



ADDIS ABABA UNIVERSITY
SCHOOL OF JOURNALISM AND COMMUNICATION

**The relationship between social media use and body image: the case of young
female students of management**

By

Kidist Yidnekachew

June, 2019

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A Thesis Submitted to school of Journalism and Communication presented in
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Journalism and Communication

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Declaration

I, hereby, declare that the thesis entitled, “The relationship between social media use and body image: The case of young female students of management”, is my original work and that all sources of materials that have been used for the research have been properly acknowledged.

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This is to certify this thesis has been prepared by **Kidist Yidnekachew**, entitled, “The relationship between social media use and body image: The case of young female students of management”, and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Journalism and Communications complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

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Chair of Department or Graduate Program Coordinator

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Abstract

The current study tried to explain the relationship between social media use and body image among young adult females. Social media for the sake of the study focused on two outlets: Facebook and Instagram. A quantitative approach with correlational research design was used in the study. 108 female students from the department of management were picked using convenience and purposive sampling methods. The collected data were analyzed using descriptive statistics, Pearson correlation, cross-tabulation and linear regression. The findings of the study found 61.9 % of the participants spent more than three hours per week on Facebook; while 33.3 % spent more than three hours per week on Instagram. 71.3 % of the participants' body mass index (BMI) was under normal category. The study using the figure rating scale to assess body image found that majority of the participants (69.5%) were dissatisfied with their current body image. On the contrary, participants reported body satisfaction on the modified body shape questionnaire ($M=2.27$, $SD=0.83$). A significant negative relationship was evident between Instagram usage and body image ($r= -.236$, $p= .014$). Meanwhile a non-significant negative correlation was found between Facebook usage and body image. Instagram usage was able to explain and predict only 5.6 % of the variance in body dissatisfaction. Further research experimental and survey in nature should be conducted on both genders to further explore the relationship between social media use and body image.

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Acronyms

BMI.....	Body mass index
BSQ.....	Body shape questionnaire
FB.....	Facebook
FBQ.....	Facebook use questionnaire
FRS.....	Figure rating scale
INQ.....	Instagram use questionnaire
MET.....	Media Ecology Theory

Chapter one

1 Introduction

1.1 Background of the study

Body image is a multi-dimensional, subjective and dynamic concept that encompasses a person's perceptions, thoughts, and feelings about his or her body (Grogan, 2007). Body image is often discussed and researched usually in terms of negative body image. Negative body image defined as, "the psychologically salient discrepancy between a person's perceived body and their ideal body, which manifests itself as the experience of negative thoughts and esteem about one's body and appearance" (Bell & Dittmar 2011, p. 479). Similarly Body image dissatisfaction is defined as a person's negative evaluation of his or her own body (Grogan, 2007). This is to mean that what a person feels about his or her body affects his/her self-esteem and how he or she sees himself or herself. Body dissatisfaction is found to affect the psychological and physiological health of individuals. It is said to be a risk factor for suicidal tendencies, smoking, eating disorders and other behaviors (Burnette, 2016). That is why body dissatisfaction was discussed in details in the present study.

The pressure the media and the society put on women to be thin and men to be muscular causes negative body image in individuals; as a result being discontent with one's body has become a common phenomenon especially in westernized cultures (Farquhar & Wasylikiw, 2007). Beauty standards have changed through time for both genders. This study is however specifically about women; as they happen to be more conscious about their bodies than men. According to Zhang (2012), women suffer from body image dissatisfaction in numerous countries and regions around the world. The impacts of traditional media such as magazines, advertising and television on body image concerns has been studied for decades (Sharifi, Omid, & Marzban, 2016). As users of social media are growing rapidly, researchers have begun to assess the possible impacts of new social media outlets on body image (Sharifi, Omid, & Marzban, 2016). Social media influences are complex given the nature of body image disturbance; social media's exposure doesn't have a simple direct impact on body disturbance. A number of studies have failed to find clear-cut effects of social media exposure on body dissatisfaction or thin ideals (Botta, 1999;

Bell & Dittmar, 2011). Based on that, the current study focused on the two most used social media platforms: Facebook and Instagram and their relationship with body image.

Facebook is a social media website first developed by Mark Zuckerberg in 2004. Since its creation, it has become one of the most popular social media sites attracting people of all ages from all over the world (business dictionary, n.d.). Worldwide, there are over 2.41 billion monthly active users as of June 2019. This is an 8 percent increase in Facebook monthly active users year over year. This is compared to 2.38 billion monthly active users for quarter 1 2019 (<https://investor.fb.com>). The other emerging social media platform is Instagram. It's a social media application that was launched in 2010 by Kevin Systrom and Mike Krieger. The application was later bought by Facebook in 2012. It allows users to take photos, add a filter, write a caption, and post (Rousseau & Foulk, 2018). The number of monthly active Instagram users as of June 2018 had reached 1 billion monthly active users, up from 800 million in September 2017. The application is one of the most popular social networks worldwide (statista, n.d.). What makes Instagram different from Facebook is the former allows users to follow pictures of their favorite celebrities and famous people. This gives fans access to follow the activities of these celebrities (Cohen, 2016).

Studies have demonstrated that social media app that is particularly based on photographs-Instagram is widely used for defining body images and requirements for women. Instagram is a space where people can investigate and identify body image research. According to researchers, body dissatisfaction may develop when women continually compare their appearance to the appearance of others. Exposure to images of idealized women in social media especially Instagram could cause women to be engaged in upward comparison and ultimately the need to change their bodies (Vartanian & Dey, 2013).

The Center for Eating Disorders created a public survey for Facebook users ranging from 16 to 40 years old. 51% of the survey respondents said that seeing their own photos on Facebook makes them more conscious about their own body and their weight. 32% said they feel sad when comparing Facebook photos of themselves to their friends'. 44% spend time wishing they had the same body or weight as a friend when looking at photos on Facebook. 37% said they feel that they need to change specific parts of their body when comparing their bodies to a friend's body in Facebook photos (Donnovan, 2011). This is evident that Facebook makes users get

engaged in social comparison and create the need to alter their bodies to achieve the ideal beauty standards. A new study (Chianca, 2013) discovered that one in three people felt worse and more dissatisfied with their lives after they viewed their friends' profiles on Facebook. This happens when people get involved in upward social comparison and feel less accomplished or successful be it in terms of looks, wealth, education, career when compared to their peers.

Social comparison referring to an individual's tendency to compare oneself to others has been found to moderate the impact of exposure to idealized media. Social theory states that people are constantly evaluating themselves. Researchers have found that body dissatisfaction could occur when women constantly compare their appearance to the appearance of others. A study found that the effects of thin ideal advertisements on mood and body dissatisfaction were mediated by social comparison in a sample of 126 female undergraduate students. The results of the study demonstrated that women who are engaged in more social comparison experienced more negative mood and body dissatisfaction after being exposed to magazine advertisements containing images of thin idealized female beauty. Social comparison moderates the impact of idealized media exposure on both men and women (Tiggemann and McGill, 2004).

According to researchers, Ridolfi, Myers, Crowther, and Ciesla (2011) individuals make upward social comparisons with individuals who are viewed as superior, such as celebrities and famous individuals. And make downward social comparisons with those who are viewed as being equal or lesser to the individual. Women are more likely than men to experience pressure from peers to attain the ideal body. This can lead women to have higher levels of internalization than others if their peers share the same beauty standards as them. Since women are portrayed as extremely thin in the media, self-comparison to the images they are exposed to can lead to negative outcomes. In relation to Festinger's 1954 social comparison theory, when women find a difference in themselves compared to media images they are more likely to feel less content with their weight and appearance (Plado-Costante, 2013). A link was found between women's perceptions of their bodies and women's representation in the media. Irving (1990) cited in Plado-Costante, (2013) found that when women were exposed to images portraying thin women, they experienced a lower self-evaluation.

The current research explored the link between social media use (Facebook and Instagram) and body image among young girls. This study fell under the domain of media psychology. Media psychology refers to the applications of psychological science to the use, development, distribution and research of mediated communication and technology (Rutledge, 2017). Media psychology explores how media affect human being's sensory and cognitive processes. This includes how media induces specific behaviors in individuals, larger groups or global societies. The large and exciting realm of effects research (how various news and entertainment media influence audience perceptions and behaviors, audience demographics and audience numbers) is central to media psychology (Luskin, 2002).

1.2 Statement of the problem

As the culture of social media is booming in Ethiopia, youngsters are highly exposed to social media. Facebook is a powerful and popular social media tool that incorporates text, pictures, group events, and other things to create an all-encompassing social media experience. Instagram, on the other hand, specifically focuses on the dissemination and consumption of personal photographs. Because of this, Instagram could potentially display a more direct relationship between women's body image and activity on the site (Wagner, Aguirre, & Sumner, 2016). Instagram is one of the most popular and trendy social media platforms. It allows users to communicate solely through posting and sharing photos. It also allows users to follow their favorite artists and celebrities as well as share their travelling and other experiences with their friends.

Teenagers tend to feel higher body image dissatisfaction when comparing themselves with their teen counterparts who match the thin ideal look for reference. In addition, young women tend to be more concerned about their body images (Cohen, 2016). The media by showing pictures of perceived ideal shapes of both women and men influence young girls and boys to conform to these images. Popular cultures reinforce these images as well. As a result, young women and boys will be put under pressure to look like and weigh like the idealized individuals. This as a result influences their body image. This is more evident especially among women (Sharifi, Omid, & Marzban, 2016). Facebook is commonly used among adolescents. Researchers have found an association between Facebook usage and body dissatisfaction (Tiggemann & Slater, 2003; Fardouly, Diedrichs, Vartanian, & Halliwell, 2015).

Tiggemann & Slater in 2003 found that teenage girls who used Facebook were more concerned with monitoring body appearance, idealizing thinness, and pursuing thinness, than were teenage girls who did not use Facebook. Furthermore, in comparison to viewing an appearance-neutral website (i.e., a craft website), viewing Facebook was associated with more negative mood and negative body image or body dissatisfaction for women who tend to compare their appearance with others. However, rather than the time spent on Facebook, the way people use it such as interacting with photos seems to explain the relationship with body dissatisfaction. Similarly, Kim & Chock, (2015) found that “social grooming” behaviors such as “liking”, visiting, and commenting on friends’ posts and photos were linked to body image concerns. The researchers explained this link through the notion that “social grooming” activities lead to viewing other individuals’ profiles, particularly their photos. People tend to post attractive images of themselves on social media platforms and increased exposure to these images may lead to a distorted and idealized conceptualization of body shapes.

Kalnes (2013) conducted a qualitative study on how social media impacts female adolescents’ body image. Kalnes interviewed participants and recorded their social media usage in a three-day time period in order to examine how social media impacts body image. Kalnes was able to draw the conclusion that social media plays a major role in body dissatisfaction among female adolescents and often times fuels social comparison behavior, encouraging young females to compare themselves against images seen in social media, which in this case, led to low self-esteem and body dissatisfaction (Kalnes, 2013). Studies on Instagram have mostly focused on fitspiration pictures and content in the young adult population. Fitspiration is a movement that promotes a healthy lifestyle, mostly through food and exercise. Despite its good intentions, researchers have suggested dysfunctional themes in the images and messages. Most images on fitspiration were found to contain elements objectifying the female body.

Furthermore, some researchers suggest that even the mere act of watching fitspiration on Instagram can lead to unhealthy eating and exercise behaviors in young adults (Holland & Tiggemann, 2016). In one experiment where 130 female undergraduates were randomly exposed to either fitspiration or neutral travel images, researchers found that the appearance-based pictures of fitspiration had a negative impact on mood, body image, and self-esteem (Tiggemann & Zaccardo, 2015). In other words, the college students who viewed fitspiration images felt

worse about themselves and their bodies compared to the students who viewed neutral images. Limitations of these studies need to be kept in mind when interpreting the findings. Using travel photos as a control to fitspiration may not have isolated the variable of interest and resulted in inaccurate findings.

