Wheeler & Miyake, 1992). Research examining the impact of appearance comparison found that comparisons to peers and models led to different outcomes in regard to women's body image concerns (Fardouly et al., 2015). Specifically, exposure to peers who possess characteristics of ideal standards of beauty has been found to increase women's body dissatisfaction (Fardouly et al., 2015).

As the usage of social media increases, it is important to examine the impact of specific functions of social networking platforms. Unlike traditional media sources, social media provides its users with interactive communities that allow members to contribute content that is reflective of their specific worldview. Recognizing that an increasing amount of communication happens though the relaying of images, the internet provides a hub for users to identify what is and is not acceptable as it relates to beauty standards. Research has proven that internalization of unrealistic beauty expectations can

foster a host of mental health concerns, while instigating women to achieve these standards by practicing unhealthy behaviors. Recognizing how mental health concerns impact specific social media activities can be helpful in highlighting the ways in which maladaptive thoughts or behaviors can be reflective in online behavior.

**Current Study**

Recent research has revealed that SNS also contribute to the promotion of unrealistic beauty ideals along with traditional media outlets. Specifically, it seems that social media usage may have a stronger association with body dissatisfaction than other Internet related activities due to its interactivity and ability to manipulate photographs (McLean, Paxton, Wertheim, & Masters, 2015; Tiggemann, 2014). Posting photos is a commonly practiced interactive tool available on several social media sites, with more than 90% of users posting pictures (McLean et al., 2015). Particularly, women have found to be exposed to greater peer scrutiny of appearance and competition through posting of self-images, which has been shown to increase body dissatisfaction and body related concerns (McLean et al., 2015). Due to its expanding usage, a more in-depth investigation of specific social media activities was warranted in order to clarify the relationship between actively engaging in social networking and negative mental health outcomes.

It is evident that a relationship exists between social media usage and body dissatisfaction, however, there is minimal research that explores how engagement in specific online activities can help perpetuate cultural standards of beauty while directly impacting how women perceive their physical appearance. Although research has revealed that Black women may reject the standards of thinness accepted by white

women, other physical appearance standards exist that create pressure for Black women to conform to Eurocentric beauty standards (Capodilupo & Kim, 2014). Considering the implications of the aforementioned studies, it is important to explore the relationship between overall exposure to SNS and engagement in specific social networking activities and body dissatisfaction among Black women in order to fill in gaps of current research that only examines the impact of usage habits (i.e. duration or frequency) among samples of predominately white women.

**Purpose and Hypothesis**

Uncovering the effect of SNS usage on body image perception, understanding which processes underlie this relationship, while examining the harmful effects that are a related to specific photo-related activities, is crucial to the future prevention of negative outcomes of social networking on well-being. As a result of an absence of literature that examines the impact of specific social media activities on body image concerns, this study highlighted the relationship among photo investment and manipulation and body dissatisfaction, appearance anxiety, skin color satisfaction and appearance comparison.

Specifically, the following research questions are posed:

1. What is the relationship among engagement in photo-related activities, including photo investment and photo manipulation, body dissatisfaction, appearance anxiety, appearance comparison, and skin color satisfaction?

Related to that question, the following hypotheses were made:

1. Women who more frequently engage in social media photo activities, selfie-taking and posting, will report greater body and skin color dissatisfaction, appearance anxiety, and engage in more appearance comparison.

2. Among women who post self-photos on social media, those who report greater photo investment and photo manipulation before posting will report greater levels of body and skin color dissatisfaction, appearance anxiety, and engage in more appearance comparison, than those who do not endorse high level of photo investment/manipulation.

**Chapter II**

**Literature Review**

During the past two decades, there has been a surge in research examining body image which has fueled investigation of body dissatisfaction among women. Findings from this growing literature has demonstrated that body dissatisfaction is a significant problem in Western societies and that women are more dissatisfied with their body size and shape than their male counterparts. Literature has demonstrated that body image concerns develop relatively early, with children as young as seven years old reporting dissatisfaction with their bodies (Grabe, Hyde, & Ward, 2008). As images that demonstrate the thin ideal dominate mainstream media, exposure to this media content leads viewers to begin accepting media portrays as representation of reality. Constant exposure to these "ideal" body types lead women to see these images as normative, expected, and essential to attractiveness (Grabe et al., 2008). Researchers have become increasingly more interested in examining body dissatisfaction due to its correlation with adverse psychological consequences such as depression and anxiety (Monro & Huon, 2005).

This chapter will utilize the self-objectification theory as a framework to explore the multifaceted process that underlines the adoption and maintenance of body dissatisfaction. First, components of objectification theory will be introduced, followed by its influence on the internalization of the thin ideal, which ultimately leads to body dissatisfaction among some women. Next, body dissatisfaction research will be explored, highlighting relevant literature that examines this construct among Black women. The overall influence of traditional and social media on the attainment of body dissatisfaction

will be stressed throughout this literature review, especially while examining the relationship between said media and variables that contribute to body dissatisfaction, such as appearance anxiety and appearance comparison.  Lastly, photo manipulation and investment will be explored in order to capture the different methods women are utilizing to in an attempt to reduce the ambivalence that they posses about their how their bodies compare to what they perceive is the ideal body image.

**Self- Objectification**

In Western societies, women are often the victim of societal and interpersonal experiences in which their bodies are primarily used as objects that exist for the pleasure, critique or admiration of others (Tiggemann & Williams, 2012).  Objectification theory has been a construct that has arisen to explain the mental health consequences that women face in a culture that sexually objectifies the female body (Fredrickson & Roberts, 1997; Tiggemann & Williams, 2012). Both traditional and newer forms of media overwhelmingly emphasize the appearance of women, while ignoring internal characteristics such as personality traits and intelligence. Similar to magazines and television, SNS also project unrealistic body images aimed at representing "ideal" female beauty or body standards (Mabe, Forney, & Keel, 2014). Sites such as Facebook and Instagram, provide its users with the ability to view images that reflect these unrealistic beauty standards through actively browsing images and viewing the amount of praise and admiration received through "likes," "comments," or reposts. Fredrickson and Roberts (1997), theorized that women are gradually socialized into adopting the observer's perspective after internalization of consistent experiences that reinforce these basic principles of objectification. Specifically, women who continuously see other bodies

being objectified in the media learn the importance of the body, which could encourage individuals to "self-objectify" by viewing themselves as objects to be looked at by others and evaluated based on their outward appearance (Tiggemann & Williams, 2012).

Self-objectification is demonstrated through habitual monitoring of the body's physical appearance, also known as body surveillance (Moradi & Huang). Consistent monitoring of the body's outward appearance, while occasionally ruminating over how other people view their physical attributes, inadvertently increases anxiety, promotes eating disorder symptoms, self-consciousness and depression (Moradi, 2010). In fact, exposure to objectifying media either in magazines or television media images was positively correlated with appearance anxiety in samples of predominantly White, undergraduate, men and women (Aubrey, 2006; Moradi & Huang, 2008). This relationship was mediated by body surveillance, such that undergraduate students that reported greater levels of body monitoring also reported higher levels of appearance anxiety. This mediated relationship reinforces the idea that individuals tend to monitor their physical appearance as a result of being exposed to objectifying media. Additionally, anxiety may occur as a result of appearance related pressures that develop when women feel that they do not reflect the standards portrayed in the media (Moradi & Huang, 2008).

Taking the observer's perspective about one's body leads to several mental health outcomes such as body dissatisfaction. However, there has been minimal research that explains the process that underlies this behavior (Lindner et al., 2012). One explanation introduced suggests that social comparison plays a role in maintaining this "circle of objectification," in which women self-objectify while also unconsciously objectifying

another woman (Lindner et al., 2012; Strelan & Hargreaves, 2005). Results from a study examining predominately white, undergraduate women provided additional evidence of a relationship between self-objectification and social comparison, such that frequently practicing either may cause women to feel worse about their bodies and report greater disordered eating practices and body dissatisfaction. (Lindner et al., 2012).

**Body Dissatisfaction**

Body image is typically conceptualized as the way in which an individual perceives his or her body, ultimately serving as a part of a person's identity or sense of self (Dittmar, 2009). At a young age, women are socialized to believe that their worth lies within their beauty, while also being inundated with messages suggesting that looks are their most powerful asset (Groesz et al., 2002). In addition to gender socialization practices, on any given day, women are exposed to unrealistic images likely affecting what people perceive to be the ideal for beauty (Lee et al., 2014). A meta-analysis revealed that three determinants; internalization of a thin ideal, awareness of a thin ideal, and perceived pressures to be thin, all had associations with body image (Cafri, Yamamiya, Brannick, & Thompson, 2005). The association between internalization of a thin ideal and body image was significantly larger in comparison to the other two variables, suggesting that although awareness of the "ideal" is harmful to a person's body image, the degree to which individuals come to internalize these pressures, beliefs, values, or ideals related to their own appearance is more harmful and may ultimately lead to body dissatisfaction (Dittmar, 2009).

There is research that supports the claim that Black women are more accepting of a larger body size, and specifically are likely to prefer larger specific body parts such as

thighs, hips, and buttocks (Poran, 2006).  Additionally, a qualitative study examining

Black women's body image reported that participants identified hair, skin-tone, and

attitude or self-confidence as important factors that influence body image (Capodilupo &

Kim, 2014). When compared to White women, Black women endorsed fewer body

images disturbances, such as a drive for thinness and body dissatisfaction (Schooler,

Ward, Merriwether, & Caruthers, 2004).  However, Frisby (2004) found that Black

women's self-esteem decreased when they compared themselves to Black models.  Like

most women, however, Black women will compare themselves to images in the

mainstream media, and may unfortunately fall short of possessing the "ideal" physical

attributes which may lead to body dissatisfaction (Schooler et al., 2004).

Body dissatisfaction among women has caused tremendous concern among

researchers for several decades. Studies confirm that dissatisfaction with one's body is a

strong precursor of negative self-perception, negative emotional states, and unhealthy

body-related behaviors (Grabe et al., 2008).  Approximately 40% to 50% of women in

Western societies express some level of body dissatisfaction (Ferguson, Winegard, &

Winegard, 2011).  Possessing a negative body image is prevalent in the United States

with about 50% of American women, regardless of race expressing a negative evaluation

of their appearance and concern about their weight (Lee et al., 2014). Women are more

likely than men to describe themselves as fat, frequently weigh themselves, and diet often

(Furnham, Badmin, & Sneade, 2002). Women have a higher tendency to become critical

of themselves when they do not meet self-imposed standards of thinness, often feeling as

if they are overweight or out of shape (Furnham et al., 2002). A study examining the

gender differences related to body dissatisfaction revealed that both adolescent boys and

girls show similar degrees of body dissatisfaction, but girls possessed a stronger desire to be thinner, whereas boys wanted to increase their weight (Furnham et al., 2002).  Among these participants, girls scored higher on measures that examined their behaviors and attitudes associated with disordered eating, such that more girls reported that they exercise for weight control, mood, health, and tone reasons which directly correlated with their weight concerns (Furnham et al., 2002). Among the same sample of adolescent girls, body image and weight was correlated with self-esteem, such that body image dissatisfaction was more closely related to low self-esteem (Furnham et al., 2002).

### Body Dissatisfaction and Black Women

Although women share a multitude of social experiences, scholars have acknowledged that gender and race are not mutually exclusive. Historically, psychological research highlighting beauty and body standards have been centered largely around the experiences of women and adolescents of European descent. Although body dissatisfaction is prevalent in both Black and White communities, studies show that African American women reported lower levels of body dissatisfaction, embrace a more positive opinion of larger body sizes, and have less concerns about dieting, weight fluctuations, and fear of fatness (Awad, Norwood, Taylor, Martinez, McClain, Jones, Holman, Chapman-Hilliard, 2014). Falconer and Neville's (2000) examined general cultural factors associated with body image perceptions of African American women college students and found that women with higher BMI scores were less satisfied with their overall appearance, but held greater satisfaction with specific aspects of their bodies.  Satisfaction with specific body areas was only unique to the African American participants, whereas white women reported overall dissatisfaction

with all areas of their bodies (Falconer & Neville, 2000). The results of their findings may be attributed to African culture being more accepting of women who poses a larger than ideal body type. Specifically, African American culture has consistently been more accepting of women with wider hips and a larger posterior, so women who may not be thin may still be able to maintain satisfaction with distinct areas of their bodies (Falconer & Neville, 2000).

Additionally, African American women may expect to have their appearance evaluated in terms of skin tone, hair texture, and facial features in addition to body size and shape (Watson, Robinson, Dispenza, & Nazari, 2010). Consistent with research conducted with White women, experiences of objectification increase African American women's tendency to monitor their own body shape and size, while also predicting body shame (Buchanan, Fiischer, Tokar, & Yonder, 2008). Higher levels of skin tone specific monitoring were also associated with general body shame (Buchanan et al., 2008). Skin-tone monitoring and skin-tone dissatisfaction as well as body shape and size monitoring and dissatisfaction overlapped by only 7% (Buchanan et al., 2008). This small percentage indicates that both skin color and body shape and size are unique constructs that help provide a richer understanding of the body issues of African American women (Buchanan et al., 2008). More research is needed to gain a better understanding of how Black women navigate exposure to different types of objectifying media online, in addition to taking a closer look at the variables that are impacted by this exposure.

**Mass Media and Body Dissatisfaction**

Researchers have utilized both experimental and correlational studies to examine the connection between exposure to traditional forms of media, such as magazines and

television programming, and the body image concerns of women (Grabe et al., 2008).  In concordance with traditional experimental designs, participants are typically randomly assigned to conditions in which their response to exposure to thin media models is measured (Grabe et al., 2008). Using this method, researchers have found that women who were exposed to the thin-ideal body type magazine ads reported significantly greater body dissatisfaction than those who viewed neutral ads (Halliwell & Dittmar, 2004). Similar findings were found using television commercials that featured the thin-ideal image, such that the body dissatisfaction and eating disorder symptomatology increased after exposure (Hargreaves & Tiggemann, 2004).

Correlational studies that investigate the relationship between women's media consumption and body dissatisfaction yielded similar results.  For instance, girls and women who indicated more frequent exposure to television programs that featured the thin-ideal body type reported higher levels of body dissatisfaction and eating disorder symptomology (Bizzell & Zhou, 2004; Grabe et al., 2008).  There have been similar relations between generalized media usage or music television viewing and body dissatisfaction among adolescents, such that exposure directly correlates with levels of body dissatisfaction (Grabe, et al., 2008; Hofschire & Greenberg, 2001).

**Traditional Media vs. Social Media**

As of September 2014, Facebook remains one of the most popular SNS, with over 600 million active users worldwide and estimated 155 million users in the United States alone (Duggan, 2015).  Overall, Facebook is the leader among the SNS claiming the largest audience, most minutes spent on a social media site, and the most mobile usage time (Nielsen, 2012).  Facebook consists of user made "profiles" that allows

individuals to add other users as "friends," send messages, post status updates, share videos and pictures and use various applications. Facebook mainly consists of image content, serving as an online photo album site where individuals can post pictures of themselves or other people, places or things (Meier & Gray, 2014). In addition to posting pictures, Facebook users can also interact with one another through usage of the "like" and "comment" feature. For instance, when a user uploads a picture or any image, their "Facebook friends" have the option of "liking" the image or leaving a comment under the picture. Typically, liking a picture indicates approval from the "friend," while also suggesting that they find the picture appealing.

Similarly, Instagram serves as another SNS that places an emphasis on the uploading and sharing of personal pictures. Currently the platform has over 300 million users with over 70 million photos uploaded daily (Instagram, 2014). In comparison to Facebook, Instagram users also have individual profiles on which they upload pictures or videos taken from their mobile device. A unique feature of Instagram allows users the ability to alter their photos by using filters, which consist of changing the lighting or adjusting the color, and blurring the effects in order to enhance or change the image. An individual's "followers" are also given an opportunity to "like" and post comments under a photograph. Instagram has also incorporated a new feature in which users can upload a story, consisting of a video of themselves that automatically deletes after 24 hours.

There are a number of specific features of social media that distinguishes it from traditional mass media, possibly contributing to the unique effects that it has on body image. A key feature that distinguishes these two forms of media is interactivity (Perloff, 2014; Eveland, 2003). Specifically, users are given an opportunity to feature themselves

on various platforms in a multitude of ways. This differs from traditional media by allowing users to produce and create their own messages and upload salient images of themselves or interests, as opposed to just viewing images of celebrities or models on televisions and in magazines (Fardouly & Vartanian, 2016). This interactivity creates an outlet in which users are both sources and receivers of media images, uploading their own images while disseminating the images of others. In comparison, individuals who are exposed to media via traditional sources are seen more so as consumers rather than participants (Fardouly et al., 2015). Often times they are being shown ideal body standards through magazine or television ads, and do not have the ability to see how others are judging these images (i.e. likes, reposts). Additionally, traditional sources of media flood consumers with images of celebrities and models, reducing a consumers' exposure to more realistic and attainable body image goals of potential peers.

