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Megan Elizabeth Jeffris

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**SELF-REPORTED BODY SATISFACTION RATES AMONG COLLEGIATE
FEMALE ATHLETES AND THEIR USE OF SOCIAL MEDIA**

A Masters Thesis

Presented to

The Graduate College of
Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree
Master of Science, Athletic Training

By

Megan Elizabeth Jeffris

May 2015

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SELF-REPORTED BODY SATISFACTION RATES AMONG COLLEGIATE FEMALE ATHLETES AND THEIR USE OF SOCIAL MEDIA

Sports Medicine and Athletic Training

Missouri State University, May 2015

Master of Science

Megan Elizabeth Jeffris

ABSTRACT

Social media use has become increasingly popular in the past decade with all demographics. The significance of this research relates to the serious risk factors as a result of body dissatisfaction, including low self esteem, depression, eating disorders and obesity. Literature on the psychological effects of social media on perception of body satisfaction is lacking for the collegiate female athlete population. This mixed-methods study investigated the amount of time spent on social media in relationship to self-reported body satisfaction scores in collegiate female athletes. One-hundred and two collegiate female athletes were surveyed via an online survey about body satisfaction, time spent on social media, and perceptions of weight and appearance. There was no correlation between the total time spent on social media and reported body satisfaction scores ($r = -.16$, $P = .10$). A mediation calculation showed no correlation between participants' perception of their weight and reported body satisfaction scores ($Z = 1.17$, $P = .24$, $K^2 = .03$). A mediation calculation showed no correlation between participants' reported body satisfaction scores and their perception of appearance in uniform ($Z = -.60$, $P = .55$, $K^2 = .02$). Six domains emerged from qualitative content analysis: 1) social comparison, 2) body satisfaction in and out of competition, 3) size, appearance and weight, 4) internalization of beauty standards, 5) control of weight, 6) and time. Conclusions from this research suggest that social media is not a strong variable that affects collegiate female athletes' reported body satisfaction.

KEYWORDS: body esteem, social psychology, athletics, appearance, social comparison.

This abstract is approved as to form and content

Tona Hetzler, EdD, ATC
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To my Springfield Catholic High School student athletes: you all have unknowingly been a constant source of support and motivation in the last year of my graduate studies. When you see me carrying more than my fair share of kits, bags and crutches, know that my heart is overflowing with appreciation for your acceptance into the Springfield Catholic family.

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CHAPTER I: INTRODUCTION

The ebb and flow of body figures and subsequently body image over the last 100 years has changed dramatically. It seems that society cannot make up its mind about measurements of the perfect body figure. But the one thing that has remained the same, and the one thing that every single woman can count on, is the fact that the “perfect” body figure is not static.

I am a high school athletic trainer. Ask most of the athletes at the high school what I actually do, and the students will tell you that I “train people athletically”. The first time I heard this, I was disheartened at the lack of education I have given my athletes about my profession. But then I thought about it, and what I realized was this: most of what I do is not out on the field, court, or course. My work is frequently behind the scenes when I am in my athletic training facility. Most of what I do includes listening to high school athletes talk about their tribulations and helping them find solutions to problems associated with life as a high school student. The athletes have nicknamed the sessions “life talks” and topics can range from boyfriend and girlfriend issues to family matters. The life talks that are the closest to my heart are when the athletes come in and talk about dissatisfaction with their body figure. They scroll through social media sites and make comments such as, “this is how I want to look when I’m older.” Most of the time when I hear this, it’s hard for me to not to interrupt them. I forget that the facts and the reasons I spout off do not help them understand that body dissatisfaction is a real problem.

The first time I had a female athlete speak to me about her body dissatisfaction, I was still an undergraduate student in an athletic training program. I was taken back by the fact that she felt comfortable speaking to me about such an important issue. I listened to this collegiate athlete, and I began to question if I had received enough education on how to help others in this area. And not just in the area of body image, but other psychosocial aspects of athletic training. I sat down with her and listened to her story. I listened to her explain that, despite her best efforts, she still felt bigger than other girls. She said that she was so concerned about her body that she was constantly comparing herself to fashion models, actresses and other athletes. It was in part her story, in addition to my own past insecurities, which led to the creation of this thesis.