The problem of media exposure and its effects on body image issues has become so severe that countries like Spain and Italy have banned models that are “too thin” in order to curb the thin-ideal body type standard seen in the media (Grabe, Ward, & Hyde, 2008). Even though many research works have been conducted on the impact of social media use on body image especially on young girls, most research works gave emphasis to the effects of Facebook. There is little research that focused on the effects of Instagram (Cohen, 2016). Furthermore, the researcher haven’t come across studies conducted in Africa and Ethiopia. That is why the current study attempted to investigate the relationship between Facebook and Instagram use and body image.

1.3 Objectives of the Study

1.3.1 General objectives

The general objective of the study was to assess the relationship between body image and Facebook and Instagram use among young girls. The study aimed to explore the link between young girls’ body image and the amount of time they spent on Facebook and Instagram.

1.3.2 Specific Objectives

Specifically, the study was intended to:

- Assess the frequency of participants’ Facebook and Instagram engagement
- Explore young girls’ views of their body image
- Explore the relationship between Facebook and Instagram usage and body image
- Explore Facebook use’s possible effect on body dissatisfaction
- Explore Instagram use’s possible effect on body dissatisfaction

1.4 Research questions

Accordingly, the current study attempted to find answers for the following research questions.

- How often did the participants use Facebook and Instagram?
- How did research participants see their bodies?

- Was there a significant relationship between Instagram and Facebook usage and body image in young girls?
- What percentage of body dissatisfaction did Facebook use explain?
- What percentage of body dissatisfaction did Instagram use explain?

1.5 Significance of the Study

The study was believed to explore the relationship between social media use (Facebook and Instagram) and body image among young girls in the Ethiopian context. As body image research is growing across the globe, there happens to be scarce research conducted on body image of female Africans especially in relation to social media use. The current study could serve as an eye opener and open the door for further researches. Based on the findings and literature of the current study, other researchers could get an insight into the concept of body image and the impacts of social media use on body image. Also this study would add to the field of media psychology especially in Ethiopia.

1.6 Scope of the Study

The study was conducted on female university students aged 18-29. The research participants were students of management department at the college of business and economics found of Addis Ababa university sedest kilo. The researcher has observed that many young people especially university students follow social media trends and were active users of Facebook and Instagram among other platforms. Not only that but they often spend time on these two social media platforms looking at others' profiles, posting photos, videos, articles and networking with their peers. Research on body image shows that young girls are most susceptible to body image concerns mediated by social comparisons (Rudd & Lennon, 2000).

1.7 Limitations of the study

The study was aimed at investigating the correlation between social media use and body image. One of the limitations of the study was not assessing social comparison behavior of the participants; as social comparison theory was found at the core of the study. The study was conducted on female students of management because the participants were thought to be active Facebook and Instagram users. The sample size even though was representative of the population (management department), taking a larger sample size would have been more effective. The

other limitation of the study was that the contents of participants' Facebook and Instagram pages weren't analyzed.

1.8 Operational Definition of Terms

- **Facebook:** Facebook is “a powerful and popular social media tool that incorporates text, pictures, group events, and other affordances to create an all-encompassing social media experience” (Wagner, Aguirre, & Sumner, 2016, pp. 2-3). It was developed by Mark Zuckerberg in 2004. For the purpose of this study, participants' Facebook use was measured using a Facebook use questionnaire.
- **Instagram:** Instagram is a social media application that was launched in 2010 by Kevin Systrom and Mike Krieger. Users can take photos, add a filter, write a caption, and post on the platform (Rousseau & Foulk, 2018). In the current study, Instagram use questionnaire was used to assess the amount of time participants spent on the platform.
- **Body Image:** Body image is a multidimensional, subjective and dynamic concept that encompasses a person's perceptions, thoughts, and feelings about his or her body (Grogan, 2007). Body image was measured using the modified Body Shape Questionnaire (BSQ). The scale measures the concerns related to one's body shape. It was developed by Cooper, Taylor, Cooper, and Fairburn in 1987.
- **Body Dissatisfaction:** Body dissatisfaction can be understood as a person's negative evaluation of his or her own body (Grogan, 2007). This construct was measured using the Figure Rating Scale (FRS) also known as the Stunkard Scale developed by Stunkard, Sorenson and Schlusinger in 1983.
- **Body Mass Index:** Abbreviated BMI, it is a key index for relating weight to height. BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared. According to the National Institutes of Health (NIH), overweight is a BMI of 27.3 or more for women and 27.8 or more for men. Obesity is a BMI of 30 or more for either sex. A very muscular person might have a high BMI without health risks (Medical Definition of Body mass index, 2018).
- **Fitspiration Images:** Fitspiration is perceived to promote ideas about health and fitness, shaping health beliefs and encouraging young women to achieve a particular body type.

Fitspiration” (also known as “fitspo”) aims to inspire individuals to exercise and be healthy (Jong & Drummond, 2016).

1.7. The structure of the study

The first chapter introduced the research topics, objectives of the study, statement of the problem, operational definition of basic terms, scope of the study and limitations of the study. The second chapter reviewed various research works done on the correlation between body image and the use of Facebook and Instagram. Theoretical frameworks behind body image and social media use were also discussed in this chapter. The third chapter touched upon methodology including sampling population, procedure, techniques and data collection tools employed in the study. After the data were analyzed, the results were presented and discussed in chapter four. The last chapter summarized the study and tried to draw conclusion based on the findings of the study. Implication of the study and directions for future research were also discussed in this chapter.

Chapter Two

2 Literature Review

2.1 Basic concepts on Social Media use

The 2018 Global Digital reports has revealed that there are now more than four billion people around the world using the internet. Africa has seen the fastest growth rates, with the number of internet users across the continent increasing by more than 20 percent year-on-year. With the sharp increase in internet use, social media usage continues to grow rapidly too. In fact, the number of people using the top platform in each country has increased by almost 1 million new users every day during 2017. More than 3 billion people around the world now use social media each month, with 9 in 10 of those users accessing their chosen platforms via mobile devices (Kemp, 2018). Accordingly, Facebook's core platform still dominates the global social media landscape, with total users up 15 percent year-on-year. Instagram for its part has managed to claim Facebook Incorporation's standout growth story over 2017, with the number of global users up by a third (Kemp, 2018). Social media use in this study refers to Facebook and Instagram use.

2.1.1 Facebook

There were 5, 682,800 Facebook users in Ethiopia in October 2018, which accounted for 5.1% of its entire population (Napoleoncat.com). Facebook is mainly filled with image content, promoting a sort of online photo album site (Wallis, 2015). Users can share their posts of different kinds with their friends or the people who they are connected with on Facebook. And their friends would get to either like, dislike, comment or share their posts. This photo based activities of Facebook is what influences users to get engaged in social comparison. In addition, the number of likes and comments individuals get when sharing their own photos can impact their self-esteem and body dissatisfaction (Kalnes, 2013). For instance, in relation to body image, the more likes a woman gets for a photo of herself in a dress that shows off her physique, the more the woman tend to think she is beautiful, fit and attractive. Also, the less number of likes of the picture might make the woman think "maybe I don't look good in this dress; maybe my belly shows on the picture...." Making her insecure about her body. Of course this is not always true for every woman.

A research finding by Kalnes, (2013) has revealed that individuals who frequently compared their number of likes to others had lower levels of self-esteem and confidence. In fact, participants who compared themselves to others reported increased feelings of jealousy, body dissatisfaction, the desire to be thin, or the desire to have “things” such as clothing, that others may possess (Kalnes, 2013). Therefore, it is possible that the number of likes on a picture could impact an individual’s self-esteem and body satisfaction, particularly if the picture uploaded happens to be of the individual’s own self-image. Meier & Gray in (2014) also found that time spent on photo activity, rather than time spent on Facebook generally, was linked to thin-idealization, self-objectification, weight dissatisfaction, and pursuit of thinness.

2.1.2 Instagram

There were 329, 800 Instagram users in Ethiopia in October 2018, which accounted for 0.3% of its entire population (NapoleonCat., n.d.). Instagram is a solely picture focused platform. Instagram allows users to take a photo from their mobile device and change it by using filters, blurring effects, color adjustments, or other effects. Instagram is mainly accessed through mobile devices although it is available for use on a computer; however users are unable to upload photos through that medium. The research on Instagram is limited mainly because it is an emerging social media (Wallis, 2015). A research conducted on the relations between actual body size, body dissatisfaction, frequency of selfies taken, and number of Instagram selfies posted revealed a positive relationship between body dissatisfaction and selfies taken. However no correlations were observed between the frequencies of selfies posted to Instagram and either actual body size or body image dissatisfaction (Wagner, Aguirre, & Sumner, 2016).

Furthermore, Hu in his 2018 study stipulated that women’s body image is represented in a way that emphasizes “sexuality” and attractiveness. The pictures reviewed on Instagram depicted that perfect body image representations and visuals include comments like “Sexy” and “Body goals” (which means the body one wants to achieve or attain) these comments are culprits in giving rise to the idealized thin body image and consequently body dissatisfaction. Instagram users are playing a major role in forming ideas around women’s body. The body positive account holders are found to be having different reasons and concerns for representing themselves on the platform. Meaning the so called ‘body positive’ concept is tailored to bring more fame and likes

to those who post the photos; instead of bringing a real shift in the way women see their bodies (Hu, 2018). However a current study conducted on positive body image has demonstrated that brief exposure to body positive posts on Instagram was associated with improvements in young women's positive mood, body satisfaction and body appreciation, when compared to thin-ideal and appearance-neutral posts (Cohen, Fardouly, Newton-John, & Slater, 2019).

2.1.3 Body Image

Body image is the way one views themselves and their own bodies, sometimes in relation to others. Body image is often discussed and researched usually in terms of negative body image. Negative body image defined as, "the psychologically salient discrepancy between a person's perceived body and their ideal body, which manifests itself as the experience of negative thoughts and esteem about one's body and appearance" (Bell & Dittmar 2011, p. 479). In a similar vein, Ridolfi defined body dissatisfaction as, "the cognitive-affective domain of body image, refers to negative and dysfunctional cognitions and emotions about one's appearance" (Ridolfi, Myers, Crowther, & Ciesla, 2011, p. 491). Ridolfi added that negative body image has become more common on an international level following the globalization of western media. According to all authors, Negative body image is commonly associated with body dissatisfaction.

Body dissatisfaction levels fluctuate in daily life. Collected research drawn upon theoretical frameworks such as the objectification theory and the tripartite influence model try to pinpoint the potential predictors in the shift in body dissatisfaction. From this, an appearance-based comparison was found to be the most commonly tested and supported predictor of body dissatisfaction (Leahey, Crowther, & Mickelson, 2007). Research has indicated that individual factors, such as the tendency to engage in social comparison and level of media literacy moderate social media effects on body dissatisfaction. Women are more likely than men to engage in upward social comparisons, perceiving other same-sex persons as being more attractive, having better physical qualities than theirs. Men instead are less affected by rigid physical appearance norms and have the tendency to resort to downward social comparisons, a more self-hopeful strategy that enhances self-esteem.

Females experience pressures to attain the idealized body image and display higher levels of body dissatisfaction compared to males. International research has highlighted the importance of body dissatisfaction during adolescence and the associated risks for depression and eating disorders (Neagu & Rainer, 2015). Researchers agree that there is a possibility for young women to develop body image issues; if they compare themselves to the societal norm of beauty portrayed by the media. A relationship has been found between viewing of idealistically thin models and negative body image. Negative body image is said to be a risk factor for many harmful behaviors such as self-induced vomiting, laxative misuse, excessive exercise and fasting (Sharifi, Omid, & Marzban, 2016).