In contrast, SNS also serve as more personal outlets, resulting in individuals feeling pressured to present an idealized version of themselves on social media (Fardouly & Vartanian, 2016). Individuals may upload only their most attractive images, edit and enhance photographs to fit their idealized version, or remove pictures that they believe are unattractive (Fardouly & Vartanian, 2016). Users may seek validation about their photos from other members through "likes" or "comments" which provides an example of how interaction with one's peers can influence a user's personal self-concept. Research suggests that online appearance comparison to peers may be influential on body image, supporting the notion that exchanges with peers can impact how users feel about their appearance (Fardouly & Vartanian, 2016).

The differences between social and conventional media have important implications on the impact of social media effects on body image concerns. People have the ability to bond with one another through technology, potentially leading to a feeling of presence and interpersonal connectedness.  These feelings have the potential to psychologically influence individuals, perhaps encouraging a change in beliefs or attitudinal change about oneself (Perloff, 2014). Since women can be more selective with the content that they view online, it is important to consider the impact of peers' role in communicating media messages about body image. Due to the accessibility of social media, appearance-related pressures can stem from different sources, including one's family and peers, in addition to lay media (Fardouly & Vartanian, 2015).  For example, SNS are filled with pictures of an individual, her online friends, and a multitude of other thin-idealized images that are available to be viewed 24/7 and offer a distinct representation of what is considered acceptable and meeting society's standards of beauty. In comparison to traditional forms of media, women have an opportunity to browse the internet for hours at a time while being exposed to hundreds of images that all reflect an "ideal" beauty standard.  Often times, these pictures are of other women that are regarded as peers. Research shows that individuals endorse more body dissatisfaction when comparing their physical attributes to images of their peers, because the appearance of their peers may be seen as more personally attainable due to a similar lifestyle and available resources that peers may share (Fardouly et al., 2015).

When comparing the impact of Facebook usage and magazine exposure on the body dissatisfaction among women, women who tended to make more appearance comparisons reported a greater desire to alter characteristics of their face, skin and hair

after Facebook usage (Fardouly et al., 2015). When examining the impact of viewing idealized images of attractive women on social media among a sample of White adolescent young women, research found that young women who were exposed to selfies of women wearing makeup were reportedly more motivated to change aspects of their face, hair, and skin (Fardouly & Rapee, 2019). One explanation is that pictures on Facebook are typically portraits, thus providing more opportunity for women to be exposed to pictures that focus solely on features from the neck up.  For example, exposure to a fashion magazine caused women to have more shape and weight concerns in comparison to Facebook exposure (Fardouly et al., 2015).  Magazine and television ads typically depict images that display the entire body of models and celebrities, as such it is more likely for women to endorse dissatisfaction with their weight and shape when viewing these media sources. Furthermore, 24-hour access allows for more opportunities for social comparison and dysfunctional surveillance of personal pictures of disliked body parts than were ever available for conventional mass media.

Facebook or Instagram accounts holders were chosen, in part due to the emphasis that both sites have on posting and viewing photos as well as the interactivity that individuals can engage in on both sites. Additionally, participants with both accounts have the option of linking their Facebook and Instagram accounts in order to share the same image on both platforms. Both Facebook and Instagram allow users to communicate directly with friends or family members by receiving feedback or comments about posted pictures. Due to easy accessibility and interactivity, social networking users have more opportunity to engage in dysfunctional surveillance of the images posted online, thusly increasing their vulnerability to internalizing messages

about body ideals (Perloff, 2014). Due to the accessibility of SNS and likelihood that young women are engaging in these sites, and apparent lack of literature that highlight the experiences of black women, the relationship between social media and body dissatisfaction should be explored.

**Social Media and Body Dissatisfaction**

Research has revealed that young adults spend an average of 100 minutes a day on Facebook interacting with peers primarily by posting and viewing photos (Mabe, Forney, & Keel, 2014). A study examining the relationship between Internet exposure and body image concern in adolescent girls between the ages of 13 to 15 years old revealed there was a relationship between having a Facebook account and body dissatisfaction (Tiggemann & Slater, 2013). Specifically, Facebook users scored significantly higher on all indicators of body image concern than their non-user peers (Tiggemann & Slater, 2013). Among those with a Facebook account, the amount of time spent on the site and the number of friends were correlated with higher levels of internalization of the thin ideal, body surveillance, and drive for thinness. (Tiggemann & Slater, 2013). Authors suggested that those who have Facebook profiles may endorse higher body image concerns because they are exposed to more idealized images and may come into contact with individuals that reinforce stereotypical beliefs.

Although helpful to establish a relationship, studies that measure the link between time and body dissatisfaction do not account for the impact of engagement in specific features offered on Facebook. For instance, users may vary on the types of activities that they participate in while on Facebook such as posting or commenting on pictures, updating a status, or messaging other users (Meier & Gray, 2014). Meier and Gray,

aimed to extend the research of Tiggemann and Slater (2013) by examining the specific features of Facebook that are associated with body image disturbances in American girls ages 12 to 18 years old. Specifically, Facebook appearance exposure served as the predictor variable and was measured by user activity dedicated to Facebook photos (i.e., views of friend's photos and photos of themselves) (Meier & Gray, 2014). When controlling for BMI, Facebook appearance exposure was positively correlated with internalization of the thin ideal, self-objectification, and drive for thinness, and negatively correlated with weight satisfaction (Meier & Gray, 2014). Meier & Gray (2014) also found contradicting results that suggested that higher overall Facebook usage did not correlate with higher body image disturbance. This may be in part due to a difference in popularity of Facebook in the United States in comparison to Australia, or the time lapse in which the data was collected for both studies. Although contradictory, these results are consistent with traditional media effects research which suggested that exposure to specific TV and magazine categories predicted body dissatisfaction when overall media consumption did not (Tiggemann, 2005). Appearance-related Facebook exposure was also positively correlated with self-objectification, or the act of taking an outsider's perspective on the physical self (Aubrey, 2006; Meier & Gray, 2014). Publically sharing personal photos is a prime example of taking an outside perspective on the physical self, while "likes" and "comments" explicitly operate as the outsider's perspective. Posting pictures and commenting or liking other pictures is reflective of the two-step process that encompasses objectification theory which involve, objectify other women in the media and adopting the outsider's perspective of one's physical self (Aubrey, 2006). Facebook

can intensify the objectifying process by allowing users to comment on the photographs of others while also receive instantaneous feedback about the photograph they post.

As indicated, body dissatisfaction and image related concerns may stem from participation in specific photo-related activities on SNS. Most recently, McLean, Paxton, Wertheim, & Masters (2015) examined this assumption by examining social media activities related to taking "selfies", photo investment, and photo altering, in relation to the development of body dissatisfaction among 101 13-year-old adolescent girls. Among this sample, 73.3% were categorized as regular self-photo sharers (McClean et al., 2015). Analysis revealed that self-photo sharers had significantly higher mean score for body dissatisfaction than non-sharers (McClean et al., 2015). "Selfie" photo sharers also attained high scores for self-photo investment and self-photo manipulation, which were associated with high scores for body-related and eating concerns (McClean et al., 2015).

These findings support the notion that the relationship between social networking and body dissatisfaction is influenced by passive or active habits of the users. Studies showed that merely being exposed to Facebook was correlated with body dissatisfaction, as well as engaging in specific activities such as receiving likes and commenting on pictures (Meier & Gray, 2014; Tiggemann, 2005;). In addition to the habits of the user, personal vulnerability factors may also be influential in whether or not users are actively manipulating or posting photos. For instance, young girls with high levels of body-related and eating concerns might engage in social media activities that are appearance focused such as altering photographs in efforts to present an appearance that reflect culturally influenced body image ideas (McClean et al., 2015). Both conceptualizations are consistent with objectification theory, such that engagement in social media may be

sought by individuals that have internalized beliefs that the body is meant for the consumption of others (Lindner et al., 2012).

Mabe and colleagues (2014) found similar results in an experimental design intended to examine whether Facebook use causes temporal changes in anxiety and weight and shape concerns. 84 female college students were assigned to either a control group in which they engaged in a neutral online site, or an experimental group in which they were instructed to log into their Facebook account and spend 20 minutes on the site. After 20 minutes of Internet usage, participants were asked to complete a number of measurements including the Eating Attitude Test, which assessed disordered eating attitudes and behaviors (Mabe et al., 2014).

Results reveled that participants with greater disordered eating endorsed greater importance of receiving comments on their status and photos, and greater importance of receiving "likes" on their status (Mabe et al., 2014).  Similarly, those with greater eating pathology reported untagging photos of themselves more often, and reported comparing their photo to their female friend's photos more often (Mabe et al., 2014).  Additionally, participants in the control group demonstrated a greater decline in weight/shape preoccupation than participants who spent 20 minutes on Facebook, suggesting that Facebook use maintains a preoccupation with weight and shape compared to the internet control condition (Mabe et al., 2014). Participants in the control condition endorsed a significant decrease in anxiety while participants in the experimental condition endorsed a nonsignificant increase in anxiety (Mabe et al., 2014). It is particularly concerning that these effects could be established after only 20 minute of social media engagement, which raises curiosity of the impact that site usage may have if Facebook is visited

throughout the day. These results reinforce the notions that the way in which women use Facebook contributes to the maintenance of weight, shape, and anxiety concerns. The literature lacks information that shows a correlation between specific social media activities and body dissatisfaction among Black women, as such it is important to consider the similarities of usage statistics when generalizing these findings across races.

**Appearance Anxiety and Body Dissatisfaction**

Results have implied that women's responses to thin ideal images cannot be explained simplistically (Perloff, 2014). Mere exposure to thin ideal media images will not always guarantee that women internalize thin ideal beauty standards. There are several contributing factors that are influential in how women interpret messages about beauty standards and personally maintain these standards over the course of their lives. It is unlikely that all young women are affected by idealized images to the same degree, such that women whose attention is focused on appearance are more likely to be vulnerable (Monro & Huon, 2005). One theory suggests that women who self-objectify are more likely to see themselves from the point of view of an outsider and regard their body as an object to be gazed by others, while valuing their appearance over any of their other attributes (Fredrickson & Roberts, 1997; Monro & Huon, 2005). This extreme focus on appearance is believed to result in increased body shame and appearance anxiety, especially in situations in which the body may be subjected to more scrutiny that usual (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Monro & Huon, 2005).

Historically, appearance anxiety has been associated as one of the five domains of social anxiety (Levinson & Rodebaugh, 2012). However, Levinson & Rodebaugh (2012), examined appearance anxiety as a separate domain highlighting its relationship

with indicators of disordered eating (i.e., body dissatisfaction, bulimia, drive for thinness, weight concerns, eating concern, shape concern, and restraint).  Results revealed that appearance anxiety significantly predicted disordered eating over and above social anxiety (Levinson & Rodebaugh, 2012).  Furthermore, a follow up regression analysis revealed social anxiety was the only significant predictor of body dissatisfaction and bulimia (Levinson & Rodebaugh, 2012).  Additionally, Levinson and Rodebaugh found that appearance anxiety and a fear of negative evaluation mediated the relationship between social anxiety symptoms and disordered eating (2012).  These results indicate that appearance anxiety may cause individuals to become concerned about their overall appearance, and seek out methods to alter their appearance to avoid experiencing anxiety (Levinson & Rodebaugh, 2012).  Conceptualizing these results from an objectification lens suggests that individuals with appearance anxiety may engage in body surveillance related activities such as photo altering in order to minimize anxiousness around uploading a picture.

Monro and Huon (2005) designed a study to determine the effects of media-portrayed idealized images on the body shame and appearance anxiety of 39 females 17 to 35 years of age.  Participants were asked to view 24 magazine advertisements for 20 seconds. There were four categories of images, specifically consisting of either a) body present body related product advertisements, b) idealized body absent body related product advertisements, c) idealized body absent non-body-related product advertisement, and d) idealized body absent non-body-related product advertisements (Monro & Huon, 2005).  Participants were then instructed to complete a questionnaire assessing appearance and body shame. Results showed that regardless of self-

objectification level or advertisement type, participants experienced less appearance anxiety after exposure to advertisements without an idealized body, and greater appearance anxiety after viewing advertisements featuring an idealized body (Monro & Huon, 2005). There were subsequent results that indicated a difference between body present and body absent conditions, such that high self-objectifiers experienced greater appearance anxiety in the body present condition, whereas low self-objectifiers' appearance anxiety was only slightly higher in the body present conditions than in the body absent condition (Monro & Huon, 2005). This is consistent with research that emphasizes exposure to idealized media images can impact the amount of appearance anxiety experienced by women (Hart et al, 2000).

As mentioned previously, adoption of a self-objectifying viewpoint causes hyper vigilance about body image related concerns, resulting in an increase in appearance anxiety when viewing images that reinforce societal beauty body standards. As such, women who focus more on their appearance are likely to feel more anxious when posting images on social media due to their anticipation of the potential scrutiny that they may receive. In comparison to body dissatisfaction, appearance anxiety is not only general dissatisfaction with one's body, but also fearfulness of other's evaluation of how they look (Monro & Huon, 2004). Facebook and Instagram provides its users with a platform in which their physical attributes are under constant surveillance by others, potentially triggering highly anxious users to extensively ruminate over perceived body imperfections. Although there is literature that highlights the experiences of appearance anxious white women, the literature lacks research that closely examines how appearance anxiety black women navigate their social media accounts.

**Online Social Comparison and Body Dissatisfaction**

Social comparison has been identified as a behavior influencing the relationship between engagement in social media and the adoption of body dissatisfaction (Perloff, 2014). Research on sociocultural factors that influence body image have found that social comparison plays a significant role in explaining the effects of media on body image concern (Perloff, 2014; Botta, 1999). As such, the social comparison theory states that it is normal for individuals to compare themselves to others, especially those that are central to their definition of self (Festinger, 1954; Wood & Taylor, 1991). In fact, a study exposed 52 black college-aged women to 3 photographs of attractive white and black female models in an attempt to expose the participants to mainstream standards of beauty (Evans & McConnell, 2003). Result showed that Black women did not find the photographs that depicted white mainstream beauty ideas relevant, and only compared themselves to photographs that depicted other Black women (Evans & McConnell, 2003).

SNS (i.e., Facebook, Instagram) offer a platform in which individuals can upload photos at their leisure. In fact, almost 10 million new photographs are uploaded to Facebook each hour, which provides an abundance of opportunities for users to make appearance-related social comparisons (Fardouly & Vartanian, 2016). People who are more likely to engage in social comparison are said to possess a chronic sensitivity and awareness of others, while also experiencing more uncertainty and instability regarding their self-concept (Vogel, Rose, Okdie, Eckles, & Franz, 2015). Research has shown that regularly engaging in appearance based comparison can lead to an adoption of a negative body image, and those that report heavier Facebook usage have also engaged in social

comparison more frequently (Fardouly & Vartanian, 2016; Myers & Crowther, 2009; Vogel et al., 2015). Specifically, studies have revealed that the tendency to compare one's appearance to peers has mediated the relationship between Facebook usage and body image concerns (Buunk & Gibbons, 2006; Fardouly & Vartanian, 2015).

People generally present themselves and their lives positively by posting pictures of themselves looking their best (de Vries & Kuhne, 2015). Viewing these images may impact how people see themselves, as self-perceptions are based, in part, to how one is doing in comparison to others (de Vries & Kuhne, 2015). De Vries and Kuhne (2015) examined the impact of online social comparison to self-perception of physical attractiveness among 231 participants, of which 69% were females, and found that more time spent on Facebook increased the likelihood that individuals engage in negative comparison. Additionally, engagement in negative comparison was related to lower self-perceived physical attractiveness (de Vries & Kuhne, 2015).

**Physical Appearance Comparison and Body Dissatisfaction**

Similar to general social comparisons, appearance comparisons consist of making upward or downward comparisons to others based on physical attributes (Fardouly & Vartanian, 2015). An example of upward appearance comparisons is when an individual compares their appearance to someone whom they believe to be more attractive then themselves; whereas negative appearance comparison is described as the opposite (Fradouly & Vartanian, 2015).

Television has always been one of the primary sources of media that communicates messages about societal beauty standards. Women often turn to television in an effort to seek out images of their ideal body (Botta, 2000). A study examining 189

female undergraduates reported that upward comparison to celebrities were significantly linked to an increase in body dissatisfaction, drive for thinness, and bulimic behaviors (Botta, 2000). When Black and White adolescents were compared, both groups idealized television images to the same degree and the more they idealized these images, the more dissatisfied they were with their bodies (Botta, 2000). This study concluded that how much adolescents compared themselves to images made a difference in the amount of body image disturbance they endorsed (Botta, 2000). As such, one may assume that as more media images of Black women are made available via television and movie ads, more Black women will have thin ideals for comparison, making it easier to be affect by thin ideas since the images may poses similar phenotypical features (Botta, 2000). A study examining the impact of social comparison on Black women's body image found similar results. Black women in this study rejected comparison with the white characters on television, and instead compared themselves to Black television characters (Schooler, Ward, Merriwether, Caruthers, 2004). These Black women, however, were largely unaffected after comparing themselves to idealized images on Black-oriented media (Schooler et al., 2004). Explanations provided by the author suggests that the small number of Black women on television may be seen as allies to Black women rather than competitors (Schooler et al., 2004). This claim is supported by the theory of social comparison, such that when the object of comparison is seen as a competitor, an upward comparison can damage self-esteem, but if the object is not seen as a competitor, the comparison can be inspiring or encouraging (Wood, 1989).