There are five domains of professional practice athletic trainers are expected to know and understand: 1) injury/illness prevention and wellness protection, 2) clinical evaluation and diagnosis, 3) immediate and emergency care, 4) treatment and rehabilitation, and 5) organization and professional health and well-being. These domains are also the categories in which athletic trainers use to obtain continuing education credits throughout their career. Professional education of athletic training, whether at the undergraduate or graduate level, is directed by a matrix of competencies that expand on the five domains of professional practice. Currently, under the 5th edition of competencies set forth by the National Athletic Trainers' Association (NATA),¹ there are three categories/content areas in which psychosocial education appears: clinical integration proficiencies, prevention and health promotion, and psychosocial strategies and referral. As educational competencies, these are categories that must be addressed in Athletic Training Programs to meet minimum requirement standards of professional education.

The way in which educational programs choose to meet these standards is specific to philosophy of teaching and dissemination of information for each program.

Background

In any retail bookstore or online book company, one can find a very large section of materials related to body image. Books on this topic include losing weight, improving fitness, increasing awareness, cooking healthier meals, etc. These books cater to all different age groups. In addition to books in print and magazines, there are numerous social media websites that are capitalizing on individuals' desire to achieve the "ideal body." These websites include everything from pro-anorexic lifestyle "Pro Ana Forever,"² to websites that show users a picture of themselves at a certain weight and height,³ and websites that disseminate biased pictures of the gym culture.⁴ The latter two types of websites (pictures depicting females at a certain weight and height, and biased pictures of gym culture) are considered to be thin-ideal and strong-ideal types of media. Thin-ideal and strong-ideal media is anything that depicts and encourages women to be thin or to create an increased muscle mass.⁵ These social media websites are easily accessible through any Internet search, but viewers are not provided with any way to determine if the information is accurate or coming from a credible source. With the ease of which one can obtain information from the Internet, it is plausible to assume that these websites and social media platforms in some way related to body dissatisfaction in women.⁶

Social media use is relatively new and not much research has been published on how it affects individuals' body image. Facebook is just over a decade old, and its

popularity grew to over 500 million users in 2012.⁷ More recently, social media sites such as Twitter have been become research tools for scholars to either invite others to participate in research or gather qualitative data.⁸ Social media has grown from sites that were strictly used for connecting with friends such as MySpace and Tagged, to websites such as Facebook and LinkedIn that are now based on promoting companies, marketing products, and searching for other job opportunities. Since the Internet has become more accessible through the invention of laptop computers, tablet devices, and smartphones (among many other tech gadgets), anyone with access to these devices can easily get connected at any point in the day to all different kinds of social media platforms. New Internet campaigns are constantly being pushed into social media with some deliberately being focused on women.

In 2001, a study conducted at the University of South Alabama concluded that female athletes are at a special risk for lower levels of body satisfaction because of the sociocultural pressures to be thin.⁹ Results from this study showed that coaches and parents alike reported to believe that “it is necessary to maintain a certain weight and body shape for optimal athletic performance.”^{9(p503)} Athletes who feel that their bodies are constantly being evaluated have shown to be at a greater risk for unhealthy eating and potentially serious health problems.⁹ These potentially serious health problems can include significantly lower self-esteem, depression, and obesity.⁶ Additionally, many collegiate female athletes are under the impression that they need to be toned, but not too muscular, to avoid being perceived as masculine.¹⁰ To support this impression, other research has found the farther away a woman is from her ideal body figure, the more negative body satisfaction she will report.¹¹ If a collegiate female athlete perceives

herself to be too muscular, that athlete will have an increased awareness about her figure that could potentially lead to serious medical problems.

Given an increased accessibility to social media, I predicted to find a relationship between collegiate female athletes' body satisfaction and the amount of their social media use. I expected to find that collegiate female athletes report low scores on the body image satisfaction scale utilized in the survey due to personal critique and social comparison.

Statement of Problem

A search of literature on women's body satisfaction yields numerous results, some dating back to the 1950s. However, this literature revealed a limited amount of research on the combined areas of collegiate female athletes, use of social media and body satisfaction. The few studies I found focused on individual social media platforms but did not relate to body satisfaction or female athletes.

There is, however, significant research on advertising media images and non-athletic female body satisfaction. Take, for example, a study conducted in 2011 on analyzing Twitter updates about the *Victoria's Secret Fashion Show*. This study found that ninety percent of the tweets analyzed were considered to be making an upward social comparison to the Victoria's Secret (VS) models.⁸ Meaning, users felt they suffered in comparison to the VS models in relationship to their appearance and weight. Responses that were highlighted in this article were highly negative in context: "The *Victoria's Secret Fashion Show* = an hour to feel bad about yourself"; Every girl is going to feel like shit after watching the *Victoria's Secret Fashion Show*"; "*Victoria's Secret Fashion Show*: Just there to remind you that yes, you are still fat."^{8(p650)} Considering this is only

one study that looks at the overt behaviors of social comparison via social media, there is more that needs to be done to help understand social media's impact on body satisfaction.