2.1.4 Thin-Ideal Images in the Media

In today's world most people are exposed to some type of mass media (e.g. television, music videos, movies, and magazines) on a daily basis. Thin ideal images often accompany various advertised products reinforcing the idea that if you buy or use a particular product, you, too, can be thin and beautiful too. Mass media overtime has developed this idea of what the perfect female body should be and what it should look like. The ideal body image or thin ideal for women is increasingly dominating the media. Across movies, magazines, and television programs, thinness is consistently being celebrated and rewarded for women. As a result, girls, adolescents, and young women are constantly bombarded with extremely thin models that portray an ideal that is unattainable by most (Fouts & Burggraf, 1999).

Most of the advertisements and music videos in the western world use thin female models reinforcing the 'thin is beautiful' message. Negative body image among women has become common and a normative part of a female's life and her perception of her body. Women are constantly targeted by the media to attain the "ideal body type" which usually means extremely thin. And this pressures women to meet the so called 'Western society standards' (Knobloch-Westerwick & Crane, 2012 cited in Wallis, 2015). Research has demonstrated that girls start to become socialized to the thin ideal body type perpetuated in the media as early as toddler years – when they are still learning fundamental skills like speech and communication. Even girls living in the western world as young as six begin to feel pressure to be thin as one study noted that 40% of six-year-olds wanted to be thinner (Park, 2005).

Thin body-type images not only promote a specific type of body to females, but also “highlight these particular gaps within an individual’s bodily self-concept, which causes negative feeling and body dissatisfaction” (Dittmar, 2009, p. 6). Women are not only exposed to what kind of body is considered ideal, but they are also told what society might consider “flaws” in other body types. Social media often blurs the line between virtual and reality therefore creating ideas that women should look like the images they are viewing on social media (Klein, 2013). Women are constantly being taught that the only way to be successful in their life is to look like the women they see in media. According to Klein, 74 percent of all women are engaged in social networking therefore increasing their exposure to these ‘thinspiration’ images. Since social media is all about interaction, they are feeling the pressure more from these networking sites than other sources of media.

2.1.5 Social Comparison Behavior

Festinger’s 1954 Social comparison theory is often used in guiding research that examines body image in relation to social comparison behavior to media images. According to him, people innately compare themselves with one another and these comparisons which can include physical appearance can help individuals determine self-characteristics and attributes. Likewise, Richins (1991) reported that comparisons lead to higher levels of attractiveness standards and reduced body satisfaction levels. Even though many times comparisons are made unconsciously, they can have a negative impact on adolescents and young adults, as they are beginning self-evaluation (Rudd & Lennon, 2000). Accordingly, adolescents are especially affected by social comparison behaviors, as they are at a critical time of self-evaluations. Social comparison behavior leads to “guilt, shame, stress, unhappiness, insecurity, and body dissatisfaction” and in some cases is directly related to bulimic and anorexic behaviors (Rudd & Lennon, 2000, p. 155).

Rudd and Lennon, (2000) discussed body image and appearance-management behaviors in college women and how these are created through social comparison behaviors. The authors concluded that even though almost half of the women studied demonstrated a neutral body image, many women (36.8%) mentioned making comparisons with others and media images. The comparisons often resulted in negative feelings. By participating in social comparison behaviors to models in advertisements, again, it was noted that attractiveness standards were raised therefore causing a decrease in participants’ own body satisfaction (Rudd & Lennon,

2000). Several researchers have investigated the role of social comparison in processing thin media images and how social comparison may influence body image disturbance (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015). Upward comparison with the thin media characters may function as an opportunity of self-evaluation, and such evaluation may be associated with negative body image of female viewers and with pressure of having a body like the thin media characters. Thus, the more female viewers make upward comparison with thin media characters, the more likely they have body image dissatisfaction (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015). Furthermore, A study conducted in 2011 on the influence of body image found that 72.5 % of the research participants compared their own appearance to social media images and 80 percent compared their own appearance to friends' social media images (Ferguson, Winegard, & Winegard, 2011).

2.2 Integrating the theories of Social Media use and Body Image

2.2.1 Social comparison theory

Festinger in 1954 proposed that individuals get engaged in social comparison as a means of self-exploration. This helps individuals to evaluate themselves precisely and then accept or refuse their characteristics when compared to individuals who are either similar or different from them. Since the introduction of the theory, psychologists have expanded the concept and added upward and downward social comparisons. Several underlying reasons for social comparison have been identified. These include self enhancement in the case of upward social comparison and maintenance of a positive self-evaluation in downward comparison. Self enhancement is comparing oneself to people who are better off than the individual and can be used as self-improvement. While self-enhancement resulting from upward comparison may yield positive outcomes, researchers have found that it may contribute to negative effects longitudinally (Tiggemann, Polivy, & Hargreaves, 2009).

Feistenger, 1954 further proposed that upward comparisons are more likely to produce negative consequences such as lowered self-esteem, whereas downward comparisons could produce positive consequences such as improved self-esteem. Self-evaluation is comparing one's self with people who are worse off than the person. Theorists and researchers agree that competition is often the primary motivation to be engaged in social comparison (Festinger, 1954). Social comparison is a means of quickly sizing up the competition. According to Pila, Stamiris,

Castonguay, & Sabiston, (2014) physical fitness and appearance contexts were found to be the main sources of upward social comparison and raise feelings of envy for both college men and women. For women in particular, appearance contexts were more striking. The researchers also found body related envy was positively correlated to regular regulation which is linked to exercise behavior.

2.2.2 The Sociocultural Model

The sociocultural model stipulates that media, peers, and family are important means through which messages about weight and appearance are transmitted to members of society (Stice, 1994). For females, the sociocultural model suggests that body image disturbances are the result of prevalent societal burden to be thin and lose weight; whereas males are expected to meet the idealized tall, muscular, and well-built physique standards. The three constructs of the social media model media, peer and family social networking sites are the strong transmitters of messages about weight and appearance. This is because users interact with peers, family and members of the media including celebrities, fitness models, athletes and famous public figures. These interactions can put pressure on users to achieve the idealized beauty standards and give birth to body dissatisfaction (Santarossa & Woodruff, 2017). The validity of the sociocultural model is emphasized by a large number of studies. For example, research shows that the pressure to lose weight or gain muscle that adolescents experience from parents, peers, and the media is positively related to their body dissatisfaction (Xu, Kiehne, Ricciardelli, McCabe, & Xu, 2010). Furthermore, internalization of appearance ideals and comparison with these ideals was shown to mediate the effects of sociocultural messages about appearance on body dissatisfaction (Shroff & Thompson, 2006).

2.2.3 The tripartite influence model

This is similar to Sociocultural Model proposed by Stice in 1994. Accordingly, the tripartite influence model proposes the pressure on women to attain the ideal body often came from three different groups; these are family, friends, and the media. And the pressure will lead to body dissatisfaction. The current study gives emphasis to the effects of social media specifically Facebook and Instagram. However the pressure from peers comes indirectly through the pictures they post on Facebook and Instagram. By looking at peers' posts, users will get into social comparison and cultivate the need to look like their peers who are more fit and are close to the

'thin ideal'. Peer interaction plays a major role in body image and internalization. According to (Slater & Tiggemann, 2015), a major part of social media and peer interaction that has been researched is the influence of positive and negative commenting. Social media allows individuals to comment and share posts with other users both in and outside of their social group. This often allows users to leave negative comments on images and posts made by others. This kind of negativity is related to body dissatisfaction. It is important to bear in mind that family plays a huge role in raising their children to become comfortable in their own skins, to accept and appreciate their bodies without the need to change it. But this doesn't mean parents should encourage unhealthy eating and restrain their children from getting involved in physical exercise.

2.2.4 Cultivation Theory and Media Exposure

Cultivation Theory was introduced by George Gerbner & Larry Gross in 1976. The hypothesis behind this theory is that a long term television watching makes viewers suggestive to adopt views and narratives being administered to them. According to Shanahan & Morgan (1999) Cultivation Theory is about the pervasive nature of exposure to a repetitive pattern of images and ideologies exposed on television over a period of time. When extending the hypothesis from television watching to social media, social media like television is found to enable an image-based mediation. Some platforms like Instagram are solely image-based where Facebook has a wider set of possibilities. There are numerous fashion, modeling and fitness handles offered on Instagram. While super-thin models and hyper-fit men are celebrated, other body types are underrepresented (Aziz, 2017). This repetitive exposure to flawless body images makes users want to attain the ideal body and adopt the measurement as a normalized body standard; increasing their body image concerns and implanting body dissatisfaction.

Fashion industry and the media put pressure on women to look like celebrities and attain idealized body image while it makes men to work out to have muscles and 6-abs to resemble athletes and celebrities (Aziz, 2017). In addition, motivation theory states that seeing flawless models is enough to motivate women to change their appearance if they think they don't stand to the images they view. Women compare themselves with these images without knowing that so much of what they are viewing is not real. Thanks to digital altering and Photoshop, the images are made to look perfect. By examining the media images presented to them, women decide how they should look and compare themselves to the way the media defines beauty. This in turn

motivates them to alter their appearance to copy the models seen in the media (PladoCostante, 2013).

2.2.5 Media Ecology Theory (MET)

Media Ecology Theory explores the social impact of technology and communication (McLuhan, 1964). According to the theory, media shapes culture directly. Media ecology studies how media and communication processes influence human perception, feeling, understanding, and value in communication studies (Parameswaran, 2008). Marshall McLuhan emphasized that electronic media have revolutionized society, and society was quickly becoming dependent on these communication technologies. McLuhan felt that it was almost impossible to find a society unaffected by electronic media. As society has evolved, its technology has also evolved. The rules of media set forth by Media Ecology Theory state how technology affects communication through the development of new technology. MET focuses on the idea that society cannot escape the influence of technology and that technology will forever remain vital to almost every action in modern life. The influence of media technology on society is the main concept of MET, upheld by three main assumptions: media is infused into every act and action in society, media fixes perceptions and organizes experiences, and media bring the world together (McLuhan, 1964). The theory states that media directly influences us, as they are powerful in our perception of the world. Media connects the world into a “global village,” where media can tie anyone around the globe into a single social, cultural, political, and economic system (Parameswaran, 2008).

2.2.6 Third-person effect

This theory states that despite the fact that media consumption levels have grown tremendously, individuals think that the media are not having an effect on them but rather on other people. Researchers’ interest and study in media effects should give a clear indication that the media do have some sort of effect. However, people tend to be immune to the effect and claim others are being affected by the media. And the so called ‘others’ claim they are not being affected but rather some others which ultimately include the original individuals (Perloff, 2002). This paradox of media effects is what is called the third-person effect. The assumptions on the part of people exhibiting this effect are that communication stimuli have a bigger impact on other

individuals, and that behavior must be changed to match the statement that media are having a larger influence on 'others' (Perloff, 2002).

2.3 Research findings on the relationship between social media use and body Image

Social media reinforces the thin ideal body since it can be connected to almost all outlets of mass media. And these days the use of social media is prevalent especially among adolescents and young adults. Women are most commonly the targets of these ideal body portrayals and advertisements. Everything from height, weight, body measurements, and body shape has become an intricate part of this ideal. Thin body is being promoted as the ideal body. Women are being pressured to attain the perfect body and ultimately become more attractive. Pritchard & Cramblitt, in their 2014 study argue that many of these ideals are, impossible for many people to realistically and healthily achieve. The media mostly report about the few who have achieved the ideal thin body and these in most cases are paid models, celebrities and athletes.