Unlike traditional forms of media, Facebook provides users with the ability to compare themselves to individuals who may vary in relational closeness, such as family

members, close friends, and distant peers. Users are also still exposed to images of models and celebrities; however, research has shown that people primarily use Facebook to interact with their peers (Hew, 2011; Fradouly & Vartanian, 2015;). Additionally, research has shown that appearance comparisons to peers may have a stronger association with body image concerns than does comparison to models or celebrities (Carey, Donaghue, & Broderick, 2014; Fardouly & Vartanian, 2015). This may be due to the appearance of peers being more relatable or attainable than the appearance of celebrities, causing ambivalence.

Analysis of a study on 227 Australian, female college students studied the effect of comparison groups and type of appearance comparison (upward vs. downward) on body dissatisfaction. Participants reported comparing their appearance most often to their distant peers just as frequently as close friends and celebrities, and less frequently to female family members (Fradouly & Vartanian, 2015). When comparing their bodies to other groups, females rated their body most negatively when compared to female celebrities, followed by close friends and then distant peers (Fradouly & Vartanian, 2015).

Frequency also mediated the association between Facebook usage and body image concerns, such that comparing one's self to close friends and distant peers were more likely than comparing to family members or celebrities (Fradouly & Vartanian, 2015). Family members may not be seen as relevant comparison targets since one may have both "very old" or "very young" family members that make it difficult to find similarities. In contrast, celebrities may be seen as less comparison targets because of the resources that they have to enhance their beauty (i.e., cosmetic surgery, make-up)

(Fardouly & Vartanian, 2015). More frequent comparison to peers may be seen as more personally attainable due having similar resources and lifestyles of the participants.

When examining the relationship between appearance comparison and verbal commentary research has revealed a higher frequency of negative comments was associated with a higher occurrence of upward comparison and a higher frequency of positive comments was related to more frequent downward comparisons (Bailey & Ricciardelli, 2009). This is consistent with previous research that has demonstrated a link between negative commentary and social comparisons (Bailey & Ricciardelli, 2009; Stormer & Thompson, 1996; Thompson & Heinberg, 1993). This may be explained by individuals experiencing teasing during childhood which reinforce societal standards of beauty ideas, as such, influences an individual's tendency to critically evaluate themselves through social comparison (Bailey & Ricciardelli, 2009). In contrast, the results of receiving positive commentary from others may encourage an individual to develop a more positive body image and be more likely to interpret social comparison in a positive way (Bailey & Ricciardelli, 2009).

When comparing upward versus downward appearance comparison, upward appearance comparison was found to be the strongest predictor of body dissatisfaction and eating disturbance, with more frequent upward comparisons being associated with higher body dissatisfaction (Bailey & Ricciardelli, 2009). Downward comparison also significantly predicted lower body dissatisfaction and eating disturbance, suggesting that engaging in downward appearance comparison may serve as a protective buffer by helping maintain body image satisfaction (Bailey & Ricciardelli, 2009). Ultimately, viewers who perceive a discrepancy in their body image when comparing to others are

more motivate to close the gap on that comparison (Botta, 2000).  Social media provides tools that can help users close that gap by enhancing the photographs that they share of themselves on social media.

**Photo Investment and Manipulation and Body Dissatisfaction**

According to Baumeister and Hutton (1987), people engage in self-presentation in order to convey information about themselves to other individuals (Chia & Chang, 2016).  Through self-presentation, individuals elicit a platform in which they can please an audience by displaying an image that they believe meets the audiences' expectation.  As such, self-presentation typically consists of highly selective images or information that are used to articulate specific identities that an individual is willing to reveal about herself (Chua & Chang, 2016).  Online social networking profiles allow users to have a space in which they can display what they feel will be judged favorably by their online "friends and followers."  An example of this behavior is when a user monitors the photographs that he or she uploads onto their personal Facebook or Instagram page.  Monitoring which photographs are uploaded and displayed serves as another example of body surveillance activities, such that users are actively monitoring the appearance of their bodies by filtering which photos they allow to be displayed on their page.  A study examining the relationship between specific Facebook activities and eating disorder pathology found that among a predominately Caucasian sample, women with greater eating pathology not only reported spending more time on Facebook, but also engaged in more appearance focused behaviors including removing, or untagging, photographs of themselves in an attempt to remove unflattering photographs of themselves (Mabe, Forney, & Keel, 2014).

Online body surveillance behaviors are not limited to monitoring the types of photos that are uploaded and removing "unflattering" photographs, but can also include the investment and manipulation efforts that are exerted prior to uploading a photograph of oneself (McLean et al., 2015). As mentioned previously, photo investment is a measurement of the amount of concern about photo quality and how a photo depicts the individual, as well as the amount of effect that is exerted in choosing a photograph to upload (McLean et al., 2015). An example of manipulation consists of altering the appearance of oneself in a photograph by applying filters or altering specific body features to reflect sociocultural standards of beauty (McLean et al., 2015). A study examining the impact of photo investment and manipulation among an Australian sample of adolescent girls revealed several interesting findings. Among the sample of 101 girls, at least 50% took at least one selfie per two-week period and about 49.5% reported taking at least one "usie" (the inclusion of others in a selfie) one time per week (McLean et al., 2015). Data analysis revealed that self-photo sharers endorsed a greater tendency to exercise overvaluation of shape and weight, body dissatisfaction, and internalization of the thin ideal than non-sharers (McLean et al., 2015) This is consistent with previous studies that have found a positive correlation between greater Facebook usage is associated with greater body related concerns (McLean et al., 2015; Meier & Gray, 2004). Girls that reported higher levels of photo manipulation and investment prior to sharing reported greater body-related and eating concerns in comparison to those that were not as invested in their photographs or those that did not frequently engage in photo manipulation (McLean et al., 2015). Although these findings were based on the behaviors of white adolescent girls, statistics show that almost 64% of Black American

adults have a social media account (Pew, 2016). Additionally, of that 64%, 67% of Black adults use Facebook (Krogstad, 2015). Mills, Musto, Williams, and Tiggemann (2018) replicated these findings and found that editing selfies prior to uploading them actually worsened appearance related concerns among a sample of undergraduate female students between 16 and 29 years old. Participants were given an opportunity to take multiple photos, delete photos that they disliked, and edit photos using a photo editing app prior to uploading the photographs to their social media page. In comparison to women who did not upload a photograph at all, women who uploaded a retouched photograph endorsed higher levels of state anxiety. These findings show that having an opportunity to edit photos prior to posting did not alleviate women's feelings of anxiety. Taking into consideration that a primary function of Facebook is for users to post and share pictures and that more Facebook usage is correlated with increased body dissatisfaction among adults, these findings may be generalizable to Black women who engage in similar online activates.

Overall, these findings may suggest that girls with higher levels of body-related and eating concerns may more frequently engage in appearance related social media activities such as photo sharing, commenting under photographs, and "liking" photographs (McLean et al., 2015). This study also provides evidence attesting to the impact of actively engaging in social media, as opposed to passively surfing the web. The findings related to actively presenting a desired image, or engaging in social comparison and judging the photographs of others, may incite body monitoring or self-objectification behaviors that lead to worry, concern, or appearance related anxiety (McLean et al., 2015).

Chua and Chang (2016), conducted a qualitative study with 24 teenage girls from Singapore in order to understand the relationship between self-presentation and peer comparison on social media as it relates to beauty standards.  Findings from this research revealed that participants possessed some ambivalence between their understanding of beauty and their perceptions of what society regarded as beautiful, such that although they believe that beauty involved intrapersonal characteristics, it was difficult to accept this idea due to the pressures placed on them by peers and the media to confirm to a certain standard of outer physical beauty (Chua & Chang, 2016).  Participants went on to claim that in order to meet the norms of physical beauty, editing photographs and make oneself look "attractive" on social media became a necessity (Chua & Chang, 2016).  In fact, all 24 participants reported using filters in photo-editing apps to brighten their skin, blur facial imperfections, and enhance the overall quality of the photo (Chua & Chang, 2016).  These behaviors were regarded as a requirement in order to post photographs and was regarded as an important means to build a positive self-image and impress peers (Chua & Chang, 2016). Reflective of photo investment behaviors, girls stated that they planned for the "perfect" scenic backdrop prior to taking a photograph, and used their peers' pictures as a reference for what types of photographs to upload of themselves, typically by identify the mistakes of others to determine "good editing practices" and what is regarded as beautiful (Chua & Chang, 2016).  All participants revealed that they wanted to receive peer attention for their selfies and 63% described insecurity as a key factor contributing to their overall fear of having unattractive photographs and fueled the desire to look as attractive to other girls in their social media community (Chia & Chang, 2016).

**Gaps in the Literature and the Current Study**

The development of body dissatisfaction is a multifaceted process that can manifest as a result of the interaction of several different variables. As the evolution of media continues, women will continue to be inundated with body images that depict what society has deemed as "ideal" beauty. Since social comparison is a behavior that women consciously and subconsciously engage in, their satisfaction with their bodies will continue to be threatened as they are confronted with more media exposure and continue to compare themselves to others. When women identify perceived discrepancies between their physical appearance and what they are exposed to in the media, they can become overly anxious about their "flaws" and ruminate over how they are being perceived by others. In an effort to reduce this anxiousness about their appearance being negatively evaluated by others, women can become overly concerned with the photos that they post online, and engage in photo manipulation to project themselves in a favorable light. Although these behaviors may help to alleviate anxiousness for a moment, overall body dissatisfaction does not disappear and women find themselves continuing to engage in the self-defeating habits in an attempt to resolve internal ambivalence.

Much of the literature examining the relationship between media exposure and body dissatisfaction has used forms of traditional media as the primary media outlet to assess the impact of exposure on specific mental health variables. However, given the increasing popularity of social media, there has been a rise in the amount of research conducted examining the consequences of social media usage on body dissatisfaction. It is apparent that there is an association between spending time on social media and developing body dissatisfaction, however little is known about what this processes looks

like or the specifies that give rise to the adoption of mainstream ideals. Although there is research that highlights several unique factors that differentiate social media from traditional media, there is minimal literature that examines the impact of these factors on the development of body dissatisfaction. Social networking sites' ability to bring users an interactive platform has been theorized to serve as an important factor that influences the relationship between exposure and body dissatisfaction and should be explored more thoroughly. Two underlying factors that this study considered and attempt to control for were the degree to which users feel connected to their social networking community and their motivations to engage in social networking. Previous research has shown that a positive relationship exists among motivations for engagement and the user's experience and level of satisfaction with social media; however, minimal research exists that examines the relationship between motivation and endorsement of body image concerns or engagement in specific photo-based online activities (Al-Menayes, 2015). Additionally, it was important to consider how emotionally connected participants feel to their social media site along with identifying how much time is spent on Facebook and Instagram and the number of online friends on each platform. By controlling for motivations of engagement and amount of emotional connectedness this study attempted to expand current body dissatisfaction literature by highlighting how participation in specific social media activities can potentially exacerbate body image concerns.

Much of the research on body dissatisfaction and social media has included a very homogenous sample, consisting of mainly white, female college students or adolescents. This makes it difficult to generalize findings cross culturally, leaving a multitude of ambiguity surrounding the process in which specific social media related activities

influence body dissatisfaction among Black women. In research examining the effects of traditional media consumption, data have shown that on average, Black women experience fewer appearance-related concerns when compared to White women (Howard, Heron, MacIntyre, Myers, & Everhart, 2017; Botta, 2000; Schooler et al., 2004). Knowing that there are stark differences in social media and traditional media, it is important to expound on current research by recognizing maladaptive components of social networking sites from a multicultural lens. Highlighting skin color dissatisfaction as a particular way in which Black women express appearance concerns provides additional context to help recognize how women of color experience displeasure with aspects of their appearance.  This study also highlighted the relationship between specific social media photo related activities and body dissatisfaction, appearance anxiety, appearance comparison among a sample of Black women as an attempt to complement existing studies that examine similar variables among a homogeneous sample.

## Chapter III

## Methods

**Participants**

Individuals who identified as Black or African American women between the
ages of 18 to 34 years old were invited to participate in the study. Participants were
required to have at least one profile on either Facebook or Instagram due to each
platform's emphasis on photo sharing. Participants were also required to upload, at least,
an average of two pictures per month for at least the past year in order to ensure a pattern
of online photo-related activities. Participation in this study was voluntary, as subjects
were expected to consent before they were allowed to complete the survey.

A total of 459 participants accessed the study. Of these 459, 126 entries were
excluded because they did not meet eligibility requirements. Specifically, 18 participants
were excluded for not identifying as Black or African American, 5 were excluded for not
identifying as female, 6 were excluded for not being within the ages of 18 to 35, 11 were
excluding for not having a social media account, and 85 were excluded for not
completing the survey (i.e., they accessed the study but did not answer any questions).
The final sample consisted of 333 participants. Based on a power analysis using G*Power
software (Faul, Erdfelder, Lang, & Buchner, 2007), the desired sample size for this study
was 146 to achieve an expected medium effect size of .5 at the $p < .05$ significance level
(Cohen, 1992). Therefore, the final sample size ($N = 333$) far exceeds the desired size for
sufficient statistical power.

Participants' ages ranged from 18-34 years ($M = 24.30$, $SD = 4.97$). Participants
varied in education with 9.9% reporting at least a high school diploma or GED, 56.2%

reporting some college education, 16.8% having some trade/technical/vocational training, 2.4% were college graduates, 3.6% reporting some processional or graduate education, and 11.1% held professional or graduate degrees.

Of those sampled, 96.7% reported that they access their social media account from their smartphone device. Participants were surveyed on the amount of time that they spent on either Facebook or Instagram. Within the sample, 35.1% reported that they did not have a Facebook account, 29.4% spent under an hour on Facebook per day, 21.6% spent 1 to 3 hours on Facebook, and 13.8% spent more than 3 hours on Facebook. When asked about average time spent on Instagram, 14.7% reported that they did not have an Instagram account, 36.3% reported spending less than one hour per day on the social media platform, 34.5% reported spending 1 to 3 hours on Instagram, 14.4% spent more than 3 hours on Instagram. Measures of central tendency were computed to summarize the data for how many selfies and usies participants took per month within the past year, and measures of dispersion were computed to understand the variability of scores. Over 35% of participants reported posting about 2 selfies per month (Mode = 2; Mdn = 3, Range = 1-90) Two selfies per month was most frequently reported among the participants, with about half of the participants reported posting under three selfies per month.

**Procedure**

Participants were recruited through three simultaneous convenience methods of recruitment in order to increase generalizability. First, participants were attained from a large, ethnically diverse Southwestern university in a major metropolitan city. Undergraduate participants from the large southwestern university sample were recruited

via SONA, a university-based system to recruit research participants for course credit or other incentives. Participants who were recruited via SNS (i.e., Instagram, SnapChat, and Facebook) were notified of the survey through access to an approved flyer outlining the details of the study and a link to the survey on Qualtrics. Finally, participants were attained through snowball sampling from personal/professional e-mail contacts. An approved flyer and information about the study was sent out to the following APA division listservs: Society of Clinical Psychology, Society of Counseling Psychology, Society for the Psychology of Women, and Society for the Psychological Study of Culture, Ethnicity, and Race. Professional colleagues of the PI were contacted via e-mail, and were given general information about the study, such as the purpose of the research, risks and benefits of participating and information about how confidentiality will be ensured. These colleagues were given permission to disseminate the e-mail to professionals and students within their network that may be eligible and interested in participating in the study. These parallel methods were used in order to obtain a sample that was reflective of the current demographics of women who utilize SNS, in an attempt to generate a sample of women from various education levels.

Individuals who expressed interest in the study were able to access the survey via a Qualtrics link and asked to complete the survey online. The online survey was accessible via mobile devices and tablets. First, participants read an informed consent statement describing the research procedures, risks and benefits of participation, and steps to ensure that participant's privacy was protected (see Appendix B). Although participants were informed about the eligibility criteria via study advertisement materials, women were also asked to complete a pre-screening questionnaire to confirm eligibility.

Qualifying participants were allowed to continue on to the main survey, where they were asked to complete demographic questions, followed by the survey instruments. Once the survey was completed, participants were given the option of including their e-mail address in a raffle to win one of three $25.00 Amazon gift certificates. Three e-mail addresses were randomly selected and winners were e-mailed the certificates. Individuals who completed the survey via SONA may have obtained extra credit in their course, which was determined by individual course instructors. Participants could end their participation at any time by exiting the survey without any penalty if they did not wish to continue participation. Participation in the study took between 15 to 25 minutes. In an attempt to minimize respondent fatigue, a time bar was visible at the top of each survey page so that participants were aware of their progress.