Research Questions

- 1) Is there a relationship between the amount of time spent on social media and a collegiate female athlete's level of body dissatisfaction?
- 2) Does the use of social media affect the relationship between self-reported body satisfaction scores and opinion of weight among collegiate female athletes?
- 3) Does the use of social media affect the relationship between perception of appearance in uniform and self-reported body satisfaction scores?

Hypothesis

H₁ — There is a relationship between the amount of time spent on social media platforms and collegiate female athlete's reported body satisfaction.

H₂ — Social media changes collegiate female athlete's feelings about the way their weight changes their perception of their body satisfaction.

H₃ — Social media changes self-reported body satisfaction scores in collegiate female athletes and perception of their appearance in their uniform.

Significance of Study

As an athletic trainer, I have heard my fair share of complaints made by female athletes. These complaints range from comments about "man-traps," to "huge quad muscles" and everything else in-between. I have had young, incredible female athletes tell me that they feel fat in their sports uniforms, in their day-to-day clothes, and their workout gear. Most of the time, these female athletes think they do not have an ideal body figure because of media images they have seen in magazines, commercials or social

media. Research has proven with resounding evidence that athletic females have common issues when navigating their way through different social constructs while maintaining accepted social responsibilities in the world outside of sport.^{5,6,10,12-14} Throughout my research I expected to find a relationship between collegiate female athletes' perception of body satisfaction and the amount of time spent on social media.

With this information, I expected to find a more clear understanding of what collegiate female athletes' time on social media is doing to their psychosocial health. This research is important for athletic trainers in treating and intervening with athletes who are susceptible to increased anxiety of their body due to time spent on social media.

Limitations

Generalizations of my study may be limited by:

- 1) The relatively small sample size of participants.
- 2) All participants were collegiate female athletes from four Midwest universities.
- 3) Most people, including female athletes, are not able to accurately estimate the amount of time spent on a task – in this case, social media.¹⁵
- 4) Unintentional variables affecting the amount of body satisfaction and the use of social media that do not support a causational relationship.

Assumptions

It will be assumed:

- 1) That all participants completed the survey truthfully.
- 2) That all participants reported social media platforms use accurately.

Delimitations

Delimitations are:

- 1) The use of an online survey to obtain data.
- 2) The definition for the amount of time on social media for a “check in”.
- 3) The social media sites chosen for this study.
- 4) The use of the Body Esteem Scale as the only measurement of body satisfaction.

Definition of Terms

- 1) Body Image: The way you see yourself.¹⁶
- 2) Body Figure: measurements of aspects of one’s body.¹¹
- 3) Body Satisfaction: Contentment with an aspect of one’s body; usually scales define which sites are rated (ie, waist, hips, thighs, breast, hair, etc).¹⁶
- 4) Body Dissatisfaction: the belief that one’s body or body parts are too big or too fat.¹⁷
- 5) Social Media: forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content.¹⁸
- 6) Internalization: acceptance of cultural body standards, making it appear as though these standards come from within the individual women and makes the achievement of these standards appear to be a personal choice rather than a product of social pressure.¹⁹
- 7) Upward Social Comparison: when one person compares themselves to another whom they believe is better.²⁰

CHAPTER II: LITERATURE REVIEW

Introduction

This chapter is divided into four sections. Section one examines the cognitive responses of women to media images, section two outlines the previously conducted research on changes in body satisfaction, section three covers the research on social media, and section four defines and describes the theoretical background and instrument influence on the current study.

Cognitive Responses to Media

Media plays a key role in shaping women's standards of beauty.²¹ Not only through advertising products, but also by reinforcing societal standards of beauty. Previous research has only touched the surface on the link between internalization of beauty standards and social comparison: "there is a link between internalization and social comparison, but the constructs differ in level of implicitness and specificity."^{5(p771)} A high amount of attention is needed to incur anxiety about body figure, while low attention does not change the amount of anxiety about body figure at all. When women make these comparisons, other reports have concluded that: "[The] Level of attention at which women process thin-ideal images, and appearance schema activation is an underlying process that mediates the exposure-anxiety link."^{22(p1088)} Meaning that, an increased cognitive process about discrepancies of weight issues, height, etc., creates more anxiety about body figure after exposure to thin-ideal media. On the contrary, though, some women are able to disregard the thin-ideal messages in today's media, and

therefore, do not create deeper cognitive processes.²² When women make a decision to comment on their body figure, they are cognitively creating a deeper process of thinking about their body. Other reports confirm: “If our twitter users expected to tweet about the show, then *their plan to form and transmit a comment required the deeper processing* that has been shown to lead to body dissatisfaction in laboratory studies.”^{8(p651)} [emphasis added]