In the United States, the majority of female models are 15 percent below the average female weight and 95 percent of actresses are thinner than the average woman (Pritchard & Cramblitt, 2014). These types of bodies and advertisements are telling women that they should strive towards being thinner and weighing less than the average woman, which can be extremely unhealthy. Klein (2013) also argues how younger generations are experiencing increased accessibility to social networking and the Internet while also facing the increasing desire to belong to numerous different social media sites. This is increasing their exposure to image heavy social media such as Instagram and Snapchat, which both only use, post, and share images. Exploratory analyses revealed that Instagram users scored significantly higher on body surveillance compared to non-Instagram users. Unlike Facebook, Instagram is purely a photo-based platform and known for the pervasive 'selfie' as well as 'fitspiration' images. It may be that young women higher in body surveillance tendencies are more likely to use Instagram regularly due to the unique self-presentation opportunities it offers beyond Facebook (Chua & Chang, 2016).

A study has found a link between higher social comparison and thin-ideal internalization scores and greater body dissatisfaction in an early adolescent female sample (Burnette, 2016). A total of 36 students from grade 7 and 8 took part in a survey that aimed to assess the impacts of social

media use on thin-ideal internalization, social comparison, and body dissatisfaction. The participants first had to answer demographic questions. A social media use questionnaire that assessed Internet access, time spent on social media sites and applications, and types of social media activities was used. An 11 item-Physical Appearance Comparison Scale-Revised assessed appearance based comparisons. The study used qualitative and quantitative methods to explore social media engagement, exposure, attitudes, and beliefs in an emerging adolescent female sample. The researcher used focus groups to learn how this population interacts with social media and how it perceives social media's impact. Sociocultural Attitudes Towards Appearance questionnaire-4 was used to measure thin-ideal internalization. Body dissatisfaction was assessed using the Body Dissatisfaction subscale of the Eating Disorders Inventory-3. Both internet and social media use were high in this sample. All participants reported having Internet access at home. Over 90% reported using social media at least daily, and half reported visiting social media sites multiple times per day. The most popular applications within this sample were visual social media platforms like Instagram and Snapchat. Higher scores on measures of social comparison and thin-ideal internalization were significantly associated with greater body dissatisfaction in this study. Interestingly, the girls did not report frequent social comparisons. In fact, many actively denied comparing themselves to others and pointed out the potential harm of making these comparisons (Burnette, 2016).

A study conducted in 2012 has attempted to explore the connection between media use and body dissatisfaction. The study compared media with the internal factor of self-esteem and other social factors including peer and parental attitudes. A sample of 285 female undergraduates completed measures of media exposure, comparisons with media figures, self-esteem, parental and peer attitudes toward body shape, and peer comparisons, as well as internalization of the thin-ideal and body dissatisfaction measures. Overall, comparison to media figures was linked with internalization of the thin ideal but not as strongly as peer attitudes and self-esteem. On the contrary, peer comparisons and self-esteem were found to be the strongest indicators of body dissatisfaction. In addition, social or environmental influences and self-esteem proved to be robust indicators of body dissatisfaction, which suggested that the indirect effect of media messages on body dissatisfaction is an important area for further examination (Van-Vonderen, & Kinnally, 2012).

Another research conducted on 259 Australian women aged 18-29 has found that total time on Social Network Sites was not related to body image outcomes. The study conducted in 2017 was aimed at identifying the specific social networking sites components that relate to body image concerns (Cohen, Newton-John, & Slater, 2017). The components of body image concerns in the study were Thin-ideal internalization, appearance satisfaction, body surveillance and eating disorders. After demographic questions were presented to the participants; BMI was also calculated. Various scales were employed in study. Social networking site use was used to assess the amount of time spent on Facebook and Instagram. A 23-items Facebook questionnaire was used to measure total Facebook use and Facebook appearance exposure. From this, eight of the activity items that were photo-based activities e.g. 'update your profile picture' and 'view friends' photos of themselves' comprised the photo subscale. Frequency scores for these items were summed and divided by the overall Facebook questionnaire score to comprise the appearance exposure score. Thin-ideal internalization was measured by the internalization general sub scale of the socio-cultural attitudes towards appearance questionnaire-version 3. Appearance satisfaction was assessed by the appearance evaluation sub scale of the multi-dimensional body self-relations questionnaire-appearance scales. Body surveillance was assessed using the sub scale of the objectified body consciousness scale. And the drive for thinness sub scale of the eating disorder-inventory-3 was used to measure disordered eating symptomology.

Results of the study indicated that 257 from the total 259 participants had a Facebook account and checked their Facebook account at least 3-5 times per day. 81.5% had an Instagram account with over half of the participants checking Instagram 3-5 times a day. Findings of the study showed that total time on Social Network Sites was not related to body image outcomes, but rather greater engagement in photo activities on Facebook was associated with greater thin ideal internalization and Body surveillance. Similarly, following appearance-focused accounts on Instagram ('celebrities') was associated with both thin-ideal internalization and body surveillance, and the following of 'health' and 'fitness' accounts also demonstrated a relationship with thin-ideal internalization as well as increased drive for thinness. Following appearance-neutral Accounts ('travel') was not associated with any of the body image variables.

A study by Wallis in 2015 tried to examine how social media impacts the body satisfaction of adolescent and young adult females. Participants of the study were female high school and college students between the ages of 14 and 24. Age was broken into two groups, creating a younger (14-18) and older (19-25) group. This was with the aim of making comparisons between the two age groups in relation to the variables being studied. An online questionnaire was distributed. The instrument used in the study was a 66-item questionnaire using the Qualtrics program. The Body-Areas Satisfaction Scale was used to assess body satisfaction, the Engagement in Social Comparison Behavior Scale used for assessing on participants' likeliness to engage in social comparison behavior as well as the Sociocultural Attitudes towards Appearance Questionnaire was also utilized to evaluate participants' attitudes towards their body. Items measuring participants' time spent on social media and other demographic variables were also included in the research instrument.

A total of 357 female respondents participated in the study. Of the 357 participants, 140 were in the age category of 14-18 and 217 were in the age category of 19-25. Descriptive statistics, linear regression, Independent samples T-test among other methods were applied. Results indicated that participants who accessed their social media accounts more times per day were more likely to engage in social comparison behavior to fashion models and celebrities and peers. In addition, the more participants compared themselves with fashion models and celebrities and peers, the higher their appearance-related attitudes, which lowered their body satisfaction. Age was not a significant factor in predicting time spent on social media, participation in social comparison behavior or appearance-related attitudes. However, among the sample, younger participants were overall more satisfied with their body than older participants. The study determined that on average, participants checked their social media accounts between 5 and 15 times a day and spent three or less hours daily on social media (Wallis, 2015).

Fardouly, Diedrichs, Vartanian, and Halliwell in 2015 carried out a study on the effect of Facebook usage on body image and mood in women. In the two part experimental research, a sample of 112 female participants took part in the study. 38 of them were randomly assigned to spend 10 minutes browsing through their own Facebook account, 36 to browse a magazine website while 38 of them were engaged in browsing appearance-neutral control website. On the second part, the participants were requested to complete an assessment that measures mood,

body dissatisfaction, and appearance discrepancies scales. The scales used were Self-Discrepancy Index, Upward and Downward Appearance Comparison Scale and computer based visual analog scales (VAS). The research found that women reported being in a more negative mood after brief exposure to Facebook than after exposure to an appearance-neutral website, and that for women who are high in appearance comparison tendency, spending time on Facebook lead to greater face, hair and skin-related discrepancies (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015). The finding that exposure to Facebook induced a more negative mood in young women is consistent with previous research showing that brief exposure to Facebook led to more negative mood for both men and women (Sagioglou & Greitemeyer, 2014).

Another research conducted in 2014 examined the relationship between body image and adolescent girls' activity on the social networking site, Facebook. 103 Research participants between the ages of 12 and 18 years completed a survey. The survey begun with the demographic questionnaire followed by the Facebook Questionnaire (FBQ). Body image measures were presented in randomized order to minimize sequencing effects. Participants also reported age, grade level, height, weight among others under the demographic section. Later their Body mass index (BMI) was calculated. The FBQ was created by the authors to assess total Internet and FB use and FB appearance exposure. FB appearance-related exposure was used to assess the frequency of user activity on specific FB features.

A 24-item list of individual FB activities was compiled based on a list of popular features published on the FB help center. Eight activity items that involved photos (of self and friends) made up the photo subscale (PS). Frequency scores for these items were summed and divided by the overall FBQ score to create the appearance exposure score (AES). The appearance exposure scale represents users' photo-based activity relative to their overall FB activity. The extent to which adolescents adopt the media-presented appearance ideals for themselves was measured by the 5-item sociocultural internalization of appearance questionnaire for adolescents. Subjects' tendency to compare their appearance to the appearance of others was assessed using the physical appearance comparison scale. The 8-item Weight Satisfaction subscale of the Body-Esteem Scale for Adolescents and Adults (BES) was used to assess how girls feel about their bodies/ weight. In addition subjects' pursuit of thinness and fear of being fat was assessed with the 7-item Drive for Thinness subscale of the Eating Disorder Inventory. The 10-item Self-

Objectification Questionnaire was also used in the study. Subjects of the study were asked to rank order 10 body attributes in order of how much impact each attribute has on their physical self-concept.

Data collected was analyzed using descriptive statistics, person correlation and exploratory analysis. The results found controlling for BMI, FB appearance exposure was positively correlated with internalization of the thin ideal, self-objectification, and drive for thinness, and negatively correlated with weight satisfaction. Meaning it was not the total time spent on FB or the Internet, but the amount of FB time allocated to photo activity that was associated with greater thin ideal internalization, self-objectification, weight dissatisfaction, and drive for thinness. Appearance-related FB exposure was positively correlated with self-objectification. Also Exploratory analyses comparing FB users and non-FB users as groups revealed that FB users scored significantly higher on self-objectification and physical appearance comparison (Meier & Gray, 2014).

A research conducted in 2017 examined the effect of Instagram use on body image concerns and self-objectification among women between the ages of 18 and 25 from the United States (n=203) and from Australia (n=73). 276 female participants were recruited through online means, following that the participants were asked to complete an online questionnaire which had several scales. Three questions were asked to measure Instagram related usage: a) “How often do you check Instagram (even if you are logged on all day)?” And b) “Overall, how long do you spend on Instagram on a typical day?” c) How often they viewed fitspiration images on Instagram? Several scales used in Fardouly, Willburger and Vartanian, (2017) study included the Self-Objectification Questionnaire, Eating Disorder Inventory, Upward and Downward Appearance Comparison Scale and Internalization-General subscale of the Sociocultural Attitudes Towards Appearance Questionnaire-3 and the Drive for Thinness subscale. The results showed that the participants checked their Instagram between once a day and once every few hours. Overall, Instagram usage was positively correlated with self-objectification, internalization of the beauty ideal but not with body dissatisfaction or drive for thinness. The results suggest that Instagram usage may negatively influence women’s appearance-related concerns and beliefs (Fardouly, Willburger, & Vartanian, 2017).

Similarly, Wagner, Aguirre, & Sumner, (2016) conducted a study to observe the relations between actual body size, body dissatisfaction, frequency of selfies taken, and number of Instagram selfies posted. The researchers wanted to test the hypothesis that Participants actual body size (BMI) will be positively related to their reported sense of body dissatisfaction. The sample consisted of 130 female college students ranging from 18–32 years of age. A selfie was defined as a digital self-portrait usually taken with the use of a camera phone. The number of selfies taken was assessed using an open-ended item that asked participants how many solo-selfies they take in general during a typical month. Likewise, the number of selfies posted was similarly measured using an open-ended question that asked participants how many solo-selfies they post to Instagram during a typical month. According to an article from the Telegraph cited, by the researchers, the “average person posts over 100 selfies a year.” This number of selfies breaks down to less than 10 per month. Participants’ actual body size was assessed in the form of their body mass index (BMI). Body dissatisfaction was assessed using the Body Image Assessment Scale-Body Dimensions (BIASBD). The Body Image Assessment Scale-Body Dimensions uses a pictorial scale of silhouette figures that are designed to represent various body sizes that range from 60–140 percent of the typical female BMI. The study’s results indicated that actual body size was positively related to body dissatisfaction, and negatively related to the number of selfies taken. The Results also revealed a positive relationship between body dissatisfaction and selfies taken. No correlations were observed between the frequency of selfies posted to Instagram and either actual body size or body image dissatisfaction.