**Measures**

**Pre-screening questionnaire.** A pre-screening questionnaire was administered to determine the participant's eligibility to participate. The questionnaire consisted of the following items: Do you self-identify as Black/African American? Are you between the ages of 18-34? Do you self-identify as a woman? Do you have an Instagram or Facebook account? Do you post photos of yourself online or share them through services like Facebook or Instagram (Likert scale; 1= *never* to 3= *frequently*)? Individuals who answered yes to being a Black or African American woman between the ages of 18-34 with either a Facebook or Instagram account, and shared photos of themselves online at least sometimes, were considered regular self-photo sharers and allowed to proceed on to the survey for completion.

**Demographic Questionnaire (Appendix C).** The demographic questionnaire was administered in order to gather information about the participants' highest achieved education level, a ranking of the SNS that they visit most frequently, the number of usies or selfies that they took and uploaded within the past year, and the device that they used most frequently to access their social media accounts.

**Predictors**

**Controlling Variables**

**Facebook Intensity Scale (FBI; Ellison, Steinfield, & Lampe, 2008).** The FBI scale is an 11-item scale used to provide a more robust measure of how social media sites are being used beyond the superficial measurement of frequency and duration. This scale was normed on a mostly Caucasian sample of college students within the United States. Specifically, this measure seeks to identify the emotional connectedness experienced by participants in addition to identifying the number of Facebook and Instagram friends and the amount of time spent on Facebook on a typical day. It should be noted that this measure was modified in order to examine participants' usage frequency and attitudes towards only Facebook and Instagram social media accounts rather than to all social networking sites. This modification was to ensure that participants were only focusing on the SNS that have the most picture related activity according to the literature (Pew, 2015). Each question used a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*) allowing participants to rate the extent to which they endorse the items. The measure contains six additional attitudinal items designed to assess the degree to which the respondent feels emotionally connected to one's social media accounts. An example items is, "*I would be sorry if Facebook/Instagram shut down*." It also measures the extent

to which social media is integrated into daily activities. An example item is "*Facebook/Instagram is part of my everyday activity*." All of the items can be found in Appendix C. The FBI score was computed by calculating the sum of all the items on the scale with higher scores indicating more emotional connectedness and integration of Facebook and Instagram in their daily lives. Overall, the FBI scale has demonstrated strong levels of internal consistency ($\alpha = .83$, Ellison et al., 2007). The Cronbach's alpha in this study was .78.

> **Social Networking Sites Motivation Scale (SNSMS; Kim, Sohn, & Choi, 2011).** The SNSMS is a 20-item scale used to examine respondents' motives for using social networking sites. This measure was normed on American and Korean undergraduate students at a large southwestern university in the United States. The anchor for this measure was altered to specifically examine participants' motivations to use Facebook and Instagram rather than all social networking sites (i.e., *I use Facebook/Instagram to…*). There are five subscales of the SNSMS, each examining users' motivation to engage in SNS. This study used only three of those: Seeking Friends, Seeking Support, and Entertainment subscales. The first subscale, Seeking Friends, is comprised of 4 items and includes questions such as "I use Facebook/Instagram to meet new people." The Seeking Social Support subscale is made up of 4 items and includes items such as "I use Facebook/Instagram to express my anger to others who will sympathize." The 4 item Seeking Entertainment subscale includes items such as "I use Facebook/Instagram to forget about work or other things." All questions are answered on a five-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). All of the items can be found in Appendix C. The SNSMS score is computed by

calculating the mean of each scale with higher scores demonstrating a tendency to engage in that particular type of motive for usage. The Cronbach's alphas are as follows: (a) Seeking Friends ($\alpha = .92$); (b) Seeking Social Support ($\alpha = .89$); (c) Seeing Entertainment ($\alpha = .81$). The Cronbach's alphas for this study are: (a) Seeking Friends ($\alpha = .79$); (b) Seeking Social Support ($\alpha = .87$); (c) Seeing Entertainment ($\alpha = .63$).

**Social Media Engagement** was assessed by creating an index measure comprised of 5 items that assessed how frequently participants uploaded photos to either Facebook or Instagram and how frequently they take selfies or usies. Responses were summed to form a total score for social media engagement with higher scores indicated a higher overall use of social media networking.

**Main Variables**

**Photo Investment Scale (PIS; Mclean, Paxton, Wertheim, & Masters, 2015**). The 8-item scale assessed investment and effort participants exerted choosing photos of themselves to share on social media as well as the concerns they have about sharing such posts. This scale was normed on adolescent Australian girls with a mean age of 13.13 years (*SD* = .33). Example items were presented along a visual analogue scale ranging from 0 to 100 and included opposing statements such as "I share/post whichever photo is available" and "I take photos especially for posting/sharing." All of the items can be found in Appendix C. The mean for items are calculated for the scale score with higher scores reflecting higher investment in photo sharing through social media. The Cronbach's alpha for the original sample was .85, and .74 among this study's population.

**Photo Manipulation Scale (PMS; Mclean et al., 2015**). The 10-item scale was used to indicate the extent to which participants manipulate or edit their photos of

themselves prior to sharing. This scale was normed on the same adolescent Australian

female population. Example items from the PMS scale are, "Edit or use apps to smooth

skin" and "Highlight facial features, e.g., cheekbones or eye color/brightness," which are

rated on 5-point Likert scale (1 = *never* to 5 = *always*). All of the items can be found in

Appendix c. The possible scores on the PMS are summed and averaged with the range

being between 1 to 5, with higher scores indicating more frequent photo manipulation.

Cronbach's alpha for the original sample was .85. and .88 among the study's sample.

**Criterion Variables**

**Social Appearance Anxiety Scale (SAAS: Hart, Flora, Palyo, Fresco, Holle, &**

**Heimberg, 2008).** The 16-item SAAS measures anxiety about one's appearance being

negatively evaluated by others. This scale was normed on a wide range of ethnic/racial

backgrounds, including a large sample of African Americans (33.2%) with a mean age of

18.85 (SD=3.15). Example items from the SAAS are, "I am concerned people would not

like me because of the way I look," and "I am afraid that people find me unattractive,"

which are rated on five-point Likert scale ranging from (1 = *not at all* to 5 = *extremely*).

All of the items can be found in Appendix C. The possible scores on the SAAS are

summed and averaged with higher scores indicate higher levels of social appearance

anxiety. Additionally, the SAAS demonstrated good internal consistency with a Cronbach

alpha of .95, and test-retest reliability over a one month period ($r$=.84) in a sample of 100

participants consisting of 67% women. The Cronbach's alpha for this study is also .95.

SAAS's convergent and discriminate validity was also assessed showing a significant

positive correlation with measures of social anxiety, such as the Social Physique Anxiety

Scale as well as measures of body dissatisfaction; while negatively correlating with the

Appearance Evaluation subscale indicating higher scores on the SAAS were related to feelings of unattractiveness.

**Eating Disorder Examination Questionnaire (EDE-Q; Fairburn & Beglin, 1994).** Is a 41-item measurement that assesses attitudes, feelings, and behaviors related to eating and body image over the past 3 months; this questionnaire was adopted from the structural clinical interview (Eating Disorder Examination [EDE]; Garner, 1995). The EDE-Q measures four subscales: Restraint (R), Shape Concern (SC), Weight Concern (WC), and Eating Concern (EC). Body dissatisfaction was operationalized by combining the Weight Concern and Shape Concern subscales to capture multiple dimensions of the construct. Previous work has indicated that these two subscales generally load onto one underlying factor and include content that focuses on body dissatisfaction, discomfort with body exposure, and a desire to change body shape and weight (Peterson et al., 2007). Items are rated on a seven point Likert scale ranging from 0 = *not at all* to 6 = *Markedly*. Examples of this item include, *"How dissatisfied have you been with your weight?"* and *"How uncomfortable have you felt about others seeing your shape or figure (for example, in communal changing rooms, when swimming, or wearing tight clothes)?"* All of the items can be found in Appendix C. Subscale scores were summed and averaged with higher scores reflecting greater weight/shape concern (Aardoom, Dingemans, Slof Op't Landy, & Van Furth, 2012). Based on previously normative data, scores ≥ 4 indicate a clinically significant disordered eating pathology (Carter, Stweart, & Fairburn, 2001; Kelly, Cotter, & Mazzeo, 2012; Mond et al., 2006). The EDE-Q's items yielded internally consistent scores with excellent two-week temporal stability r=.81(Luce & Crowther, 1999). The EDE-Q subscales yielded strong Cronbach alpha's

in a sample of undergraduate Black women with a mean age of 19.57 years (Kelly, Cotter, & Mazzeo, 2012), with Cronbach's alphas for the Shape Concern (.91), Weight Concern (.88) being relatively high. The Cronbach's alpha for this study was .92.

**Skin Color Satisfaction Scale (SCSS; Falconer & Neville, 2000)**

The 7-item scale served as a culturally specific measurement to assess how satisfied Black women were with their skin complexion (Falconer & Neville, 2000). Items are rated on a 9 point Likert scale ranging from *1- extremely dissatisfied/strongly disagree* to *9- extremely satisfied/strongly agree;* an example of an item includes *"How satisfied are you with the shade of your own skin color?"* and *"Compared to the complexion (skin color) of my friends and followers, I am satisfied with my skin color"* All of the items can be found in Appendix C. Some questions were adapted in order to capture participants' perception of their skin color in comparison to the friends and followers that they interact with online.  Higher average scores represent greater skin-tone dissatisfaction.  The SCSS yielded a strong Cronbach's alpha (.71) in a study measuring skin-tone satisfaction among undergraduate Black women, and discriminate validity *(r=*.39) with a measure of satisfaction with specific body parts and physical appearance. The Cronbach's alpha for this study was .60.

**Online Physical Appearance Comparison Scale (Appendix A; OPAC)**

This scale was adapted from the Physical Appearance Comparison Scale (Thompson, Heinberg, & Tantleff, 1991) in order capture the participants' online comparison behaviors. The five-item scale assesses an individual's tendency to compare their own appearance to the appearance of others online.  Items are rated on a 5-point Likert scale ranging from *1 – never* to *5- Always*; an example of an item includes *"The*

*best way for a person to know if they are overweight or underweight is to compare their*

*figure to the figures of others on Facebook or Instagram."* All of the items can be found

in Appendix C.  Scores can be summed and averaged with higher scores reflecting a

greater tendency to engage in online physical comparison.  Internal consistency was

found to be .78 and test-retest reliability was .72. The Cronbach's alpha for this study was

.72.

## Chapter IV

## Results

The aim of this study was to highlight the relationship among photo investment and manipulation and body dissatisfaction, appearance anxiety, skin color satisfaction and appearance comparison. To test the main hypotheses, four independent hierarchical regression analyses were conducted with photo manipulation and photo investment as predictors and body dissatisfaction, social appearance anxiety, online physical appearance comparison, and skin color satisfaction as outcome variables. Preliminary statistical analyses were conducted to determine if the data fit assumptions of normality prior to the main analysis. The means, standard deviations, and correlation coefficients were computed for all measures within the full sample, and these results are presented in appendix A.

**Preliminary Analyses**

The distribution of the sample was normal, and the mean scores on the self-report FB Intensity ($M = 35.38$, $SD = 10.86$), Friends Motivation ($M = 2.84$, $SD = .90$), Support Motivation ($M = 2.27$, $SD = .93$), Entertainment Motivation ($M = 3.61$, $SD = .663$), Photo Investment ($M = 55.19$, $SD = 16.14$), Photo Manipulation ($M = 1.96$, $SD = .72$), Body Dissatisfaction ($M = 2.51$, $SD = 1.56$), Appearance Anxiety ($M = 2.14$, $SD = .945$), Appearance Comparison ($M = 2.50$, $SD = .772$) and Skin Color Satisfaction (SCSS) ($M = 7.32$, $SD = 1.44$) were comparable to similar studies that utilized these measures (Kim, Sohn, & Choi, 2011; Mclean et al., 2015; Monro & Huon, 2004; Kelly, Cotter, & Mazzeo, 2012).

Pearson product-moment correlations and significance values are displayed in Table 3 for all variables of interest. As expected, the results revealed correlations among predictor and criterion variables of interest. Photo investment was positively correlated with Manipulation ($r = .17$, $p < .01$), Body Dissatisfaction ($r = .29$, $p < .001$), Appearance Anxiety ($r = .36$, $p < .001$), and Appearance Comparison ($r = .36$, $p < .001$), and negatively correlated with Skin Color Satisfaction ($r = -.18$, $p < .01$). Photo Manipulation was positively correlated with Body Dissatisfaction ($r = .31$, $p < .001$), and Appearance Anxiety ($r = .46$, $p < .001$), negatively correlated with Skin Color Satisfaction ($r = -.49$, $p < .001$), but was not significantly correlated with Physical Appearance Comparison.

**Primary Analysis**

*t***-Tests**

The first hypothesis was addressed by conducting three independent samples *t*-tests to examine the mean differences in Body Dissatisfaction, Appearance Comparison, and Appearance Anxiety among frequent and occasional photo-sharers. Participants were categorized as frequent photo-sharers if they answered "frequently" to the question, "Do you post photos of yourself online or share them through services like Facebook or Instagram?" located on the demographic questionnaire. Participants were considered occasional photo-sharers if they answered "occasionally" to the same question. On the measure of Body Dissatisfaction, Appearance Comparison and Skin Color Satisfaction, there was no significant difference in scores for occasional photo-sharers and frequent photo sharers.

On the measure of online Appearance Anxiety, individuals engaging in occasional social media photo activities exhibited on average significantly higher scores on

Appearance Anxiety ($M$ = 2.25, $SD$ =.980) than those engaging in frequent social media

photo activities ($M$=1.96, $SD$ = .855; $t$(279.337) = 2.73, $p$ = .007, two-tailed). The

magnitude of the difference in the means (mean difference =.282, 95% CI: .079-.486)

was large ($\eta^2$ = .161). The results of this analysis are displayed in table 4.

**Multivariate Analyses**

Four hierarchical multiple linear regression were conducted to assess the

independent and combined contributions of several social media related variables in

predicting several facets of Appearance Satisfaction. Prior to conducting the preliminary

analysis, the data were examined for outliers, or values at the lower or upper end, in order

to minimize the risk of inflated error rates or distortions of parameter and statistic

estimates. No outliers were detected. Descriptive statistics and bivariate correlations were

examined among all variables of interest. Specifically, correlations among the covariates

(i.e., FB Intensity, Age, and Motivation) and predictor variables (Investment and

Manipulation) were examined for multicollinearity. Multicollinearity was determined not

to be a concern, as most of the significant correlations did not exceed .7. Independent

variables considered included the sociodemographic variable of the participant's age

(years) and predictor variables included FB Intensity, Motivation variables, and

Engagement. Criterion variables of interest included Appearance Anxiety, Body

Dissatisfaction, Skin Color Satisfaction, and Appearance Comparison.

The ordering of each step was consistent with the research question. In block one

of each regression model, theoretically relevant variables to be controlled for (i.e., Age;

SNS Motivation Scale; FB Intensity) were entered. In block two of the regression, Social

Media Engagement was entered, followed by Photo Investment and Photo Manipulation

in block three. All statistical analyses were performed with SPSS 24.0, and two-sided

tests were used with a significant level of $p < 0.05$.

**Body Dissatisfaction.** A hierarchical multiple regression was performed to

investigate the ability of Photo Investment and Manipulation to predict Body

Dissatisfaction, after controlling for age, FB Intensity and Engagement, and Motivation

for using social networking sites (Table 5). Eight predictors were entered into the model

in sequential steps: Step 1: Age, Social Networking Site Motivation subscales (Friends,

Support, Entertainment), and FB Intensity; Step 2: Photo Engagement; and Step 3: Photo

Investment and Photo Manipulation. As a whole, the model accounted for 18% of the

variance in Body Dissatisfaction $F(8,303)= 8.288$, p < .001. The block containing age,

Friends Motivation, Support Motivation, Entertainment Motivation, and FB Intensity

accounted for 7% of the variance $F(5,306) = 4.61$, p <.001. Step two of the model

accounted for 7% of the variance $F(6,305) = 3.837$, p<.001, and the addition of photo

investment and photo manipulation scores in step 3 produced a significant change in $R^2$,

accounting for an additional 10.9% of the variance $F(2, 303) = 20.19$, p < .001. Within

this model, both Investment ($\beta = .22$, p < .00) and Manipulation scores ($\beta = .24$, p < .00)

were positive predictors of Body Dissatisfaction.

**Social Appearance Anxiety.** A hierarchical multiple regression was performed

to investigate the ability of Photo Investment and Manipulation to predict Appearance

Anxiety, after controlling for age, FB Intensity and Engagement, and Support Motivation

for using social networking sites (Table 6). As a whole, the model was significant

accounted for 39.4% of the variance in Appearance Anxiety, $F(8,303)= 24.59$, p < .001.