All women differ in the extent to which they endorse the thin-ideal body figure.⁵ It is critical to separate that some women are aware of the importance of their perception of appearance but do not internalize ideals, while other women have internalized thin-ideal messages as their personal belief system.⁵ Before any internalization happens, women have to feel, and decide, they are significantly bigger or worse off than the women of social media in comparison.⁵ The tendency for females to make these upward social comparisons has been shown to be a significant predictor of the thin-ideal endorsement, body dissatisfaction, and a higher drive for thinness.⁶ As reported by another research study, making social comparisons can increase the effects of exposure to media on women who have a higher level of internalization (which leads to body dissatisfaction) compared to the average woman who has not internalized thin-ideals.⁵ As confirmed by other research: “Women are quite adept at critiquing the beauty standard created by these [media] images, while simultaneously feeling bound by this standard and motivated to abide by it.”^{23(p1133)}

Previously Conducted Research on Changes in Body Satisfaction

To this point, most research studies exploring a connection between media use and women's body satisfaction has been conducted in a lab with controlled exposure to neutral, super skinny or larger images of women. These previous studies were conducted to determine whether or not exposure to thin-ideal media⁵ affects the amount of body satisfaction one has in the short-term.⁶ Body satisfaction has been conceptualized as "a multidimensional self-attitudes toward one's body, particularly its appearance."^{24(p19)} Multiple studies have confirmed the short-term negative relationship²⁵⁻²⁷ between the exposure to thin-ideal media and the level of body satisfaction participants self-reported after exposure, maintaining the exposure-anxiety link.²² These thin-ideal media images were presented in many different forms, from music videos, ESPN magazines, fashion magazines, advertisements, and TV shows.^{6,25} Reported concerns after exposure to thin-ideal media included obsession with weight, increased levels of body dissatisfaction, disordered eating behaviors, increased self-consciousness, and negative affect.⁶ Participants in these experimental research studies have ranged in age from adolescence to young professional women. There have also been research studies conducted to discover ways to attenuate the effects of prolonged media exposure in regards to women's body satisfaction.^{6,26} But, a meta-analytic review suggests that these experimental studies only paint half of the picture.⁶ A combination of experimental studies and results acquired with naturalistic, correlational studies in which participants report their actual media use would provide cohesive evidence of the effects of thin-ideal media on female body satisfaction.⁶

Other qualitative research explored the effect that volleyball uniforms have on female athletes.²⁸ Researchers conducted semi-structured interviews with nine National Collegiate Athletic Association (NCAA), Division I, volleyball players. The interview questions included how one thinks of themselves as an athlete, how one thinks of themselves in relation to a woman outside of sport, how one thinks about their body in relation to other women who do not play sports, the evaluation of one's appearance, the perception of one's appearance, the evaluation of the volleyball uniform in relation to one's decision to play, and the evaluation of teammates' appearances. When the researchers coded all responses, four themes emerged: 1) expectations of volleyball body/uniform, 2) uniform distraction/affirmation, 3) perceptions of others' comments, and 4) social comparison. This study confirmed that even though these female athletes were not categorized as "overweight or obese by BMI criteria", they still report feelings of being concerned with how their bodies look. One volleyball player stated:

I think it is a little too tight, just because not all, I don't know how to say that, not all girls have like the right body for it, or they feel so self-conscious about it. And I feel like, "Why do you feel like that?" You shouldn't have to worry about how you look in the uniform. You should only have to worry about how you are going to play, and like, focus on the game.^{28(p803)}

Social Media Sites

Previous research can provide insight on descriptions of social media, but the literature is lacking on the relationship between collegiate female athletes and if, or how, social media affects their body satisfaction. On any university campus or any other place female athletes can be found, it is common to see female athletes (as well as the non-athletic population) with their smartphones out, connected to all sorts of social media

platforms. Some of the more popular social media websites include Facebook, Twitter, and Instagram. Less popular social media platforms but included in this study are Pinterest and Tumblr.