However a 2017 study on the relationship between Instagram use and body dissatisfaction have failed to yield the same results as the above mentioned studies. The study conducted on 105 Arizona university students between the ages of 18 and 54 using a survey found no correlations between the Instagram use and Body dissatisfaction (Ruotsi, 2017). The survey included demographic questions and questions pertaining to Instagram use such as frequency of posting, following of fitness accounts, following of dieting accounts, posting a photo among others. The observed variables of Instagram use included Frequency of Use, Time Spent Editing, and Following of Fitness and Dieting accounts. Levels of body dissatisfaction were measured using the Eating Disorder Inventory-3 RF. Levels of Body Dissatisfaction were classified to three categories: Low, Moderate and High. The relationship between Instagram use and body dissatisfaction were analyzed using person correlation. Descriptive statistics (mean, median,

mode, range) were run on Body Dissatisfaction. The results indicated no correlations between Instagram and body dissatisfaction. All variables compared against Body Dissatisfaction were found to be statistically insignificant with p-values ranging between 0.057 and 0.504. However a more notable correlation though still insignificant was observed between following diet accounts and levels of body dissatisfaction.

An experimental study was conducted recently on 125 participants ranged in age from 17 to 27 years. Participants' body mass index was found to be on average 24.31. Visual analogue scales were used to measure state overall appearance and body dissatisfaction before and after Active Social Media Engagement. The researchers hypothesized that young adult women who actively engaged with the image-based social media of attractive peers (upward social comparison targets) would have more negative body image than before doing so, whereas young adult women who engaged with the image-based social media of family (unlikely social comparison targets) would not. Results indicated active social media engagement with attractive peers' appearance-based social media resulted in worsened body image in young adult women, whereas interacting with that of family had no effect on state body image, supporting the hypothesis (Hogue, & Mills, 2019). Cross-sectional research shows negative associations between body image and active social media engagement, particularly photo-based active social media engagement (Cohen, Newton-John, & Slater, 2017; Holland & Tiggemann, 2016; Kim & Chock, 2015; Meier & Gray, 2014).

Various researchers have found a link between facebook use and body image concerns (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015; Tiggemann & Slater, 2003). For instance Tiggemann & Slater in 2003 discovered that teenage girls were more susceptible to body concerns such as monitoring body appearance, idealizing thinness, and pursuing thinness, than were teenage girls who did not use Facebook. Furthermore, Kim and Chock in 2015 found that liking, visiting and commenting on friends posts and photos were associated with body image concerns. Kalnes in 2013 conducted a research to assess the impact of social media on female adolescents' body image. He found social media plays a role in body dissatisfaction among female adolescents and often times fuels social comparison behavior. Burnette's 2016 study has found a link between higher social comparison and thin-ideal internalization scores and greater body dissatisfaction in an early adolescents. Likewise several researches have been conducted on the

relationship between body image and Instagram use (Holland & Tiggemann, 2016; Tiggemann & Zaccardo, 2015; Chua & Chang, 2016). Fardouly, Willburger, & Vartanian, 2017 conducted a research to examine the effect of Instagram use on body image concerns among women aged between 18 and 25. They found out Instagram usage was positively correlated with self-objectification, internalization of the beauty ideal but not with body dissatisfaction or drive for thinness. The results do suggest that Instagram use may negatively influence women's appearance-related concerns and beliefs. Wagner, Aguirre, & Sumner, (2016) tried to assess the impact of selfies taken on body dissatisfaction. They found a positive relationship between body dissatisfaction and selfies taken.

There aren't sufficient researches conducted on the impacts of social media use on the body image of young black females. What is known about negative body image (body dissatisfaction) and its relationship with social media use derived mainly from researches conducted in the western world based on westernized standards of beauty. With the aim of getting some contextualized insights into body dissatisfaction among university students, this study is specifically interested in investigating body image among young female university students who live in Addis Ababa, Ethiopia. Furthermore, the study wants to give attention to body dissatisfaction as it's becoming a pressing matter especially among teenagers and young adults in the western world.

Chapter Three

3 Research Methods

3.1 Design of the research

Correlation research design was used in the study to assess the relationship between Facebook and Instagram use and body image among female students. Correlational study shows the relationship of variables as it is, in their natural setting. There is no effort directed at manipulating or controlling the variables. This makes correlational research more applicable to real life settings. Correlational study was also used because of its capability in providing researchers with a good starting point (Paul C. Price, n.d.).

3.2 Study Area and population

The research participants were students of college of business and economics. The campus is located at sedest kilo. The study was conducted on female students of management. The researcher was first led to the college through a friend who studies there. According to him, majority of the students in his class spend most of their time outside of class on various social media platforms; Facebook being the leading platform. Following that the student researcher carried out her own observations on several occasions and had the chance to talk to some of the students from management department. She observed for herself that majority of the students she observed were active Facebook and Instagram users. The researcher first obtained an oral consent from the participants before carrying out the data collection. The study was conducted on 108 female students. There were 307 (109 regular and 198 extension) female students in management department. Using purposive sampling, 31 second year female students were picked. Because the number wasn't enough, the researcher took all the 54 regular female first year students. Then finally, using convenience sampling, the researcher managed to pick 23 extension female students to reach the sample size 108. According to Kothair, (2004) a study population of interest (N) less than 10,000 sample size of the study is calculated by using the formula:-

$$n_f = n / (1 + n/N) \quad \text{where} \quad n = \frac{(z^2 x p x q)}{N}$$

n=desired sample size

z=standard normal variable at the required confidence level (z-statistics) 93%=1.81

p=estimated characteristics of target population=0.5

q=1-p=1-0.5=0.5, d=level of statistical significance error=0.07

$$n = \frac{(z^2 x p x q)}{N} = (1.81(0.5) (0.5) / (0.007)^2) = 167$$

Therefore, for the population 307 the desired sample is calculated as:-

$$n_f = n / (1 + n/N) = 167 / (1 + 167/307) = \mathbf{108}$$

3.3 Sample and Sampling Procedures

3.3.1 Sampling methods

Purposive and convenience sampling were mainly used in the study. The researcher had the chance to observe and talk to some of the students of management. Most of the students were second year regular female students. So using purposive sampling the researcher took all the 31 second year female students. Following that, 54 first year female students were chosen, making the total number 85. This is because research has shown that adolescents were more likely to get body image concerns than adults and spend most of their time on social media platforms. And compared to second and third year students, first year students were very much younger in age. The researcher wanted to mix the sample size to make it representative. With that in mind, female extension students were added to the sample. Convenience sampling was used to pick 23 extension students. However the researcher wanted the age domain of the extension students to fall more or less in the regular students' domain; as a result the researcher chose extension students who were in their late 20s. Meaning extension students below the age of 30 were picked for the study. Convenience sampling is quick and economical, that is why it was employed in the study. Purposive sampling on the other hand uses the best available knowledge concerning the sample subject and also gives better control of significant variables (Kumar, 2017).

3.3.2 Data Gathering Tools

A questionnaire with two parts was used in the study. The first part consisted of demographic questions, two questions that assessed the frequency of Facebook and Instagram use as well as Facebook and Instagram use questionnaires (FBQ and INQ). The frequency use questionnaires included questions like “In a typical week, how frequently do you use Facebook? ‘And ‘In a typical week, how frequently do you use Instagram?’”. The choices range from ‘never’ to ‘more than 2 hours per day’. The second part was comprised of two scales that measured body image: these were the ‘Figure Rating Scale’ (FRS) and modified version of the ‘body shape questionnaire’ (BSQ).

3.3.2.1 The Facebook use questionnaire (FBQ)

This questionnaire was an adopted and modified version of the Facebook use questionnaire which was created by Meier and Gray in 2014 to assess total Internet and FB use and FB appearance exposure. It assesses the frequency of user activity on specific FB features. The original questionnaire had 24-item list of individual FB activities compiled based on a list of popular features published on the FB help center. The Cronbach’s alpha in Meier and Gray’s study was 0.874 for the total FBQ (n = 24). However for this study 13 items that assessed the frequency of Facebook were used. Some of the adopted questions were how often do you “update your profile photo” and how often do you “Share photographs (photos of subjects other than yourself, friends, or family)”? Some of the modified questions were how often do you “view friends’ photos of themselves or comment on their photos” and how often do you “share photos of yourself”. The questionnaire was based on a 5-point scale, ranging from 1 = “almost never or never” to 5 = “nearly every time I log on.”

3.3.2.2 The Instagram use questionnaire (INQ)

The researcher developed the Instagram use questionnaire with 11 items. Some of the items were “on estimate you spend majority of your time viewing photos of celebrities, fitness models, online personalities and other public figures” “You change your profile picture more often”. Two items were adopted and modified from Fardouly, Willburger and Vartanian, 2017’s study. These were ‘how often do you view fitspiration images on Instagram’ and ‘When looking at photos of the following people (referring to people of the same sex as you) on Instagram, how

often do you compare your appearance to theirs?” the scoring was based on 5-point scale ranging from 1 = “almost never or never” to 5 = “nearly every time I log on.”

3.3.2.3 *The Figure Rating Scale (FRS)*

The Figure Rating Scale (FRS) also known as the Stunkard Scale was developed in 1983 as a tool to determine body dissatisfaction in women and men (Stunkard, Sorenson & Schlusinger, 1983). The Figure Rating Scale consists of a series of nine figure drawings, ordered from extremely thin to very obese in appearance. In a study conducted in 2016, the figure rating scale was found to be valid with good test-retest reliability. The internal consistency was acceptable for the different sub-scales with Cronbach’s alpha ranged from 0.68-0.85 (Kamaria, Vikram, & Ayiesah, 2016). This type of measurement was originally developed and validated to indicate the weight status of relatives of research subjects when other specific measurements or self-reported values were unavailable (Cardinal, Karciroti & Lumeng, 2006). This scale is a visible measure of how an individual perceives his or her own physical appearance.

Participants of the study were asked to answer the following questions: 1) “Of the body silhouettes shown above, indicate the one that most accurately resembles your current body size,” and 2) “Of the body silhouettes shown above, indicate the one that best represents your ideal body size.” Response ranged from 1 (very thin) to 9 (very obese). Body dissatisfaction was assessed by calculating the difference between the selected current body size silhouette and the selected ideal body size silhouette. Discrepancy between ideal body size and current body size indicated level of body dissatisfaction. With 0 percent representing no desired body change, and subsequently larger scores representing proportionately larger desired body change.

3.3.2.4 *The modified Body Shape Questionnaire (BSQ)*

The scale was used to measure the concerns related to one’s body shape (Cooper, Taylor, Cooper, & Fairburn, 1987). This scale consists of 34 items and is widely used to assess body dissatisfaction and treatment of eating disorders (Cooper, Taylor, Cooper, & Fairburn, 1987). The modified version of the scale with 9 items was used in the study. The Modified Version took lesser time to administer and was easier for scoring compared to the original 34 items questionnaire. The scale was used in Gupta’s 2011 study on the Relation between Body Image Satisfaction and Self-esteem to Academic Behavior in Adolescents and Pre-adolescents and has yielded satisfactory psychometric properties. Gupta reported Dowson and Henderson (2001)’s

study used this modified version for their study and found the internal reliability to be 0.93. It is based on a six-point likert scale ranging from never (1 point) to always (6 points). Higher levels of body image dissatisfaction and lower scores indicate higher levels of body image satisfaction. Some items from the scale were “Have you noticed the shape of other people and felt that your own shape compared unfavorably?” and “Have you felt ashamed of your body?”