The first block accounted for 18.8% of the variance $F(6,305) = 14.14$, p < .001. Step two

of the model accounted for 20.4% of the variance $F(6,305) = 13.05$, p < .001 with $\Delta R^2 =$ .017, $p$ < .01. In the final step, the addition of photo investment and photo manipulation scores produced a significant change in $R^2$, accounting for an additional 18.9% of the variance $F(8,303) = 24.59$, p < .001. Within this model, age, Support Motivation, FB Intensity and Engagement, Investment and Manipulation emerged as statistically significant variables. Age ($\beta = -.14$, p < .01), FB Intensity ($\beta = -.14$, p < .01), and Photo Engagement ($\beta = -.09$, p < .05) were negative predictors of Appearance Anxiety, and Support Motivation ($\beta = .22$, p < .001), Investment ($\beta = .25$, p < .001) and Manipulation ($\beta = .36$, p < .001) were positive predictors of Appearance Anxiety.

**Online Physical Appearance Comparison.**  A hierarchical multiple regression was performed to investigate the ability of Investment and Manipulation to predict Appearance Comparison, after controlling for age, Intensity, Engagement, and Motivations (Table 7). As a whole, the model was significant ($F(8, 303) = 15.50$, p < .001), accounting for 29% of the variance in Appearance Comparison. The first block containing age, Friends Motivation, Support Motivation, Entertainment Motivation, an FB Intensity accounted or 10.6% of the variance $F(5,306) = 7.26$, p < .001 and step two of the model accounted for 10.8% of the variance $F(6,305) = 6.13$, p < .001. In the final step, the addition of photo investment and photo manipulation scores produced a significant change in $R^2$, accounting for an additional 18.3% of the variance. $F(2,303) =$ 39,02, p. < .001. Within this model, Support Motivation ($\beta = .163$, p < .01), Investment ($\beta = .295$, p < .000) and Manipulation scores ($\beta = .307$, p < .000) were positive predictors of Appearance Comparison.

**Skin Color Satisfaction.** A hierarchical multiple regression was performed to investigate the ability of Investment and Manipulation to predict Skin Color Satisfaction, after controlling for age, FB Intensity, Engagement, and Motivation. Table 8 presents the results of the regression analysis of Skin Color Satisfaction. As a whole, the model accounted for 31% of the variance in Skin Color Satisfaction ($F(5,306) = 11.21$, $p < .001$) . The first block accounted for 15.5% of the variance $F(5,306) = 11.21$, $p < .001$ and step 2 of the model accounted for 16.1% of the variance $F(6,305) = 9.78$, $p < .001$. In the final step, the addition of photo investment and photo manipulation scores produced a significant change in $R^2$, accounting for an additional 14.9% of the variance $F(2,303) = 32.70$, $p < .001$. Within this model, age ($\beta = .13$, $p < .05$) and Entertainment Motivations ($\beta = .12$, $p < .05$) were positive predictors of Skin Color Satisfaction, and Support Motivations ($\beta = -.25$, $p < .001$), Investment ($\beta = -.10$, $p < .05$) and Manipulation ($\beta = -.39$, $p < .001$ were negative predictors of skin color satisfaction.

**Chapter V**

**Discussion**

The way in which individuals are accessing media has changed with more than 90% of young adults between the ages of 18-29 using the internet as their primary media outlet (Perloff, 2014; Pew, 2016). Social media platforms such as Instagram and Facebook allow individuals to engage in a multitude of different interactive photo-based activities, with women being found to engage in these photo-based activities more frequently than men and to endorse a higher level of body dissatisfaction (Mills et al., 2018; Stefanone, et al., 2011). As such, this study aimed to further examine the relationship between engagement in photo related activities and body image concerns as well as address gaps in the literature by exploring this relationship among a sample of Black women.

The first hypothesis was that women who more frequently engage in social media photo activities (i.e., selfie/usie taking and posting) would have greater body dissatisfaction, appearance anxiety, and engage in more appearance comparison. Although the hypothesis was not fully supported, one significant difference was found among photo sharers, such that Black women who engaged less in photo sharing activities endorsed more physical appearance anxiety. This finding is consistent with appearance anxiety literature which states that individuals who endorsed a high level of appearance anxiety typically avoid situations in which their appearance will be evaluated (Levinson & Rodebaugh, 2011). Black women who are more anxious about their appearance may be more hesitant to take and post photos and apprehensive about sharing these photos in an environment where they anticipate scrutiny.

With regard to body dissatisfaction, physical appearance comparison and skin color satisfaction, both occasional photo-sharers and frequent photo-sharers endorsed similar levels of body dissatisfaction, appearance comparison, and skin color satisfaction. These findings suggest that the amount of photo engagement that Black women participate in may not influence how dissatisfied they are with their body or skin complexion, nor how much they engage in appearance comparison. These findings are contrary to past studies in which participants who reported sharing more selfies had significantly higher mean scores of body image concerns among a sample of White adolescent girls (McLean et al., 2015). This inconsistency may be due to the racial and ethnic difference among participant groups across studies. As such, the current study helps to extend social media literature by highlighting the relationship among specific photo-related activities and detrimental mental health concerns among a diverse sample of Black women.

The second hypothesis focused on the relationship between photo investment and photo manipulation and various body image concerns. It was predicted that those who report greater photo investment and photo manipulation before posting photos will report greater levels of body dissatisfaction, appearance anxiety, appearance comparison, and skin color dissatisfaction. Hierarchical regression analyses were used to assess the unique and combined contributions of photo investment and photo manipulation in predicting body dissatisfaction, appearance anxiety, appearance comparison, and skin color satisfaction, after accounting for demographic variables such as age, FB intensity, motivation and overall photo engagement. The findings demonstrated that photo

investment and photo manipulation made unique and distinct contributions to each outcome variable of interest. Each of these is discussed next.

In testing for predictors of body dissatisfaction, results indicated there was a significant, positive relationship between body dissatisfaction and photo investment and photo manipulation. Participants who were more invested in their photos and engaged in more photo manipulation reported greater body dissatisfaction. These results align with current social media research that finds that the mere act of posting photos is negatively related to perceived physical attractiveness when comparing women who took and posted selfies to those women that did not (Fardouly, Willburger, & Vartanian, 2017). These findings also extend the literature that found a positive association between photo-based social media behaviors and body dissatisfaction among a sample of White, Australian born adolescent girls by demonstrating a similar relationship among Black women (McLean, Paxton, Wertheim & Masters, 2015). In regard to the t-tests performed in this study, this regression analysis may help to explain why there was no significant mean difference among frequent and occasional photo shares. Due to photo investment and photo manipulation emerging as significant predictors, results reveal that for Black women, body dissatisfaction may depend more on their attitudes toward the photographs, rather than how many photographs are uploaded. Inclusion of these variables is helpful in understanding how specific online photo-based activities can be experienced by Black women. The findings from this regression help to support the notion that endorsement of body dissatisfaction extends above and beyond patterns of photo engagement, to also include the attitudes (i.e., photo investment) and behaviors (i.e., photo manipulation) experienced prior to uploading photographs.

Photo investment and photo manipulation can also be considered an alternate form of body surveillance behavior, such that users are actively monitoring their online appearance by only allowing certain images to be displayed on their page (de Vries & Kuhne, 2015; Lindner et al., 2012; McKinley & Hyde, 1996). Furthermore, past research has shown that among White men and women, individuals who engaged in body surveillance behaviors endorsed higher body image concerns (Aubrey, 2006). In this study, examples of photo-based body surveillance behaviors include being overly invested in deciding which photos they want to upload and engaging in manipulation of those photos. These practices are similar to traditional body checking behaviors such as repeated weighing and repeated checking of one's reflection in a mirror (Mills, Musto, Williams, Tiggeman, 2018). The positive relationship that exists among photo manipulation, photo investment and body dissatisfaction may be attributed to Black women engaging in these online photo-based body surveillance behaviors.

Being that Instagram and Facebook are interactive platforms, one might also assume that women who engage in body surveillance behaviors through photo manipulation and investment-are also engaging in appearance comparison and attending to online feedback from their peers in the form of comments and likes (Fardouly & Vartanian, 2016). In testing for predictors of online appearance comparison, results indicated there was a significant, positive relationship between appearance comparison and photo investment and photo manipulation. Participants who were more invested in their photos and engaged in more photo manipulation were more likely to engage in physical appearance comparison with others online. This result was expected given the fact that social media is an interactive platform and individuals are exposed to a variety

of profiles to which they can compare their own profile appearance. The positive relationship that exists between photo-related behaviors and appearance comparison is supported by previous literature finding that women may use media content as a source of information on what to do in order to be perceived as more attractive (Franchina & Lo Coco, 2018). In an attempt to reduce body image concerns and emulate what is considered acceptable beauty standards, Black women may become preoccupied with the photos that they take and engage in photo manipulation as a form of impression management (Botta, 2000). Black women may continue to compare altered self-photos to peers and celebrities in an attempt to gain validation or monitor their appearance against their social media friends or the images that are displayed on their newsfeed.

Social support also emerged as a significant, positive predictor of appearance comparison, such that individuals who utilize the internet to access social support were more likely to engage in physical appearance comparison. Individual's that crave this feeling of community or being connected with others may seek out online interactions in which they can bond with likeminded people. Seeking support via photo-based social media platforms may create conditions in which users unconsciously seek out reinforcement about their self-enhanced appearance through engagement in appearance comparison. Research has shown that both negative and positive comments may remind users that other people are judging their appearance (Herbozo & Thompson, 2006). This reinforcement coupled with an overall motivation to seek support may cause Black women to unconsciously engage more frequently in appearance comparison behaviors when actively engaging in online social media activities.

In testing for predictors of appearance anxiety, results indicated that age, Facebook Intensity, and photo engagement were negatively associated with appearance anxiety. These findings revealed that older women who uploaded photos less frequently and were less emotionally connected to social networking sites also reported lower levels of appearance anxiety. This is consistent with existent literature which states that women who are hypervigilant over their appearance may not integrate social media into their daily lives as an attempt to manage appearance related concerns (Monro & Huon, 2005). Limited social media engagement and feeling emotionally disconnected from social media may be considered a logical response from someone who endorses appearance anxiety, since sites such as Instagram and Facebook focus heavily on appearance related content. Mabe et al. found that when compared to women who visited a neutral online site for 20 minutes, women who spent 20 minutes on Facebook endorsed a higher preoccupation with weight and shape concerns (2014). These data are also consistent with the t-test findings reported earlier in this study. Participants who endorsed higher levels of appearance anxiety also reported uploading less photos. Taking that into consideration, Black women may feel a decrease in their appearance anxiety when not engaged in social media, prompting them to spend less time on social networking sites.

Motivation for support emerged as having a positive, significant relationship with social appearance anxiety, such that individuals who access social media to obtain support from others reported more appearance anxiety. Black women's motivation to participate in social media to obtain support from others may be an attempt to emotionally connect with others without being as concerned with their physical appearance as they would if they were interacting with someone face-to-face. However,

because social media is an interactive platform, women may find themselves in situations in which they are feeling a heightened sense of appearance anxiety due to feeling a presence of others and overall interpersonal connectedness. Research has shown that feeling interpersonally connected with others online can potentially foster attitudinal change about oneself (Perloff, 2014). As a result, Black women who access the internet for a sense of connectedness with others may find that their feelings of anxiety are either maintained or intensified.

In an attempt to manage this anxiety, photo investment and photo manipulation may be employed. Both photo manipulation and photo investment had a positive relationship with social appearance anxiety, such that the more invested Black women were in their photos and more they engaged in photo manipulation, the more anxious they were about their appearance. These findings can be compared to current research that highlights that individuals who are concerned about their overall appearance may seek out methods to alter physical attributes in an attempt to reduce anxiety (Levinson & Rodebaugh, 2012). The results of this study reveal that engagement in photo investment and manipulation helps to maintain appearance anxiety rather than helping to reduce feelings of anxiousness. When altering photos in an attempt to make them resemble societal beauty standards, women may feel more anxious about whether these photographs meet beauty standards. This notion is supported by research which revealed that women who were able to retouch their photograph prior to posting felt more anxiety than those who posted their photograph without engaging in manipulation (Mills et al., 2018). Similar to research by Mills et al., engagement in photo manipulation within this study did not mitigate women's anxiety about their appearance. The positive relationship

between photo manipulation and investment could be explained by women paying more attention to their flaws and feeling dissatisfied with their appearance prior to altering and posting their photos, which may contribute to or help maintain their current level of appearance anxiety.

In an attempt to expand the literature regarding body image concerns among African American women, predictors of skin color satisfaction were explored. Analysis revealed that overall, older participants were more satisfied with the complexion of their skin. The positive relationship between age and skin color satisfaction is consistent with research that reveals that older women are more satisfied with aspects of their appearance (Tiggemann & McCourt, 2013). It also expands current research by introducing a salient appearance construct unique to Black women.

The relationship between skin color satisfaction and photo investment and photo manipulation was negative, indicating that individuals who were more dissatisfied with their skin engaged in higher levels of photo manipulation and were more invested in the type of photographs that they planned to post. These results reinforce assumptions made by previous authors who regarded skin tone as a body image factor that may be susceptible to habitual body monitoring or surveillance (Buchanan et al., 2008). Individuals who are dissatisfied with aspects of their body image are likely to attempt to alter specific features in order to achieve their desired physical appearance.  This behavior is similarly displayed within Fardouly & Rapee's (2019) study, such that women who were dissatisfied with their skin complexion utilized available photo manipulation features to hide blemishes and even their skin tone prior to posting their photographs online. The findings of this study extend Fardouly and Rapee's research by

presenting corroborating data among a population of Black women, suggesting that skin tone dissatisfaction is a unique facet of body image that is also maintained by photo manipulation, extending beyond an attempt to hide blemishes and uneven skin tone.

Motivations for engagement in social media for support yielded a negative relationship with skin color satisfaction, whereas motivation for entertainment yielded a positive relationship. Within this sample, women who accessed social media for social support reported being less satisfied with their skin complexion. This finding may be attributed to women turning to social media for support from peers about discontented feelings or reinforcement that their skin complexion is beautiful. In contrast, women who use the internet to seek entertainment (e.g., forget about work or other things, relax, feel excited, pass the time) are more satisfied with their skin complexion. This may be due to those women engaging in social media for more neutral reasons rather than to build relationships and emotionally connect with other people. The findings from this study reflect Fardouly and Rapee's (2019) research, such that women who viewed attractive selfies of other women were more dissatisfied with their facial features than women who viewed appearance controlled neutral images. Both findings serve as unique contributions to the literature and may explain what underlying factors are influential in the relationship between social media motivation and skin color satisfaction among black women.

Taking all of the findings into consideration, this study helps to fill in current gaps within the literature by studying these variables among a sample comprised entirely of Black women. These findings take a closer look at the experiences of a population by that has been underrepresented in social media and body image research thus far. In an

attempt to reduce appearance related concerns, Black women may find themselves spending more time choosing the "right" picture to manipulate before uploading onto their profiles. Although photo investment and photo manipulation may be used to prevent or reduce appearance related concerns, engaging in these body surveillance behaviors may ultimately help exacerbate body image issues.

Consistent with the objectification theory, Black women who have internalized a societal emphasis on attending to their outward appearance have utilized body surveillance behaviors to help emulate current standards of beauty. Through habitual manipulation of their photographs and overall investment in the photographs that they choose to upload, Black women continue to fall victim to self-objectification inadvertently perpetuating unrealistic standards of beauty. This is expected given the larger racist, misogynistic culture that Black women are expected to navigate. Specifically, results reveal that exposure to the "ideal" woman presented by the media is especially harmful to Black women in a society where women are undervalued and objectified. As a result of the heighted accessibility of idealized images, Black women may be unconsciously adopting unrealistic beliefs about how their bodies should look in order to be celebrated by society.

**Limitations**

Several study limitations should be acknowledged. One limitation was the self-report nature of the study. Women were expected to be reflective and not only report on their social media usage, but also on more personal facets related to body image concerns. Specific questions related to how they view specific body parts, anxiety about their appearance, and photo manipulation tendencies may have caused some discomfort

among participants, potentially resulting in socially desirable responses. The length of the survey may have served as another limitation. Participants were asked to complete a survey that took between 15 and 25 minutes to complete. Due to the length and time commitment, survey respondents may have answered the items that were presented later in the survey with less accuracy, inadvertently introducing the possibility of respondent fatigue.

Although there were steps taken to reduce the possibility of selection bias, participants were mainly recruited through the social media platforms used by the primary investigator and those affiliated within a close network. As such, this made it difficult to get a true random sample and subject participants may have responded in a similar fashion in comparison to individuals that extend beyond the recruited population.