- A reliability analysis was conducted for this study and the coefficient alpha of the scales used in the study ranged from less than moderate to satisfactory. That is for the Facebook use questionnaire with 13 items ($\alpha = .48$), for Instagram use questionnaire with 11 items ($\alpha = .71$), for the figure rating scale with 2 items ($\alpha = .59$), for the modified body shape questionnaire with 9 items ($\alpha = .73$).

3.4 Data Analysis

The data were collected and entered to SPSS (version 20.0). Mean, frequency and percentage were the techniques used to analyze the demographic questions such as: weight, height and BMI. Cross-tabulation was used to assess the score of body dissatisfaction of the participants on the figure rating scale. The relationship between social media use (Facebook use and Instagram use) and body image were examined using Pearson’s correlation. Linear regression was used to examine the proportion of variance Facebook and Instagram use explained in body image.

Chapter Four

4 Descriptive summary of major variables

A total of 108 students took part in the study. All the participants were female students of management. 45.5 % of the participants were aged between 21 and 23. 55.6 % weighed 56 kg and above. Also 46.3% of the participants' height fell between 1.61 meters and 1.70 meters. This indicated the majority of the participants were on average tall. Even though more than half of the participants weighed 56 kg and above because their height complemented their weight, 71.3% of the participants' body mass index or BMI was under normal category. 14.8 % and 13.9 % of the participants' BMI were under weight and overweight respectively.

Table 1 Characteristics of the research participants

		Frequency	Percent
AGE	18-20 years	30	27.8
	21-23 years	49	45.4
	24years and above	29	26.9
Weight	45kg and below	7	6.5
	46-55 kg	41	38.0
	56 kg and above	60	55.6
Height	1.50 m and below	13	12.0
	1.51-1.60 meters	38	35.2
	1.61-1.70 meters	50	46.3
	above 1.70 meters	7	6.5
BMI	<18 (underweight)	16	14.8
	18.5-24.9 (normal)	77	71.3
	25-29.9 (overweight)	15	13.9

The main take from the above table is that 71.3% of the participants' body mass index or BMI was considered normal. The sample size for the study was 108. The participants were aged 18-29. Various researchers used various sample sizes in their research works. Cohen, Newton-John, & Slater in their 2017 study used a sample size of 259. All their participants were Australian women aged 18-29. The researchers also calculated the BMI results of the participants; however weight and height of the participants weren't presented.

Like wise, an average of the participants reported a BMI of 22.45 which is within the normal weight range (WHO, 2016 cited in Cohen, Newton-John, & Slater, 2017). Meier and Gray survey conducted a survey in 2014 on 103 middle and high school female participants aged between 12 and 18 years. Height and weight were part of the demographic questions however they weren't presented on the results section. BMI was calculated and the mean was found to be 22.23, which showed normal weight. However BMI results were controlled in the study (Meier & Gray, 2014). Another research conducted by Wagner, Aguirre and Sumner in 2016 used a sample size of 130 female college students. They were aged 18-32. BMI of the participants was calculated. The average BMI in study was found to be 21.59 which fell under normal. To conclude with, most of the studies used in this paper were conducted on participants with normal BMI. And the age group and sample size used in the current study have shown similarity with the work of various researchers.

4.1 Frequency of Facebook and Instagram use

The study found 61.9 % of the participants used Facebook for more than 3 hours per week. Only 32.4 % of the participants however used Facebook 1-3 hours per week. It is safe to say the participants' Facebook usage was average. In the case of Instagram though, the data were evenly dispersed. 33.3 % of the participants' spent more than 3 hours per week, 33.3% also never or almost never use Instagram. Which could have meant that one third of the participants have an Instagram account but don't access it regularly. According to the telegraph, the average person has five social media accounts and spends around 1 hour and 40 minutes browsing these networks every day, accounting for 28 percent of the total time spent on the internet (Davidson, 2015).

The average person will spend nearly two hours (approximately 116 minutes) on social media every day. Even more, time spent on social is only expected to increase as platforms develop,

and is expected to eat further into traditional media - most notably TV. YouTube comes in first, consuming over 40 minutes of a person's day. Facebook users will spend an average of 35 minutes a day, (some statistics include Facebook, Facebook-owned Instagram, and Facebook Messenger for total time spent on Facebook). Snapchat and Instagram come in next with 25 minutes and 15 minutes spent per day, respectively. Finally, users will spend 1 minute on Twitter (Asano, 2017).

Table 2 Facebook and Instagram usage frequency

		Frequency	Percent
Facebook	Never	6	5.7
	1-3 hours per week	35	32.4
	More than 3 hours per week	67	61.9
Instagram	Never	36	33.3
	1-3 hour per week	36	33.3
	More than 3 hours per week	36	33.3

The current study found 61.9% of the participants used Facebook for more than 3 hours per week. However, only one third (33.3 %) of the participants spent more than 3 hours per week on Instagram. Burnette conducted a research in 2016 on 36 students from grade 7 and 8. Over 90% of the participants reported using social media at least daily, half reported at least visiting social media sites multiple times per day. The two most popular applications were found to be Instagram and snapchat. Another research conducted on 259 Australian women aged 18-29 with a similar age group to the current study found that 257 from the total 259 participants had Facebook account and checked their account at least 3-5 times per day. 211 had an Instagram account with over half of the participants checking their Instagram account 3-5 times a day (Cohen, Newton-John, & Slater, 2017).

Wallis in 2015 conducted a research on 357 female high school and college students between the ages of 14 and 24. The results of the study determined on average, participants checked their social media accounts between 5 and 15 times a day and spent 3 or less hours daily on social media. Another research conducted in 2017 on 276 participants have also found participants check their Instagram account between once a day and once every few hours (Fardouly, Willburger, & Vartanian, 2017). All in all participants in the above mentioned studies reported high social media usage including Facebook and Instagram. However in the current study, 61.9 % of the participants reported using Facebook for more than 3 hours per week. While only 33.3 % of the research participants reported spending more than 3 hours per week on Instagram.

It is possible the participants might have decreased their social media engagement temporarily because of exams or assignments. And their immediate experiences have kept them from remembering the longer hours they spent using Facebook and Instagram. It is also possible a number of other extraneous factors have contributed to the results. Compared to Instagram, the number of Facebook users was higher in the study. This is consistent with the data that says the number of Facebook users in Ethiopia as of December 31, 2017 was estimated to be 4.5 million with 4.2 % penetration (Internet world Stats, n.d.). And considering the fact that Instagram is relatively a new platform and had 401, 700 users in Ethiopia as of February 2019, which accounted for 0.4% of its entire population (NapoleonCat., n.d.). To conclude with, the current study found majority of the participants (61.9%) used Facebook for more than 3 hours per week. However, only one third (33.3 %) of the participants spent more than 3 hours per week on Instagram. Majority of the participants were also found to be relatively active users of Facebook than Instagram.

4.2 Participants' perceptions towards their own body image

Perceptions of body size were assessed by examining the differences between current body image and idealized body image. Nine silhouettes that represent the different body sizes of females ranging from 1 (very thin) to 9 (very obese) were presented to the participants. Based on this, participants were asked to pick the silhouette that best represents their current body size and their ideal body size meaning the silhouette that represents what the participants want their bodies to look like. The greater the difference between where participants see their current body size and ideal body size on the silhouette, the greater was their body dissatisfaction level. Less

difference or no difference at all between the two (current body size and ideal body size) meant participants were content with their body image.

The current study found 75% participants whose current body sizes fell under category one (very thin), were dissatisfied and only 25% of the participants in the first category were satisfied with their current body image. This shows most of them wants to gain weight and they feel like they are too thin. 13 % of the participants whose current body size fell under category 2 were satisfied, while the rest 87% of the respondents were dissatisfied. Category 2 is considered thin, so the participants under this category reported dissatisfaction as they would want to gain weight. This was evident because their ideal body size was above category 2. Similarly, below 50 % of the participants whose current body image was under category 4, 5, 6, 7 and 8 reported body dissatisfaction. This was an indicator that the participants in these categories wanted to lose weight. On the other hand, participants whose current body image fell under category 3 showed satisfaction because 61.5% of the participants' current body size matched their ideal body size. Overall majority of the participants around 69.5 % reported dissatisfaction with their body image. The figure below would help to visualize the results.

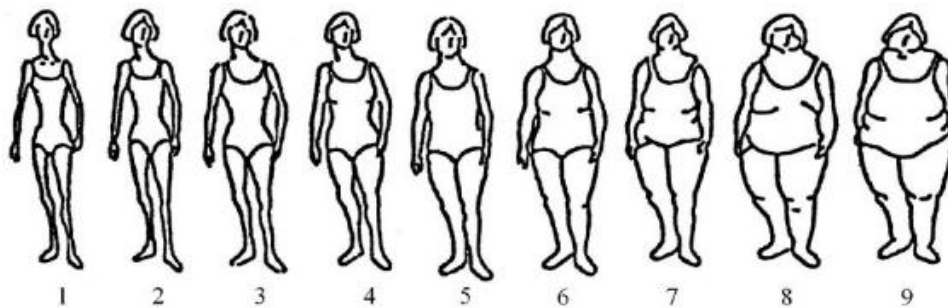


Figure 1 the figure rating scale

(Stunkard, Sorenson & Schlusinger, 1983)

Table 3 Analysis of the figure rating scale

CURRENT BODYSIZE * IDEALBODYSIZE Cross tabulation

		IDEAL BODY SIZE																Total	
		2		3		4		5		6		7		8		9			
		No. of response	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent		
CURRENT BODY SIZE	1	1	25	1	25	1	25	0	0	0	0	0	0	0	0	0	1	25	4
	2	2	13.3	8	53.3	4	26.7	1	6.7	0	0	0	0	0	0	0	0	0	15
	3	0	0	8	61.5	3	23.1	1	7.7	1	7.8	0	0	0	0	0	0	0	13
	4	2	8	5	20	12	48	2	8	4	16	0	0	0	0	0	0	0	25
	5	0	0	5	29.4	6	35.3	6	35.3	0	0	0	0	0	0	0	0	0	17
	6	1	4.89	3	14.3	6	28.6	5	23.8	4	19	1	4.8	1	4.8	0	0	0	21
	7	0	0	0	0	2	25	4	50	1	12.5	0	0	0	0	1	12.5	8	
	8	0	0	0	0	1	20	0	0	1	20	2	40	1	20	0	0	5	
	6	6	5.6	30	27.8	35	32.4	19	17.6	11	10.2	3	2.7	2	1.8	2	1.8	108	

Participants' body image assessed with the figure rating scale has indicated that majority of the participants that is close to 70 % were dissatisfied with their current body. The possible explanation for this is that some of the participants possibly wanted to gain weight because they felt too thin while the others wanted to lose weight because they felt heavy or overweight. 30.5 % of the participants were satisfied with their current body size. Thinness is consistently being celebrated and rewarded for women across movies, magazines, and television programs pressuring girls, adolescents, and young women to attain the idealized thin body image (Fouts & Burggraf, 1999).

However in some cultures obesity is often considered a sign of wealth or prestige (Hu, 2003). This is also true in Ethiopia even though it is changing now due to the influence of western media and globalization. As an Ethiopian, you may have heard the phrase ‘temechtahal’ or ‘temechtoshal’ which can be roughly translated to ‘you are looking good’; those phrases are often used when running to people we know and noticing they have put on a couple of killos. Putting on few killos or gaining weight is considered a sign of wealth and good life; which holds truth because the first food on the menu of a rich person is meat. The rich eat meat and the poor is stuck with shiro. On the contrary, when one sees someone who has lost weight, one automatically assumes they must have been either sick or going through a hard time. Our culture has associated gaining weight with comfort and losing weight with misfortune. Culture is pivotal in mediating body image concerns.

Negative body image has become more common on an international level following the globalization of western media (Ridolfi, Myers, Crowther, & Ciesla, 2011). An appearance-based comparison was found to be the most commonly tested and supported predictor of body dissatisfaction (Leahey, Crowther, & Mickelson, 2007). The current study didn’t assess social comparison as it was focused on the relationship social media has with body image. It didn’t try to establish causation. Based on this, it is hard to say what caused the participants’ body dissatisfaction. Considering their Facebook and Instagram engagement wasn’t that high, it is hard to say social media was a possible factor for their dissatisfaction. Social media often blurs the line between virtual and reality therefore creating ideas that women should look like the images they are viewing on social media (Klein, 2013). The Sociocultural Model suggests that media, peers, and family are important mediums through which messages about weight and appearance are transmitted to members of society (Stice, 1994). Maybe the participants were exposed to thin idealized messages through either their friends or family members.

A 2015 study conducted by Wallis found that participants who accessed their social media accounts more times per day were more likely to engage in social comparison behavior to fashion models and celebrities and peers. In addition, the more participants compared themselves with fashion models and celebrities and peers, the higher their appearance-related attitudes, which lowered their body satisfaction. However Participants of the study reported body satisfaction on the modified body shape questionnaire ($M= 2.27$, $SD=.83$).Simply put,

participants answered on average ‘rarely’ and ‘sometimes’ to the items found in the questionnaire. Some of the items were ‘Have you been so worried about your shape that you have been feeling that you ought to diet?’ and ‘has being with thin people made you feel self-conscious about your shape?’ This indicated the participants didn’t feel the need to alter their bodies.

Table 4 Descriptive statistics for body dissatisfaction

	Body dissatisfaction				
	N	Minimum	Maximum	Mean	Std. Deviation
BSQ	108	1.22	5.67	2.2695	.83234
Valid N (listwise)	108				

The current study found that participants reported body satisfaction on the modified body shape questionnaire. Meaning majority of the participants indicated little to no need to change their body shape. This could be due to different factors. Some of the questions on the scale ask if participants felt the need to either diet or exercise to lose weight or if they felt round and heavy when compared with other slim individuals. Considering the data from the figure rating scale, some of the participants actually wanted to gain weight because they felt too thin. This could be one of the reasons why some of the participants didn’t feel the need to diet or exercise. It could also mean that those participants who felt heavy and were dissatisfied wanted to change but didn’t want to take action to change their current body size. Or simply they wished they were slimmer but weren’t really dissatisfied with their current body image. The participants could have also been dishonest about their answers or didn’t want to admit they want to change their bodies even for themselves.

A study conducted on 177 participants with BMI of mean 30.4 (overweight or obese) indicated that scores on the BMI were positively correlated with the Body Shape Questionnaire. And people with higher BMI, tend to report greater dissatisfaction with their physical selves (Zawawi, 2014). The participants were aged 20 to 55 years old. This was also evident in the current study. Majority of the participants’ BMI was considered normal and majority of the participants reported body satisfaction on the modified body shape questionnaire. One possible factor for

explaining participants' reported body satisfaction on the questionnaire could be the lack of social comparison behavior. Rudd and Lennon in 2000 indicated body image and appearance-management behaviors in college women were created through social comparison behaviors. The authors concluded that even though almost half of the women studied demonstrated a neutral body image, many women (36.8%) mentioned making comparisons with others and media images. The comparisons often resulted in negative feelings.

4.3 Association between Instagram, Facebook and body image among young girls

The relationship between the three variables was assessed using Pearson correlation. The Pearson correlation coefficient between Facebook and Body image was found to be -.045 with Significance value of 0.646. Which meant Facebook use was negatively correlated with body image. However the correlation was weak or insignificant. Similarly the Pearson correlation coefficient between Instagram and Body image was -.236 with Significance value of .014 which is less than .05. This indicated that Instagram use and body image were significantly correlated at 0.05 level. The study also found that Facebook and Instagram were positively correlated to each other.

Table 5 Correlations amongst Facebook, Instagram and body image

		Correlations		
		Facebook	Instagram	Body Image
Facebook	Pearson Correlation	1	.362**	-.045
	Sig. (2-tailed)		.000	.646
	N	108	108	108
Instagram	Pearson Correlation	.362**	1	-.236*
	Sig. (2-tailed)	.000		.014
	N	108	108	108

** . Correlation is significant at the 0.01 level (2-tailed).
 * . Correlation is significant at the 0.05 level (2-tailed).

The study found a non-significant negative relationship between Facebook use and body image. On the other hand, Instagram was found to be significantly correlated with body image. A strong positive correlation was also found between Facebook and Instagram. This is good for future

research as it could help researchers to use Facebook and Instagram interchangeably because of their strong correlation. A research conducted on 357 female participants tried to examine the impact of social media on body image of adolescent and young adult females. The study found the more time participants accessed their social media accounts, the more likely they were involved in social comparison behavior this as a result lowered their body satisfaction. The study was conducted on students aged 14-24. The results of the study indicated young participants aged 14-18 were overall satisfied with their body than older participants aged 19-25 (Wallis, 2015). This could explain why the research participants of the current study reported body dissatisfaction on the figure rating scale.

The Center for Eating Disorders created a public survey for Facebook users ranging from 16 to 40 years old. 51% of the survey respondents said that seeing their photos on Facebook makes them more conscious about their own body and their weight. An experimental research conducted on 112 female students in 2015 has explored the effect of Facebook use on body image in women. The study found that women reported being in a more negative mood after brief exposure to Facebook than after exposure to an appearance-neutral website (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015). This result was also consistent with previous research that showed brief exposure to Facebook led to more negative mood for both men and women (Sagioglou & Greitemeyer, 2014). Even though the current research didn't find a significant correlation between Facebook use and body image; the direction of the correlation indicated a possible negative relationship between the two.

A 2017 research tried to examine the effect of Instagram use on body image concern and self-objectification among women aged 18-25. The study was conducted on 276 female participants. It found Instagram usage may negatively influence women's appearance-related concerns and beliefs (Fardouly, Willburger, & Vartanian, 2017). Another study published on the same year titled Instagram use and body dissatisfaction in adult women hypothesized that women who spend more time on Instagram were to have higher body dissatisfaction mediated by internalization of the thin ideal (Caltabiano & Paunovic, 2017). 108 female participants with mean age 28.8 years participated in the study. The average time spent on Instagram in the study was 34 minutes. Time on Instagram was found to have a significant positive correlation with

body dissatisfaction ($r=.243$, $p=.05$). Also time on Instagram was found to be positively correlated with body dissatisfaction however thin internalization didn't mediate the relationship. According to the researchers, participants in this study were older which may have accounted for the lack of a mediation effect of thin internalization. Social media usage was also positively correlated with body dissatisfaction ($r=.325$, $p=.01$).

4.4 Facebook use as predictor of body dissatisfaction

The study found that Facebook only explained 0.2 % of body image which was accounted as 0. Meaning other close to 100% various factors can predict body image concerns but Facebook's predictive power was almost 0%. It was an insignificant value. Unstandardized Coefficients of the contribution of the independent variable was $-.049$. Significant impact value of the variable was $.646$. Similarly, it is possible to observe that the t value was $-.46$. The data also showed linear regression equaled to 0.002 ($R^2=0.002$).

Table 6 Facebook as predictor of body dissatisfaction

Model	Coefficients ^a							
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	2.435	.368		6.619	.000	1.705	3.164
	FBQ	-.049	.107	-.045	-.460	.646	-.260	.162

a. Dependent Variable: BSQ
b. Constant=2.436, Sig ≥ 0.05 R=.045, $R^2=0.002$

In the current study, Facebook's predictive power in body dissatisfaction was almost 0%. Since the study wasn't experimental in nature it is hard establish causation. However regression is what comes close to causation and predication in correlational studies. A research conducted on 259 Australian women aged 18-29 used Social networking site use to assess the amount of time spent on Facebook and Instagram. The results of the study indicated that total time on Social Network Sites was not related to body image outcomes rather greater engagement in photo activities on Facebook was specifically associated with greater thin ideal internalization and Body

surveillance (Cohen, Newton-John, & Slater, 2017). Meaning the types of activities participants are engaged in on Facebook determines their body image. Spending majority of time chatting on Facebook as opposed to going through people's feeds looking at pictures may not make a person conscious about his/ her body. However spending time on Facebook activities that involve pictures be it posting one's pictures or looking at pictures of others; these could lead to social comparison and consequently can make a person discontent with their current body image.

Wallis in her 2015 study examined how social media impacts the body satisfaction of adolescent and young adult females. Linear regression was used in the study. The results indicated a significant positive relationship between the number of times participants checked their social media accounts per day and social comparison behavior to fashion models and celebrities. In other words, the more times participants accessed their social media accounts per day, the more likely they were to engage in social comparison behavior to fashion models and celebrities. Even though the amount of time spent on social media was not a significant predictor of participants' social comparison behavior to fashion models and celebrities. However those participants engaged more frequently in social comparison behavior towards fashion models and celebrities exhibited lower body satisfaction scores as compared to those who were engaged less frequently in social comparison behavior to fashion models and celebrities. This shows that social comparison is an important predictor of body dissatisfaction.

Tiggemann & Slater in 2003 found that teenage girls who used Facebook were more concerned with monitoring body appearance, idealizing thinness, and pursuing thinness, than were teenage girls who did not use Facebook. Furthermore, in comparison to viewing an appearance-neutral website (i.e., a craft website), viewing Facebook was associated with more negative mood and body dissatisfaction for women who tend to compare their appearance with others. An exploratory analyses comparing FB users and non-FB users as groups revealed that FB users scored significantly higher on self-objectification and physical appearance comparison. Burnette in her 2016's study found a link between higher social comparison and thin-ideal internalization scores and greater body dissatisfaction in an early adolescent female Sample comprised of 36 participants. Higher scores on measures of social comparison and thin-ideal internalization were significantly associated with greater body dissatisfaction in the study.

A cross-sectional survey was conducted on 186 participants tried to examine the relationships between young women’s and men’s social media use and body image attitudes—the drive for thinness and the drive for muscularity (Kim & Chock, 2015). Results of this study indicated that simple exposure (time spent on social media) was not related to body image concerns. Online social grooming behaviors, such as viewing and commenting on peer’s profiles, however, were significantly correlated with the drive for thinness for both female and male participants. To conclude with time spent on Facebook or Instagram by itself can’t predict body image dissatisfaction.

4.5 Instagram use as predictor of body dissatisfaction

Instagram was found to predict 5.6 % of the variants in body dissatisfaction. This meant greater than 5 % of the variants in body dissatisfaction was explained by Instagram use. While the rest 94 % was explained by other reasons. Unstandardized Coefficients of the contribution of the independent variable was -.236. Significant impact value of the variable was found to be .646. The t value was -2.5. The data showed linear regression of 0.056 ($R^2=0.056$).

Table 7 Instagram as predictor of body dissatisfaction

Model	Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.096	.340		9.116	.000
	INQ	-.236	.094	-.236	-2.500	.014

a. Dependent Variable: BSQ R square=0.056

In the current study, Instagram was found to predict 5.6 % of the variants in body dissatisfaction. This is a greater number especially considering the low exposure of the participants had to Instagram. Exposure to images of idealized women in social media especially Instagram could cause women to be engaged in upward comparison and ultimately the need to change their bodies (Vartanian & Dey, 2013). This could explain the greater predictive power of Instagram over Facebook. Instagram, compared to Facebook specifically focuses on the dissemination and consumption of personal photographs. Because of this, Instagram could potentially display a

more direct relationship between women's body image and activity on the site (Wagner, Aguirre, & Sumner, 2016).