Although Facebook and Instagram share many similarities relating to their emphasis on photo sharing, both sites have different features that add to their uniqueness. For example, Instagram is mainly a photo-based site in which the users interact with one another by uploading and viewing pictures and through more photo-based communication such as likes and comments; whereas there are multiple ways for users to engage with Facebook (i.e., news feed, accessing events, joining groups, and being exposed to traditional advertisement). Because of these differences, participants may have had different photo-based experiences based on the site that they frequent most often. For instance, women who spent more time on Facebook may have been exposed to more neutral imagery or other forms of media in comparison to Instagram users. This may have been a factor that influenced the experience of the women and should be considered while interpreting the results.

Lastly, the Cronbach's alpha for the Skin Color Dissatisfaction Scale (.60) also serves as a limitation of the study. Skin color satisfaction is a fairly underexplored variable, so identifying appropriate measures were scarce and interpretations of these findings should be interpreted with cautioned

**Future Research**

The present study suggests additional research should be conducted to further examine to the relationship between engagement in social media and body image concerns. As social media continues to grow in popularity and accessibility, it is imperative that research reflects the evolution of mass media. Moving forward, research should continue to identify unique characteristics of social networking and develop constructs and associated measures that captures the nuances of online media. Future studies should also consider the impact of engagement in SnapChat, a similar online photo-based social networking site. This study did not include SnapChat because of the limited timeframe that pictures are accessible on the app (24 hours); however, given this time limit it may be interesting to highlight the relationship between engagement in photo-based activities on SnapChat and body image concerns. Particularly honing in on how the lack of permanency influences body dissatisfaction, self-esteem, and opportunities for appearance comparison. Consistent with continuing to explore the uniqueness of social media, it will be important to expand the literature by examining the relationship among likes, comments, and photo manipulation and photo investment. It may also be important to research the how engagement in self-surveillance in the form of checking comments and likes relates to body image concerns. This would be a beneficial contribution to the literature considering the strong correlation that exists between body-

surveillance and body dissatisfaction (Morandi, 2010; Tiggemann & Slater, 2013; McLean et al., 2015).

Consistent with the goal of the present study, continuing to explore the impact of engagement in social media from a multicultural perspective is imperative. Future research should consider highlighting the relationship among social media usage and satisfaction by examining other phenotypical characteristic unique to black women, such as hair, lip size, and nose width. In addition to shape and weight related concerns, research shows that Black women may have more body image issues related to specific body parts, so it is important to continue to explore the relationship between these specific features and photo investment and manipulation (Botta, 2000). Lastly, there is minimal literature that considers how men are impacted by specific social media engagement, so it is important to expand this research to investigate the relationship between participating in social media and body image concerns among men.

**Implications**

An important contribution of this study that extends the previous literature is that it explored the relationship among specific social media activities and body image concerns among an underrepresented population in current media literature. Previous research has shown the impact of photo investment and photo manipulation among a largely White sample (McLean et al., 2015; Lonergan et al., 2019), however this study aimed to highlight the unique experiences of Black women. Due to the accessibility and popularity of social networking, it is important for clinicians to be mindful of the intersection of race and gender while addressing body image concerns within a therapeutic context.

Previous research has linked body dissatisfaction to eating disorders, depression, and a number of other mental health related concerns (Monro & Huon, 2005; Moradi, 2010; Aubrey, 2006; Lindner et al., 2012). As such, it is imperative to recognize how social media usage helps to maintain body dissatisfaction and potentially cause participants to develop consequent pathologies. Also, recognizing that photo investment and photo manipulation were linked to each variable of interest (body dissatisfaction, appearance anxiety, appearance comparison, and skin color satisfaction), it is important to develop programming, curriculum, or therapeutic interventions that will serve as a protective factor to buffer the negative mental health effects of engagement in social media. Prevention programs should be culturally inclusive, and include psychoeducation about the impact of participation in social media, ways to modify social media usage to reduce exposure to unhealthy images, and coping skills to help manage the detrimental effects of not receiving positive feedback from online peers, especially for those that use social media to connect with others and solicit support from others.

**Conclusion**

This study aimed to expand the literature related to specific social media photo-based activities by exploring the relationship among photo investment and photo manipulation, and several variables related to body image concern among a sample of Black women. Previous research has shown that women who use the internet for more photo-related behaviors may endorse higher levels of body dissatisfaction than women who engage social networking sites for other reasons (Lonergan, et al., 2019). This study takes this finding further by highlighting similar variables of interest (i.e., appearance anxiety, appearance comparison, and skin color satisfaction), ultimately revealing that

specific photo based activities help to maintain body image concerns that extends beyond body dissatisfaction. Although women may engage in photo manipulation as an attempt to reduce uncomfortable feelings related to their physical appearance, having more investment in the types of photographs that are posted along with modifying pictures prior to posting actually contributes to a cyclical process that helps to maintain dissatisfaction with one's body.

In conclusion, by examining these variables from a multicultural lens, the findings of this study have highlighted that this self-perpetuating cycle exists among White and Black women alike. In addition to examining the relationship among these variables within an underrepresented sample, this study also introduced skin color satisfaction, a unique appearance variable that is often overlooked in appearance related research. Future research on social media should continue to uncover and explore the impact of photo-based activities on mental health from a multicultural lens.

References

Aardoom, J. J., Dingemans, A. E., Slof Op'T Landt, Margarita, C. T., Van Furth, E. F.

 (2012). Norms and discriminative validity of the eating disorder examination

 questionnaire  (EDE-Q). *Eating Behaviors, 13, 305-309.*

Al-Menayes, J. J. (2015). Motivations for using social media: An exploratory factor

 analysis. *International Journal of Psychological Studies, 7*, 43-50.

Andsager, J. L. (2014). Research directions in social media and body image. *Sex Roles

 (71),* 407-413.

Aubrey, J. S. (2006). Exposure to sexually objectifying media and body self-perceptions

 among college women: An examination of the selective exposure hypothesis and

 the role of moderating variables. *Sex Roles, 55,* 159-172.

Awad, G. H., Norwood, C., Taylor, D. S., Martinez, M., McClain, S., Jones, B., Holman,

 A., & Chapman-Hilliard, C. (2014). Beauty and body image concerns among

 African American college women. *Journal of Black Psychology, 6,* 540-564.

Bailey, S. D., & Ricciardelli, L. A. (2010). Social comparisons, appearance related

 comments, contingent self-esteem and their relationships with body

 dissatisfaction and eating disturbance among women. *Eating Behaviors, 11, 107-

 113.*

Botta, R. A. (1999). Television images and adolescent girls' body image disturbance.

 *Journal of Communication, 49,* 22-41.

Botta, R. A. (2000). The mirror of television: A comparison of Black and White

 adolescents' body image. *Journal of Communication, 50,* 144-159.

Buchanan, T. S., Fischer, A. R., Tokar, D. M., & Yoder, J. D. (2008). Testing a culture-specific extension of objectification theory regarding African American women's body image. *The Counseling Psychologist, 36,* 697-718.

Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes, 102,* 3- 21.

Cafri, G., Tamamiya, Y., Brannick, M., & Thompson, K. (2005). The influence of sociocultural   factors on body image: A meta-analysis. *Clinical Psychology: Science and Practice, 12,* 215-239.

Calogero, R. M., Herbozyo, S., & Thompson, J. K. (2009). Complimentary weightism: The potential costs of appearance-related commentary for women's self-objectification. *Psychology of Women Quarterly, 33,* 120-132.

Capodilupo, C. M, & Kim, S. (2014). Gender and race matter: The importance of considering intersections in Black women's body image. *Journal of Counseling Psychology, 61,* 37-49.

Carey, R. N., Donaghue, N., & Broderick, P. (2014). Body image concern among Australian adolescent girls: The role of body comparisons with models and peers. *Body Image, 11,* 81-84.

Carter, J. C., Stewart, D. A., & Fairburn, C. G. (2001). Eating disorder examination questionnaire: Norms for young adolescent girls. *Behavior Research and Therapy, 39,* 625-632.

Choma, B. L., Visser, B. A., Pozzebon, J. A., Bogaert, A. F., Busseri, M. A., & Sadava,

    S. W. (2010). Self-objectification, self-esteem, and gender: Testing a moderated

    mediation model. *Sex Roles, 63,* 645-656.

Cohen, J.M., Cohen, P, West, S. G., & Aiken, L. S. (2003). *Applied multiple*

    *regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah,

    NJ: Erlbaum.

Cohen, R., & Blaszczynski, A. (2015). Comparative effects of Facebook and

    conventional   media on body image dissatisfaction. *Journal of Eating Disorders,*

    *3,* 23-35.

de Vries, D. A., & Kuhne, R. (2015). Facebook and self-perception: Individual

    susceptibility to negative social comparison on Facebook. *Personality and*

    *Individual Differences, 86,* 217-221.

Dittmar, H. (2009). How do "body perfect" ideals in the media have a negative impact on

    body image and behaviors? Factors and processes related to self and identity.

    *Journal of Social and Clinical Psychology, 28*(1), 1-8.

Dohnt, H. K., & Tiggemann, M. (2006). Body image concerns in young girls: The role of

    peers and media prior to adolescence. *Journal of Youth and Adolescence, 35,* 135-

    145.

Duggan, M. (2015). Social media update 2014. Retrieved from

    http://www.pewinternet.org/2015/01/09/social-media-update-2014/

Evans, P. C., & McConnell, A. R. (2003). Do racial minorities respond in the same way to mainstream beauty standards? Social comparison processes in Asian, Black, and White women. Self and Identity, 2, 153-167.

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*(4), 1143-1169.

Eveland, W. P., (2003). A "mix of attributes" approach to the study of media effects and new communication technologies. *Journal of Communication, 53,* 395- 410.
    Falconer, J. W., & Neville, H. A. (2000). African American college women's body image: An examination of body mass, African self-consciousness, and skin color satisfaction. *Psychology of Women, 24,* 236-243.

Fairburn, S. J., & Beglin (1994). Assessment of eating disorder psychopathology: Interview or self-report questionnaire? *The International Journal of Eating Disorders, 16,* 363- 370.

Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image, 13,* 38-45.

Fardouly, J., & Rapee, R. M. (2019). The impact of no-makeup selfies on young women's body image. *Body Image, 28,* 128-134.

Fardouly, J., & Vartanian, L. R. (2016). Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology, 9,* 1-5.

Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance mediate the relationship between Facebook usage and body image concerns. *Body Image, 12,* 82.88.

Faul, F., Erdfelder, E., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavioral Research Methods, 39*(2), 175-191.

Ferguson, C. J., Winegard, B., & Winegard, B.M. (2011). Who is the fairest one of all? How evolution guides peer and media influence on female body dissatisfaction. *Review of General Psychology, 15(1), 11-28.*

Festnger, L. (1954). A theory of social comparison process. *Human Relations, 7,* 117 – 140.

Frederickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21,* 173-206.

Frisby, C. M. (2004). Does race matter? Effects of idealized images on African American women's perceptions of body esteem. *Journal of Black Studies, 34,* 323-347.

Fujioka, Y., Ryan, E., Agle, M., Legaspi, M., & Toohey, R. (2009). The role of racial identity in responses to thin media ideals: Differences between White and Black college women. *Communication Research, 36,* 451- 474.

Furman, K., & Thompson, J. K. (2002). Body image, teasing, and mood alterations: An experimental study of exposure to negative verbal commentary. *International Journal of Eating Disorders, 32,* 449-457.

Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise. *The Journal of Psychology, 136,* 581-596.

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders, 2,* 15-34.

Goldfield, A., & Chrisler, J. C. (1995). Body stereotyping and stigmatization of obese persons by first graders. *Perceptual and Motor Skills, 81,* 909- 910.

Grabe, S., Hyde, J. S., & Ward, L. M. (2008) The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134,* 460-476.

Groesz, Lisa, Levine, Michael, Murnen, Sarah (2002). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. International Journal of Eating Disorders, 31(1), 1-16.

Halliwell, E., & Dittmar, H. (2004). Does size matter? The impact of model's body size on women's body-focused anxiety and advertising effectiveness. *Journal of Social and Clinical Psychology, 23,* 104-122.

Hargreaves, D. A., & Tiggemann, M. (2004). Idealized media images and adolescent body image: "comparing" boys and girls. *Body Image, 1*(4), 351-361.

Harris, S. (1994). Racial differences and predictors of college women's body image attitudes. *Women and Health, 21,* 89 -104.

Hart, T. A., Flora, D. B., Palyo, S. A., Fresco, D. M., Holle, C., & Heimberg, R. G.

(2008). Development and examination of the social appearance anxiety scale.

*Assessment, 15*(1), 48-59.

Herbozo, S. (2004). *The development and validation of the verbal commentary on*

*physical appearance scale* (Doctoral dissertation)*.* Retrieved from Graduate

School at Scholar Commons.

Herbozo, S., Menzel, J. E., Thompson, J. K. (2013). Differences in appearance-related

commentary, body dissatisfaction, and eating disturbance among college women

of varying weight groups. *Eating Behaviors, 14,* 204-206.

Herbozo, S., & Thompson, J. K. (2006). Appearance-related commentary, body image,

and self-esteem: Does the distress associated with the commentary matter? *Body*

*Image, 3,* 255- 262.

Herbozo, S., & Thompson, J. K. (2006). Development and validation of the verbal

commentary on physical appearance scale: Considering both positive and

negative commentary. *Body Image, 3,* 335- 344.

Hesse-Biber, S. N., Howling, S., Leavy, P., & Lovejoy, M. (2004). Racial identity and

the development of body image issues among African American adolescent girls.

*The Qualitative Report, 9,* 49-79.

Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human*

*Behavior, 27,* 662-676.

Hofschire, L. J., & Greenberg, B. S. (2001). Media's impact on adolescents' body

    dissatisfaction. In Brown, J. D., Steele, J. R., & Walsh-Childres, K. (Eds.). Sexual

    teens, sexual media: Investigating media's influence on adolescent sexuality. New

    York: Routledge

Howard, J.M., Heron, K. E., MacIntyre, R. L., Myers, T. A., & Everhart, R. S. (2017). Is

    use of social networking sites associated with young women's body

    dissatisfaction and disordered eating? A look at Black – White racial differences.

    *Body Image, 23*, 109-113.

Instagram. (2013). Instagram statistics. Retrieved from http://instagram.com/press.

Instagram. (2014). Retrieved from http://blog.instagram.com/post/27359237977/2-years-

    later-the-first-instagram-photo.

Jones, D. (2004). Body image among adolescent girls and boys: A longitudinal study.

    *Developmental Psychology, 40,* 823-835.

Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during adolescence:

    Gender and body mass variations. *Journal of Youth and Adolescence, 2,* 257-269.

Kalnes, K. (2013). Influence of social media usage on adolescent females' perceptions of

    their body image (Doctoral Dissertation). Retrieved from ProQuest Dissertations

    and Theses. (11789)

Kelch-Oliver, K., & Ancis, J. R. (2011). Black women's body image: An analysis of

    culture-specific influences. *Women and Therapy, 34*(4), 345- 358.

Kelly, N. R., Cotter, E. W., & Mazzeo, S. E. (2012). Eating disorder examination

    questionnaire  (EDE-Q): Norms for Black women. *Eating Behaviors, 13,* 429-

    432.

Kim, Y., Sohn, D., & Choi, S.M. (2011). Cultural differences in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior, 27,* 365- 372.

Krogstad, J. M. (2015). Social media preferences vary by race and ethnicity. Retrieved from http://www.pewresearch.org/fact-tank/2015/02/03/social-media-preferences-vary-by-race-and-ethnicity/

Lee, H., Lee, H. E., Choi, J., Kim, J. H., & Han, H. L. (2014). Social media use, body image, and psychological well-being: A cross-cultural comparison of Korea and the United States. *Journal of Health Communication, 19,* 1343- 1358.

Levine, M.P. & Harrison, K. (2009). Effects of media on eating disorders and body image. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research 3rd ed.* (pp. 490 – 516). New York, NY: Routledge.

Levinson, C. A., & Rodebaugh, T. L. (2012). Social anxiety and eating disorder comorbidity: The role of negative social evaluation fears. *Eating Behaviors, (13),* 27-35.

Lindner, D., Tantleff-Dunn, S., & Jentsch, F. (2012). Social comparison and the "Circle of objectification." *Sex Roles, 67*(3), 222-235.

Lonergan, A. R., Bussey, K., Mond, J., Brown, O., Griffiths, S., Murray, S. B., & Mitchison, D. (2019). Me, my selfie, and I: The relationship between editing and posting selfies and body dissatisfaction in men and women. *Body Image, 28,* 39-43.

Luce, K. H., Crowther, J. H., & Pole, M. (2008). Eating Disorder Examination Questionnaire (EDE-Q): Norms for undergraduate women. *International Journal of Eating Disorders, 41,* 273-276.

Mabe, A. G., Forney, K. J., Keel, P. K. (2014). Do you "like" my photo? Facebook use maintains eating disorder risk. *International Journal of Eating Disorders, 47*, 516- 523.

McCabe, M. P. & Ricciardelli, L. A. (2005). A prospective study of pressures from parents, peers, and the media on extreme weight change behaviors among adolescent boys and girls. *Behavior Research and Therapy, 43,* 653-668.