A 2017 study explored the specific social networking sites components that relate to body image concerns. The components of body image concerns in the study were Thin-ideal internalization, appearance satisfaction, body surveillance and eating disorders. The sample size for the study was 259. The study found that that total time on Social Network Sites was not related to body image outcomes rather engagement. Likewise, following appearance-focused accounts on Instagram ('celebrities') was found to be associated with both thin-ideal internalization and body surveillance, and the following of 'health' and fitness' accounts also demonstrated a relationship with thin-ideal internalization as well as increased drive for thinness (Cohen, Newton-John, & Slater, 2017). The research indicated picture related activities on Instagram specifically related to fitness and thinness were the components associated with body image concerns. Also following celebrities made participants engage in social comparison behavior making them conscious of their body.

Similarly, a 2016 study tried to experimentally investigate the impact of attractive celebrity and peer images on women's body image. Participants were 138 female undergraduate students who were randomly assigned to view either a set of celebrity images, a set of equally attractive unknown peer images, or a control set of travel images. All images were sourced from public Instagram profiles. Results showed that exposure to celebrity and peer images increased negative mood and body dissatisfaction relative to travel images, with no significant difference between celebrity and peer images. The study concluded that exposure to attractive celebrity and peer images can be detrimental to women's body image (Brown & Tiggemann, 2016). Participants of the current study exhibited less than average engagement on Instagram; this could be one of the reasons why the predictive power of Instagram was small. The other factors that predict body dissatisfaction can range from peer influence, other types of media or social media participants are exposed to, parents among others.

In one experiment where 130 female undergraduates were randomly exposed to either fitspiration or neutral travel images, researchers found that the appearance-based pictures of fitspiration had a negative impact on mood, body image, and self-esteem (Tiggemann & Zaccardo, 2015). Furthermore, a current study conducted on positive body image has showed that brief exposure to body positive posts on Instagram was associated with improvements in young women's positive mood, body satisfaction and body appreciation, when compared to thin-ideal and appearance-neutral posts (Cohen, Fardouly, Newton-John, & Slater, 2019).

Chapter five

5 Summary and conclusion

5.1 Introduction

The problem of media exposure and its effects on body image issues has become grave. The media by showing pictures of perceived idealized shape (thin-ideal) is putting pressure on women to conform to these images. Social media reinforces this idea of an ideal body since it can be connected to almost all outlets of mass media. And these days the use of social media is prevalent especially among adolescents and young adults. Research says young women tend to be more concerned about their body images. Various researchers have found a negative association between Facebook usage and body image. Furthermore, researches conducted on Instagram use have also found negative relationship between Instagram use and body image in young girls and adults. Exploratory analyses revealed that Instagram users scored significantly higher on body surveillance compared to non-Instagram users.

Body image is the way one views themselves and their own bodies, sometimes in relation to others. Body image is often discussed and researched usually in terms of negative body image. Negative body image is the experience of negative thoughts and esteem about one's body and appearance. Negative body image or body dissatisfaction is said to be a risk factor for suicidal tendencies, smoking, eating disorders and other behaviors. That is why the current study wanted to assess the relationship between body image and the use of social media specifically Facebook and Instagram use. The study was also aimed at assessing the amount of time participants spent on Facebook and Instagram, participants' perception of body image, exploring the relationship between Instagram, Facebook and body image in young girls and the proportion of the variance Facebook and Instagram explained in body dissatisfaction. The study used a quantitative research design to assess the correlation between social media use and body image of young girls. Questionnaires were distributed to 108 female students of management. Following that the results were entered into SPSS. Descriptive statistics, cross tabulation, linear regression were used to analyze the results.

5.2 Summary

A total of 108 female students of management took part in the study. Facebook use questionnaire, Instagram use questionnaire, the figure rating scale and the modified body shape questionnaire were used in the study. The participants were aged 18-29. 71.3 % of the participants' body mass index or BMI fell under normal category. 61.9% of the participants spent more than 3 hours per week on Facebook; while 33.3 % spent the same amount of time on Instagram. 69.5 % of the participants reported dissatisfaction with their current body image on the figure rating scale. Contrary to this, on the modified body shape questionnaire, majority of the participants reported body satisfaction ($M=2.27$). The study found a non-significant relationship between Facebook use and body image ($r= -.045$, $p=.646$). Instagram on the other hand was found to be significantly correlated with body image ($r= -.236$, $p=.014$). Instagram was also found to explain 5.6 % of the variants in body dissatisfaction while Facebook only explained .2 % accounted as 0 %. The results from the study were indicative of other extraneous factors responsible for causing body dissatisfaction.

5.3 Implication

The results of the study implied that there was a negative relationship between Facebook use and body image. This meant an increased amount of time spent on Facebook was found to be associated with low body image or low body satisfaction. However a conclusion can't be drawn considering the relationship was weak or insignificant. But a significant relationship was detected between Instagram use and body image. Likewise the negative relationship between the two variables showed increased Instagram use can result in low body image. Negative body image or body dissatisfaction isn't something to be lightly taken as it impacts the psychological and physiological health of individuals. It is believed to be a risk factor for suicidal tendencies, smoking, eating disorders and other behaviors. That is why it is important to explore what factors aside from social media can cause low body image or dissatisfaction. And the best way to do that will be to conduct an experimental research.

Consequently understanding body image better and knowing the relaying factors beneath body dissatisfaction can help parents, teachers, peers and other stake holders to come together and design interventions. The other thing is that the current study was conducted on females because they were believed to be more susceptible to body image issues and concerns. But men are also affected by body image issues. Future studies using the findings of the study as a starting point can further explore the effects of social media on both genders. Future researchers can conduct large scale survey studies to explore the relationship between social media use and body image. Picture based social media platforms like 'Pinterest' should also be incorporated into future studies. The current research is an eye opener for future researches on body image especially in African and Ethiopian context. It is also believed to deepen the link between media and psychology; adding to the flourishing field of media psychology.

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Appendix

Appendix 1 social media use and body image Questionnaire

Thank you for taking your time to fill this questionnaire!

The following questionnaire is aimed to assess the relationship between social media use (Facebook and Instagram) and body image. It has two parts. The first part consists of demographic questions, Facebook use questionnaire (FBQ) and Instagram use questionnaire (INQ). The second part is comprised of two scales that measure body image: these are the Figure Rating Scale (FRS) and modified version of the body shape questionnaire (BSQ). The questionnaire will take 5-15 minutes. Bear in mind that the answer to your questions will be kept strictly confidential and will only be used only for educational purposes.

Part I: Demographic questions

1. Name\ give an alternative name if you don't want to write your real name

2. Age: -----

3. Weight in Kg: -----

4. Height in meters: -----

5. In a typical week, how frequently do you use Facebook? Circle the answer of your choice.

- a) Never\almost never
- b) Less than 1 hour per week
- c) 2-3 hours per week
- d) More than 3 hours per week
- e) Less than 30 minutes per day
- f) 1-2 hours per day
- g) More than 2 hours per day

Facebook use questionnaire (FBQ)

Instructions: please put a tick on the answer of your choice in the box provided for you.

e.g:Share photos of yourself. Often (2)

	Nearly every time I log on the internet 1	Often 2	Once in a awhile 3	Rarely 4	Almost never 5
1. Post a link to a news story, video, Web site, etc.					
2. Share a photo of family, friends\classmates\ colleagues\spouses					
3. Share photos of yourself					
4. View friends' photos of themselves or comment on their photos					
5. go through your feed or friends' feed					
6. View, like or comment on friends' links to news stories, videos, Web sites, etc.					
7.Share photographs (photos of subjects other than yourself, friends, or family),					
8. Watch or Share memes, music, videos, (photos of subjects other than yourself, friends, family), or opinions					

9. When looking at photos of people (refers to people of the same sex as you or females) on Facebook, you often compare your appearance to theirs.					
10. Update your profile photo					
11. Private messages or group chats					
12. Check out and shop items such as clothes, shoes, houses, gadgets and others					
13. create events, groups, play Facebook games, quizzes or other activities					

6. In a typical week, how frequently do you use Instagram? Circle the answer of your choice.

- a) Never\almost never
- b) Less than 1 hour per week
- c) 2-3 hours per week
- d) More than 3 hours per week
- e) Less than 30 minutes per day
- f) 1-2 hours per day
- g) More than 2 hours per day

Instagram use questionnaire (INQ)

Instructions: please put a tick on the answer of your choice in the box provided for you.

e.g: view fitness pages/images. Answer Rarely (4)

	Nearly every time I log on the internet 1	Often 2	Once in a awhile 3	Rarely 4	Almost never 5
1. view fitness pages/images					
2. view posts of celebrities, models, athletes, online personalities, etc.					
3. On estimate you spend majority of your time viewing photos of celebrities, fitness models, online personalities and other public figures					
4. On estimate you spent majority of your time viewing others' Instagram pages or liking and commenting on their posts					
5. you spent most of your time going through your time line					

6. When looking at photos of people (refers to people of the same sex as you or females) on Instagram, you often compare your appearance to theirs					
7. you post selfies, videos of yourself with friends or group photos you are in					
8. You post photographs (of subjects other than yourself), memes, videos, etc.					
9. You use direct message					
10. majority of your following list constitutes of celebrities, fitness models, athletes, online personalities, etc.					
11. You change your profile picture more often					

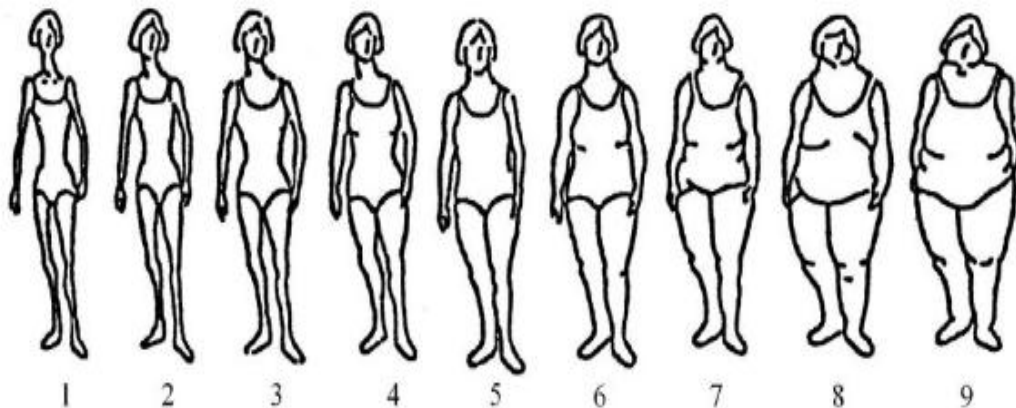
Part II: Body Image scales

The Figure Rating Scale (FRS)

Instructions: Please look at the image below and answer the following questions. Select the number that best represents your current and ideal body size

1) Of the body silhouettes shown below, indicate the one that most accurately resembles your current body size,” and write the number of your choice _____

2) Of the body silhouettes shown below, indicate the one that best represents your ideal body size.” and write the number of your choice _____



Modified Body Shape Questionnaire (BSQ)

Rate on a scale from: Never (1), Rarely (2), Sometimes (3), Often (4), Very often (5), to Always (6)

Instructions: please select the number that best suits you below. Eg: Has worry about your shape made you diet? Answer 2 (Rarely)

	Never 1	Rarely 2	Sometimes 3	Often 4	Very often 5	Always 6
1. Have you been so worried about your shape that you have been feeling that you ought to diet?						
2. Has being with thin people made you feel self-conscious about your shape?						
3. Have you noticed the shape of other people and felt that your own shape compared Unfavorably?						
4. Have you felt excessively large and rounded?						
5. Have you felt ashamed of your body?						
6. Has worry about your shape made you diet?						
7. Have you felt that it is not fair that other people are thinner than you?						
8. Have you been particularly self-conscious about your shape when in the company of other People?						
9. Has worry about your shape made you feel you ought to exercise?						

Thank you!