McKinley, N. M., & Hyde, J. S. (1996). The objectified body consciousness scale. *Psychology of Women Quarterly, 20,* 181-215.

McLean, S. A., Paxton, S. J., Wertheim, E. H., Masters, J. (2015). Photo-shopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *International Journal of Eating Disorders, 48,* 1132-1140.

Mier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking, 17,* 199- 206.

Mills, J. S., Musto, S., Williams, L., & Tiggemann, M. (2018). "Selfie" harm: Effects on mood and body image in young women. *Body Image, 27*, 86-92.

Mond, J. M., Hay, P. J., Rodgers, B., Owen, C., & Beaumont, P. J. V. (2006). Eating disorder examination questionnaire (EDE-Q): Norms for young adult women. *Behavior Research and Therapy, 44, 53-62*.

Monro, F., & Huon, G. (2005). Media-portrayed idealized images, body shape, and appearance anxiety. *International Journal of Eating Disorders, 38*(1), 85-90.

Myers, T. A., & Crowther, J. H (2009). Social comparison as a predictor of body dissatisfaction: A meta-analytic review. *Journal of Abnormal Psychology, 118,* 683-698.

Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys

Nielsen (2014). *The digital consumer: Consumer Report.* New York: The Nielsen Company. Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles, 71,* 363-377.

Perez, M., & Joiner, T. E. (2003). Body image dissatisfaction and disordered eating in Black and White women. *International Journal of Eating Disorders, 33,* 342-350.

Peterson, C. B., Crosby, R. D., Wonderlich, S. A., Joiner, T., Crow, S. J., Mitchell, J. E., et al. (2007). Psychometric properties of the eating disorder examination-questionnaire: Factor structure and internal consistency. *International Journal of Eating Disorders, 40,* 386-289.

Poran, M. A. (2006). The politics of protection: Body image, social pressures, and the misrepresentation of young Black women. *Sex Roles, 55,* 739-755.

Sanderson, S., Lupinski, K., & Moch, P. (2013). Is big really beautiful? Understanding body image perceptions of African American females. *Journal of Black Studies, 44,* 496- 507.

Shroff, H., & Thompson, J. (2006). Peer influences, body image satisfaction, eating

dysfunction and self-esteem in adolescent girls. *Journal of Health Psychology,*

*11,* 533- 551.

Slater, M. D. (2007). Reinforcing spirals: The mutual influence of media selectivity

and media effects and their impact on individual behavior and social identity.

*Communication Theory, 17,* 281-303.

Stefanone, M. A., Lackaff, D., & Rosen, D. (2011). Contingencies of self-worth and

social-networking-site behavior. *Cyberpsychology, Behavior and Social*

*Networking, 14,* 41-49.

Streiner, D.L. (2003). Being inconsistent about consistency: When coefficient alpha

does and does and doesn't matter. *Journal of Personality Assessment, 80*(3), 217-

222.

Stormer, S. M., & Thompson, J. K. (1996). Explanations of body image disturbance: A

test of  maturational status, negative verbal commentary, social comparison,

and sociocultural hypotheses. *International Journal of Eating Disorders, 19,* 193-

202.

Taniguchi, E., & Lee, H. E. (2012). Cross-cultural differences between Japanese and

American  female college students in the effects of witnessing fat talk on

Facebook. *Journal of Intercultural Communication Research, 41,* 260-278.

Thompson, J. K., & Heinberg, L. J. (1993). Preliminary test of two hypotheses of body

image disturbance. *International Journal of Eating Disorders, 14*, 59 -63.

Thompson, J. K., Heinberg, L., Altabe, M. N., & Tantleff-Dunn, S. (1999). *Exacting Beauty: Theory, Assessment, and Treatment of Body Image Disturbance.* Washington: American Psychological Association.

Thompson, J. K., Heinberg, L. J., & Tantleff, S. (1991). The physical appearance comparison scale (PACS). *The Behavior Therapist, 14,* 174.

Thompson, J. K., Herbozo, S., Himes, S., & Yamamiya, Y. (2005). Effects of weight related teasing in adults. In K. Brownell, R. M. Puhl, M. B. Schwartz, & L. Rudds (Eds.), Weight bias: Nature, consequences, and remedies (pp. 137-149). New York, NY: Guilford Press.

Tiggemann, M. (2005). Television and adolescent body image: The role of program content and viewing motivation. *Journal of Social & Clinical Psychology, 24,* 192-213.

Tiggemann, M., & Lynch, J. E. (2001). Body image across the life span in adult women: The Role of self-objectification. *Developmental Psychology, 37,* 243-253.

Tiggemann, M., & McCourt, A. (2013). Body appreciation in adult women: Relationships with age and body satisfaction. *Body Image,* 10, 624-627.

Tiggemann, M., & Slater, A. (2013). Netgirls: The internet, Facebook, and body image concerns in adolescent girls. *International Journal of Eating Disorders, 46,* 630-633.

Tiggemann, M., & Slater, A. (2014). NetTweens: The Internet and body image concerns in preteenage girls. *Journal of Early Adolescence, 34,* 606-620.

Turner, J. S. (2014). Negotiating a media effects model: Addendums and adjustments to Perloff's framework for social media's impact on body image concerns. *Sex Roles, 71,* 393-406.

Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences, 86,* 249-256.

Wheeler, L., & Miyake, K. (1992). Social comparison in everyday life. *Journal of Personality and Social Psychology, 62,* 760-774.

Wood, J. V. (1989). Theory and research concerning social comparisons of personal attributes. *Psychology Bulletin, 106*, 231-248.

Wood, J. V., & Taylor, K. L. (1991), Serving self-relevant goals through social comparison. In J. Suls & T. A. Wills (Eds), *Social comparison: Contemporary theory and research* (pp. 23-49). Hillsdale: NJ: Lawrence Erlbaum Associates.

**Appendix A**

**Tables**

Table 1

*Frequencies and Percentages of Categorical Demographic Variables*

| Variable | N | % |
|---|---|---|
| Education | | |
| High School Diploma | 33 | 9.9 |
| Some College Education | 187 | 56.2 |
| Trade/Technical/Vocational Training | 56 | 16.8 |
| College Graduates | 8 | 2.4 |
| Some Professional or Graduate Education | 12 | 3.6 |
| Professional/Graduate Degree | 37 | 11.1 |
| | | |
| Daily Time Spent on Facebook | | |
| I do not have a Facebook Account | 117 | 35.1 |
| 11 – 30 minutes | 55 | 16.5 |
| 31 – 59 minutes | 43 | 12.9 |
| 1 – 2 hours | 46 | 13.8 |
| 2 – 3 hours | 26 | 7.8 |
| More than 3 hours | 46 | 13.8 |
| | | |
| Daily Time Spent on Instagram | | |
| I do not have an Instagram Account | 49 | 14.7 |
| 11 – 30 minutes | 58 | 17.4 |
| 31 – 59 minutes | 63 | 18.9 |
| 1 – 2 hours | 73 | 21.9 |
| 2 – 3 hours | 42 | 12.6 |
| More than 3 hours | 48 | 14.4 |
| | | |
| Selfie Photo Taking Habits | | |
| Less than once a month | 33 | 9.9 |
| At least once a month | 77 | 23.1 |
| At least once a week | 152 | 45.4 |
| At least once a day | 52 | 15.6 |
| More than twice a day | 17 | 5.1 |
| | | |
| Usies Photo Taking Habits | | |
| Less than once a month | 57 | 17.1 |
| At least once a month | 148 | 44.4 |
| At least once a week | 106 | 31.8 |
| At least once a day | 20 | 6.0 |
| More than twice a day | 2 | .6 |
| | | |
| Device Used to Access SNS | | |
| Laptop | 8 | 2.4 |
| Tablet | 3 | .9 |
| Smartphone | 322 | 96.7 |

Table 2

*Means, Standard Deviations, and Cronbach's Alphas for All Measures*

| Variable | *M* | *SD* | *Alpha* |
|---|---|---|---|
| SNSFriends | 2.84 | .90 | .79 |
| SNSSupport | 2.27 | .93 | .87 |
| SNSEntertainment | 3.61 | .66 | .63 |
| FBIntensity | 35.38 | 10.86 | .78 |
| Photo Engagement | 2.08 | .62 | --- |
| Photo Investment | 55.19 | 16.14 | .74 |
| Photo Manipulation | 1.96 | .72 | .88 |
| Body Dissatisfaction | 2.51 | 1.56 | .92 |
| Appearance Anxiety | 2.14 | .95 | .95 |
| Appearance Comparison | 2.50 | .77 | .72 |
| Skin Color Satisfaction | 7.32 | 1.44 | .60 |

*Note. N = 333.* For all scales, higher scores are indicative of more extreme responding in the direction of the construct assessed.
SNSFriends = Social Networking Sites Motivation Scale Friends Subscale,
SNSSupport = Social Networking Sites Motivation Scale Support Subscale,
SNSEntertainment = Social Networking Sites Motivation Entertainment subscale,
FBIntensity = Facebook Intensity.
*M*= Mean; *SD* = Standard Deviation; *Alpha* = Cronbach's Alpha

Table 3

*Pearson Product-moment Correlation of Continuous Variable*

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | 1 | | | | | | | | | | | |
| 2. FBInten | .23*** | 1 | | | | | | | | | | |
| 3. SNMFrnds | -.19*** | .30*** | 1 | | | | | | | | | |
| 4. SNMSuprt | -.16*** | .21*** | .53*** | 1 | | | | | | | | |
| 5. SNMEnter | -.09 | .32*** | .37*** | .36*** | 1 | | | | | | | |
| 6. PhotoInvst | -.15** | .03 | .03 | .20 | .22*** | 1 | | | | | | |
| 7. PhotoMnip | -.20*** | .21*** | .25*** | .29*** | .15** | .17** | 1 | | | | | |
| 8. AppAnx | -.32*** | -.07 | .15** | .30*** | .20*** | .36*** | .46*** | 1 | | | | |
| 9. BodyDiss | -.11* | .07 | .12* | .21*** | .21*** | .29*** | .31*** | .63*** | 1 | | | |
| 10. SkinClrSat | .25*** | -.08 | -.18*** | -.32*** | -.06 | -.18** | -.49*** | -.48*** | -.20*** | 1 | | |
| 11. PhApCmp | -.11* | .12* | .20*** | .28*** | .24*** | .36*** | .41 | .60*** | .57*** | -.40*** | 1 | |
| 12. PhEngage | .11* | .42*** | .16** | .16** | .04 | -.12* | .08 | -.15** | .01 | .40*** | .02 | 1 |

Note. *p < .05, **p < .01, *** p < .001
FBInten = Facebook Intensity, SNMFrnds = Social Networking Motivation Friends
subscale, SNMSuprt = Social Networking Motivations Support subscale, SNMEnter =
Social Networking Motivation Entertainment subscale, PhotoInvst = Photo Investment,
PhotoMnip = Photo Manipulation, AppAnx = Appearance Anxiety, BodyDiss=
Body Dissatisfaction, SkinClrSat = Skin Color Satisfaction, PhApCmp =
Physical Appearance Comparison, PhEngage = Photo Engagement

Table 4

*Independent Samples t-Test for Occasional Photo Sharers and Frequent Photo Sharers and Appearance Related Variables*

| | *OPS* | | *FPS* | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Variable* | *M* | *SD* | *M* | *SD* | *t(df)* | *P* | *95%CI* | *MD* |
| BodyDiss | 2.51 | 1.62 | 2.51 | 1.50 | .26(326) | .98 | [-.35, .36] | .01 |
| PhyAppearanceAnx | 2.25 | .98 | 1.96 | .86 | 2.73** (279.34) | .007 | [.08, .49] | .28 |
| PhyAppComp | 2.37 | 1.43 | 2.14 | 1.27 | 1.46(271.33) | .146 | [-.08, .53] | .22 |
| SkinColorSat | 7.24 | 1.52 | 7.46 | 1.31 | -1.37(276.10) | 1.73 | [-.54, .10] | -.219 |

Note: BodyDiss = Body dissatisfaction, PhyAppearanceAnx = Physical Appearance Anxiety, PhyAppearanceComp Physical Appearance Comparison, SkinColorSat = Skin Color Satisfaction, OPS = Occasional Photo Sharer, FPS = Frequent Photo Sharer. *M*= Mean; *SD* = Standard Deviation; *MD* = Mean Difference.
*p < .05; **p < .01; ***p < .001.

Table 5.
*Hierarchical Multiple Regression; Predictors of Body Dissatisfaction*

| | B | Std. Error | β | $R^2$ | $\Delta R^2$ |
|---|---|---|---|---|---|
| Step 1: | | | | .070*** | -- |
| (Constant) | 1.01 | .52 | -- | | |
| Age | -.17 | .12 | -.09 | | |
| Friends | -.08 | .12 | -.05 | | |
| Support | .27 | .11 | **.16*** | | |
| Entertainment | .36 | .15 | **.15*** | | |
| FB Intensity | .003 | .01 | .02 | | |
| | | | | | |
| Step 2: | | | | .070*** | .000 |
| (Constant) | 1.06 | .60 | -- | | |
| Age | -.17 | .12 | -.09 | | |
| Friends | -.08 | .12 | -.05 | | |
| Support | .27 | .11 | **.16*** | | |
| Entertainment | .35 | .15 | **.15*** | | |
| FB Intensity | .004 | .01 | .03 | | |
| Photo Engagement | -.04 | .16 | -.01 | | |
| | | | | | |
| Step 3: | | | | **.180*** | **.109*** |
| (Constant) | -.77 | .64 | -- | | |
| Age | -.01 | .11 | -.003 | | |
| Friends | -.08 | .11 | -.05 | | |
| Support | .21 | .11 | .13 | | |
| Entertainment | .25 | .14 | .11 | | |
| FB Intensity | -.01 | .01 | -.05 | | |
| Photo Engagement | .06 | .15 | .02 | | |
| Photo Investment | .02 | .01 | **.22*** | | |
| Photo Manipulation | .53 | .13 | **.24*** | | |

*p < .05; **p < .01; ***p < .001.

Table 6.
*Hierarchical Multiple Regression; Predictors of Social Appearance Anxiety*

| | B | Std. Error | β | $R^2$ | $\Delta R^2$ |
|---|---|---|---|---|---|
| Step 1: | | | | .188*** | -- |
| (Constant) | 1.79 | .31 | -- | | |
| Age | -.30 | .07 | -.26*** | | |
| Friends | -.06 | .07 | -.06 | | |
| Support | .27 | .06 | .26*** | | |
| Entertainment | .19 | .08 | .14* | | |
| FB Intensity | -.01 | .01 | -.09 | | |
| | | | | | |
| Step 2: | | | | .204*** | .017* |
| (Constant) | 2.11 | .33 | -- | | |
| Age | -.30 | .07 | -.25*** | | |
| Friends | -.05 | .07 | -.05 | | |
| Support | .28 | .06 | .28*** | | |
| Entertainment | .16 | .08 | .12* | | |
| FB Intensity | -.003 | .01 | -.03 | | |
| Photo Engagement | -.22 | .09 | -.15* | | |
| | | | | | |
| Step 3: | | | | .394*** | .189*** |
| (Constant) | 2.43 | .29 | -- | | |
| Age | -.17 | .06 | -.14** | | |
| Friends | -.06 | .06 | -.06 | | |
| Support | .22 | .06 | .22*** | | |
| Entertainment | .10 | .07 | .07 | | |
| FB Intensity | -.01 | .01 | -.14* | | |
| Photo Engagement | -.15 | .08 | -.09* | | |
| Photo Investment | .02 | .003 | .25*** | | |
| Photo Manipulation | .47 | .07 | .36*** | | |

*$p$ < .05; **$p$ < .01; ***$p$ < .001.

Table 7.
*Hierarchical Multiple Regression; Predictors of Online Physical Appearance Comparison*

| | B | Std. Error | β | $R^2$ | $\Delta R^2$ |
|---|---|---|---|---|---|
| Step 1: | | | | **.106*** | -- |
| (Constant) | 1.52 | .27 | -- | | |
| Age | -.08 | .06 | -.08 | | |
| Friends | .01 | .06 | .01 | | |
| Support | .17 | .05 | **.20** | | |
| Entertainment | .16 | .07 | **.14*** | | |
| FB Intensity | .004 | .004 | .05 | | |
| | | | | | |
| Step 2: | | | | **.108*** | .002 |
| (Constant) | 1.60 | .29 | -- | | |
| Age | -.08 | .06 | -.08 | | |
| Friends | .01 | .06 | .01 | | |
| Support | .17 | .05 | **.21** | | |
| Entertainment | .15 | .07 | **.13*** | | |
| FB Intensity | .01 | .01 | .07 | | |
| Photo Engagement | -.06 | .08 | -.04 | | |
| | | | | | |
| Step 3: | | | | **.290*** | **.183*** |
| (Constant) | .43 | .29 | -- | | |
| Age | .03 | .05 | .03 | | |
| Friends | .01 | .05 | .01 | | |
| Support | .14 | .05 | **.16** | | |
| Entertainment | .09 | .07 | .08 | | |
| FB Intensity | -.002 | .004 | -.02 | | |
| Photo Engagement | .006 | .067 | .01 | | |
| Photo Investment | .01 | .002 | **.30*** | | |
| Photo Manipulation | .33 | .06 | **.31*** | | |

*p* < .05; **p* < .01; ***p* < .001.

Table 8.
*Hierarchical Multiple Regression; Predictors of Skin Color Satisfaction*

| | B | Std. Error | β | $R^2$ | $\Delta R^2$ |
|---|---|---|---|---|---|
| **Step 1:** | | | | **.155\*\*\*** | -- |
| (Constant) | 7.33 | .48 | -- | | |
| Age | .43 | .10 | **.23\*\*\*** | | |
| Friends | .04 | .11 | .02 | | |
| Support | -.48 | .10 | **-.31\*\*\*** | | |
| Entertainment | .21 | .13 | .09 | | |
| FB Intensity | -.01 | .01 | -.10 | | |
| | | | | | |
| **Step 2:** | | | | **.161\*\*\*** | .007 |
| (Constant) | 7.02 | .52 | -- | | |
| Age | .42 | .10 | **.23\*\*\*** | | |
| Friends | .03 | .11 | .02 | | |
| Support | -.49 | .10 | **-.32\*\*\*** | | |
| Entertainment | .24 | .13 | .11 | | |
| FB Intensity | -.02 | .01 | **-.14\*** | | |
| Photo Engagement | .21 | .14 | .09 | | |
| | | | | | |
| **Step 3:** | | | | **.310\*\*\*** | **.149\*\*\*** |
| (Constant) | 8.63 | .54 | -- | | |
| Age | .24 | .10 | **.13\*** | | |
| Friends | .06 | .10 | .04 | | |
| Support | -.38 | .09 | **-.25\*\*\*** | | |
| Entertainment | .26 | .12 | **.12\*** | | |
| FB Intensity | -.01 | .01 | -.04 | | |
| Photo Engagement | .15 | .13 | .06 | | |
| Photo Investment | -.01 | .005 | **-.10\*** | | |
| Photo Manipulation | -.79 | .11 | **-.39\*\*\*** | | |

*p < .05; **p < .01; ***p < .001.

**Appendix B**

**Informed Consent**

UNIVERSITY of
**HOUSTON**
A CARNEGIE-DESIGNATED TIER ONE
PUBLIC RESEARCH UNIVERSITY

***Title of research study:*** #NoFilter: Examining the Relationship Among Online Photo Manipulation and Mental Health Variables of African American Women

This research project is conducted by Amanda Long, a doctoral student in the University of Houston's Department of Psychological, Health, and Learning Sciences, Counseling Psychology program. This is a dissertation study being conducted under the supervision of Dr. M. Nicole Coleman.

## Why am I being invited to take part in a research study?

We invite you to take part in a research study because you identify as a Black/African American woman, between the ages of 18 to 34 years old, and possess one or more of the following social media accounts: Facebook and/or Instagram.

## What should I know about a research study?

Whether or not you take part is up to you.
You can choose not to take part.
You can agree to take part and later change your mind.
Your decision will not be held against you.
You can ask all the questions you want before you decide, and can ask questions at any time during the study.

## Why is this research being done?

Considering the increasing popularity of social media, it is important to explore the relationship between exposure and engagement in specific social networking activities and body dissatisfaction among Black women. To date, current research only examines the impact of usage habits (i.e. duration or frequency) among samples of predominately white women. As a result of an absence of literature that examines the impact of specific activities of social media on body image concerns, this study will aim to highlight the relationship between specific online photo-related activities and body dissatisfaction among Black/African American women.

## How long will the research last?

We expect that you will be in this research study for 20 minutes.

### *How many people will be studied?*
We expect to enroll about 320 people in this research study.

### *What happens if I say yes, I want to be in this research?*
You will only be asked to complete the online, 20-minute survey one time. You will be asked to complete a demographics questionnaire as well as answer items asking questions about your general social media usage, mental and emotional health, body image esteem, and self-esteem.

### *What happens if I do not want to be in this research?*
You can choose not to take part in the research and it will not be held against you. Choosing not to take part will involve no penalty or loss of benefit to which you are otherwise entitled.

If you are a student, a decision to take part or not, or to withdraw from the research will have no effect on your grades or standing with the University of Houston.

Instead of being in this research study, your choices may include: participating in alternative research studies available via SONA in order to obtain any course credit outlined by your professor.

### *What happens if I say yes, but I change my mind later?*
You can leave the research at any time and it will not be held against you.

If you stop being in the research, already collected data will be removed from the study record.

### *Is there any way being in this study could be bad for me?*
There are no foreseeable risks related to the procedures conducted as part of this study. If you choose to take part and undergo a negative event you feel is related to the study, please inform the primary investigator.

### *Will I get anything for being in this study?*

By participating in this study, you will be enrolled in a raffle for 1 of 3 $75 Visa E-gift cards. You will only be entered in the raffle if all procedures/measures are completed. You may also receive SONA credit if you are a university student.

### *Will being in this study help me in any way?*
There are no known benefits to you from taking part in this research. However, possible benefits to others include providing research that is crucial to understanding the impact of engagement in social media on body dissatisfaction among Black women. Understanding this relationship is crucial to the development of future preventative interventions aimed at addressing the harmful effects of social networking on well-being.

## *What happens to the information collected for the research?*

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. Each subject's name will be paired with a code number, which will appear on all written study materials. The list pairing the subject's name to the assigned code number will be kept separate from these materials. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this organization, as well as collaborating institutions and federal agencies that oversee human subjects research.

We may publish the results of this research. However, unless otherwise detailed in this document, we will keep your name and other identifying information confidential.

## *Who can I talk to?*

If you have questions, concerns, or complaints, or think the research has hurt you, you should talk to the primary investigator at along0388@gmail.com or (713) 743- 8392.

This research has been reviewed and approved by the University of Houston Institutional Review Board (IRB). You may also talk to them at (713) 743-9204 or cphs@central.uh.edu if:

- Your questions, concerns, or complaints are not being answered by the primary investigator.

You cannot reach the primary investigator.
You want to talk to someone besides the primary investigator.
You have questions about your rights as a primary investigator.
You want to get information or provide input about this research.

**Appendix C**

**Demographic Questionnaire and Study Survey**

**Demographic Questionnaire**

1. Do you post photos of yourself online or share them through services like Facebook or Instagram?
   o Never
   o Sometimes
   o Frequently

2. Within the past year… How many photos of yourself or you with others did you UPLOAD to Instagram and/or Facebook?
   o Less than 2 photos per month
   o 2-5 photos per month
   o 6-10 photos per month
   o 11-15 photos per month
   o 16-20 photos per month
   o 21-25 photos per month
   o More than 25 photos per month

3. Do you avoid putting photos of yourself on social media?
   o Never
   o Sometimes
   o Frequently

4. How frequently do you TAKE selfies (photos of yourself)?
   o Less than once a month
   o At least once a month
   o At least once a week
   o At least once a day
   o More than twice a day

5. How frequently do you TAKE usies (photos of yourself with others)?
   o Less than once a month
   o At least once a month
   o At least once a week
   o At least once a day
   o More than twice a day

6. Which device do you use most frequently to access your social media accounts?
   o Laptop
   o Tablet
   o Smartphone

7. What is your highest level of education?
   o High School Diploma/GED
   o Some College
   o College Graduate

- Trade/Technical/Vocational Training
- Some Professional/Graduate Education
- Professional/Graduate Degree (M.S., Ph.D., J.D., etc.)

8. How old are you?

9. Within the past year… About how many photos of yourself or you with others did you upload to Instagram and/or Facebook EACH MONTH (on average)?

# FACEBOOK INTENSITY SCALE (FBI)

1. Please rank order which of the sites you visit most frequently, with 1 being the most and 3 being the least. If you do not have an account with one or more of the platforms, simply enter 0.

Facebook _____

Instagram _____

2. In the past week, approximately how many minutes per day have you spent on Facebook?

less than 10, 10–30, 31–60, 1–2 hours, 2–3 hours, more than 3 hours.

3. About how many total Facebook friends do you have?

 A) 100 or less
 B) 101 - 250
 C) 251 – 400
 D) 401 – 550
 E) 551 – 700
 F) 701 – 850
 G) 851 – 1000
 H) 1000 – 2000
 I) 2001 or more

4. About how many Instagram followers do you have?

A)  100 or less
B)  101 - 250
C)  251 – 400
D)  401 – 550
E)  551 – 700
F)  701 – 850
G)  851 – 1000
H)  1001 – 2000
I)  2001 or more

5. About how many people do you follow on Instagram?

A)  100 or less
B)  101 - 250
C)  251 – 400
D)  401 – 550
E)  551 – 700

F)      701 – 850
G)      851 – 1000
H)      1001 – 2000
I)      2001 or more


**For the following questions reflect on your usage of social networking sites including Facebook and Instagram.**

**Please use the following scale to answer the questions below:**

**1 = Strongly Disagree   2= Disagree  3=Neutral     4= Agree        5= Strongly Agree**

1. Facebook/Instagram)is part of my everyday activity.

2. I am proud to tell people I have a Facebook/Instagram account.

3. Facebook/Instagram has become part of my daily routine

4. I feel out of touch when I haven't logged onto Facebook or Instagram for a while.

5.  I feel I am part of my Facebook/Instagram  community.

6. I would be upset if Facebook/Instagram  shut down.

**SOCIAL NETWORKING SITES MOTIVATION SCALE (SNSMS)**

**I use social network sites (i.e., Facebook/ Instagram/Twitter) to ….**

**1 = Strongly Disagree   2= Disagree  3=Neutral    4= Agree       5= Strongly Agree**

1. Meet new people.

2. Find others like me.

3. Talk with people with the same interests

4. Hang out with people I enjoy.

5. Let out my emotions easily to other who will listen.

6. Express my anger to others who will sympathize.

7. Talk out my problems and get advice.

8. Let others know I care about their feelings.

9. Forget about work or other things.

10. Relax.

11. Feel excited.

12. To pass the time.

## **Eating Disorder Examination-Questionnaire (EDE-Q)**

**Please use the following scale to answer the questions below:**

| Not at All | | Slightly | | Moderately | | Markedly |
|---|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

1. Has your weight influenced how you think about (judge) yourself as a person?
2. Has your shape influenced how you think about (judge) yourself as a person?
3. How much would it have upset you if you had been asked to weigh yourself once a week (no more, or less, often) for the next four weeks?
4. How dissatisfied have you been with your weight?
5. How dissatisfied have you been with your shape?
6. How uncomfortable have you felt seeing your body (for example, seeing your shape in the mirror, in a shop window reflection, while undressing or taking a bath or shower)?
7. How uncomfortable have you felt about others seeing your shape or figure (for example, in communal changing rooms, when swimming, or wearing tight clothes)?

## SOCIAL APPEARANCE ANXIETY SCALE (SAAS)

**Directions: Please indicate how characteristic each statement is of you, using the response scale provided.**

| Not at All | A Little | Sometimes | A Lot | Extremely |
|------------|----------|-----------|-------|-----------|
| 1 | 2 | 3 | 4 | 5 |

1. I feel comfortable with the way I appear to others.*
2. I feel nervous when having my picture taken.
3. I get tense when it is obvious people are looking at me.
4. I am concerned people would not like me because of the way I look.
5. I worry that others talk about flaws in my appearance when I am not around.
6. I am concerned people will find me unappealing because of my appearance.
7. I am afraid that people find me unattractive.
8. I worry that my appearance will make life more difficult for me.
9. I am concerned that I have missed out on opportunities because of my appearance.
10. I get nervous when talking to people because of the way I look.
11. I feel anxious when other people say something about my appearance.
12. I am frequently afraid I would not meet others' standards of how I should look.
13. I worry people will judge the way I look negatively.
14. I am uncomfortable when I think others are noticing flaws in my appearance.
15. I worry that a romantic partner will/would leave me because of my appearance.
16. I am concerned that people think I am not good looking.

**Skin Color Satisfaction Scale (SCSS)**

**Directions: Please read each statement/question carefully before circling the most appropriate answer.**

1. **How satisfied are you with the shade (lightness or darkness) of your own skin?**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Extremely Dissatisfied      Somewhat Satisfied      Extremely Satisfied

2. **Compared to most of my online friends and followers, I believe my skin color is…**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Extremely Light      About the Same Color      Extremely Dark

3. **If I could change my skin color, I would make it….**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Much Lighter      About the Same Color      Much Darker

4. **Compared with the complexion (skin color) of my online friends and followers, I am satisfied with my skin color.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Strongly Disagree      Neutral      Strongly Agree

5. **I wish the shade of my skin was darker.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Strongly Disagree      Neutral      Strongly Agree

6. **I wish my skin was lighter.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Strongly Disagree      Neutral      Strongly Agree

7. **Compared to the complexion (skin color) of my friends and followers, I am satisfied with my skin color.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|

Strongly Disagree      Neutral      Strongly Agree

## The Physical Appearance Comparison Scale (PACS)

**Using the following scale please select a number that comes closest to how you feel while on Facebook or Instagram:**

| Never | Seldom | Sometimes | Often | Always |
|-------|--------|-----------|-------|--------|
| 1 | 2 | 3 | 4 | 5 |

1. When I look at pictures of parties or other social events, I compare my physical appearance to the physical appearance of others.

2. The best way for a person to know if they are overweight or underweight is to compare their figure to the figure of others on Facebook or Instagram

3. When I look at pictures on Facebook or Instagram, I compare how I am dressed to how other people are dressed.

4. Comparing your "looks" to the "looks" of others on Facebook or Instagram is a bad way to determine if you are attractive or unattractive.

5. In social situations, I sometimes compare my figure to the figures of other people.

## Self-Photo Investment Scale

Instructions: Please think about photos of yourself that you post online or share through social media and mark your answer along the line to indicate the best response for you.

| | | |
|---|---|---|
| It's easy to choose the photo | ———————————— | It's hard to choose the photo |
| I take a long time to choose the photo ^ | ———————————— | I choose the photo very quickly |
| I feel anxious or worried about the photos I share/post ^ | ———————————— | I feel very comfortable about the photos I share/post |
| I share/post whichever photo is available | ———————————— | I take photos especially for posting/sharing |
| I don't care what others will think about how I look | ———————————— | I worry about what others will think about how I look |
| I don't care which photos I share/post | ———————————— | I carefully select the best photo to share/post |
| I worry about whether anyone will "Like" my photos ^ | ———————————— | I don't care whether anyone will "Like" my photos |
| I don't take any notice of how many "Likes" my photos get | ———————————— | I take notice of how many "Likes" my photos get |

**Self-Photo Manipulation Scale**

**Instructions: For photos of yourself that you post online or share via mobile, how often do you do the following to make the photos look better**

|  | Never | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|---|
| Get rid of red eye | 1 | 2 | 3 | 4 | 5 |
| Make yourself look larger | 1 | 2 | 3 | 4 | 5 |
| Highlight facial features, e.g., cheekbones or Eye color/brightness | 1 | 2 | 3 | 4 | 5 |
| Use a filter to change the overall look of the photo, e.g., making it black and white, or blurring and smoothing images | 1 | 2 | 3 | 4 | 5 |
| Make yourself look skinnier | 1 | 2 | 3 | 4 | 5 |
| Adjusting the light/darkness of the photo | 1 | 2 | 3 | 4 | 5 |
| Edit to hide blemishes like pimples | 1 | 2 | 3 | 4 | 5 |
| Whiten your teeth | 1 | 2 | 3 | 4 | 5 |
| Make specific parts of your body look larger or look smaller | 1 | 2 | 3 | 4 | 5 |
| Edit or use apps to smooth skin | 1 | 2 | 3 | 4 | 5 |

**Appendix D**

**Recruitment Materials**

**Recruitment Script**

My name is Amanda Long, and I am a doctoral candidate in the Counseling Psychology program at the University of Houston. I am recruiting Black women to participate in my dissertation research study that explores the relationship between engagement in social media and body dissatisfaction among Black women. The only requirement for participation is that you are female, self-identify racially as Black/African American, possess at least one or more of the following social media accounts: Facebook or Instagram, and between the ages of 18-34 years old. Participation is completely voluntary and you may withdraw at any time. It will take you no more than 15-20 minutes to complete this survey. You will never be asked to provide your name and identification codes will be used to ensure confidentiality.

Thank you so much for your time, consideration and support! Also, if you know other Black women that also qualify to participate in this study, please pass it along! It will be greatly appreciated! If you have any questions, comments or concerns please feel free to contact at along0388@gmail.com or my advisor Dr. Nicole Coleman at mncoleman@uh.edu.

****Click link to take survey ****

 LINK: https://coeuh.co1.qualtrics.com/jfe/form/SV_3vND4joboakX1ch

This project has been reviewed by the University of Houston Committee for the Protection of Human Subjects, (713) 743-9204.