Facebook “is a social utility that helps people communicate more efficiently with their friends, family, and coworkers.”^{7(p88)} Facebook is among the most popular social media websites being used.²⁹ Nationally, 80% of the 18-24 age group is using Facebook and have a personal account.²⁹ Facebook will allow a user to “like” a certain page with a main theme (ie, fitspiration, thinspiration, how to get that washboard stomach, how to keep disordered eating hidden, etc) and will update information in the form of a status update, a shared website or a picture with a message on it. The information from these shared status updates are not always accurate or credible, but to the average social media user the information is likely to be accepted as fact. In an exploratory study conducted in 2012, results showed that females using Facebook were more likely to report that scrolling through their news feeds and seeing pictures of their friends lead them to take on a dissatisfaction of their own body image.⁷ The exploratory structure of this study did not fully explain why an increased distress in females was found.

Twitter is a microblogging platform that allows individual users to follow accounts of their choosing. Twitter is like Facebook in that it uses an “electronic conversation in which anyone can join, as well as a form of diary, in which one’s thoughts and experiences are recorded and shared.”^{8(p649)} Research has shown 36% of the 18-24 age group is active on Twitter and have a personal account.²⁹ Twitter is becoming an increasingly popular avenue to gain access to world news and research data.⁸

In a study related specifically to the use of social media, researchers analyzed reactions to the 2011 *Victoria's Secret (VS) Fashion Show* from Twitter users' updates.⁸ Updates were viewed, analyzed, and then coded to create categories of how Twitter users described their feelings about the show. Of the updates that were analyzed and coded, 90% of the updates suggested an upward social comparison, meaning that the Twitter users felt they suffered in comparison to the *VS* models in regards to their physical appearance and weight. One consideration of this study that makes it slightly different is the fact that the data collected from Twitter users' updates represent real-time, spontaneous thought and reactions to the show. The real-time thoughts and reactions supports a basic social psychological theory, and gives insight to how social comparison can help or hinder user's perceptions of their individual body satisfaction. Due to the inability to obtain demographic data about the Twitter users, it is difficult to say the Twitter users were females or even athletes.

Instagram is a picture-sharing platform. Individual users have control over what shows up in their news feed if they follow or unfollow certain users. Instagram is a popular media platform among the 18-24 year-old age group. Previous polling shows that 46% of the 18-24 age group is active on this platform and have a personal account.²⁹ Pinterest is a site where users collect pictures from other websites on the Internet to 'pin boards' that collect all of the site's information and can create a direct link. This form of picture-sharing social media is less popular than the previous social media platforms among the 18-24 year-old age group. Research has shown that only 20% of Internet users are active on Pinterest and have a personal account.²⁹ Pinterest users can follow other accounts that 'pin' pictures of links leading toward websites with diet information,

thinspiration, fitspiration, and the healthy college girl's grocery list. Pinterest users can pick and choose whom to follow, but they cannot control what is posted on the accounts they follow. Tumblr is a microblogging platform that is less popular. Nationally, among the 18-24 year-old age group, only 20% of Internet users are active on Tumblr or have a personal account.²⁹ Updates from these accounts come in the form of picture sharing for the most part, with or without text on them. Currently, these last three websites have not been explored in the research as to how they affect body satisfaction.

Background on Instruments

Several different research instruments and theories have been developed over the years to study and explain body satisfaction and related factors. For the purposes of this study, I have decided to use the principles of the Body Esteem Scale (BES)^{30,31} as a scale used to measure body image satisfaction and Leon Festinger's Theory of Social Comparison Processes³² as a theory to help explain findings of data collection.

The BES from Fanzoi & Shields^{30,31} has been compiled from influences of the Body Cathexis Scale (BCS).¹¹ In 1953, Secord and Jourard¹¹ created the BCS as an objectively scored instrument to measure body esteem. The BCS was fashioned under the assumption that body esteem is a unidimensional construct measured by the sum of body parts rated. After more research on this scale, the BES was devised because of the doubt in unidimensionality of body esteem. The BES was used to assess participant's self-reported levels of body satisfaction. All 35 characteristics are summed to produce a total score ranging from 35 to 165. Higher scores indicate greater satisfaction with one's body. The BES is a self-report measure comprised of 35 items derived from test and re-test

studies. Original researchers¹¹ have identified that women's body satisfaction has three primary components: sexual attractiveness, weight concern, and physical condition. The BES has shown adequate internal consistency with subscale alpha values ranging from .78 to .87.³⁰

The BES has been used in several different studies among college-age students to determine reliability and validity. One such study was conducted by Franzoi and Shields³¹ to determine the multidimensionality of body esteem for men include 1) physical attractiveness, 2) upper body strength, and 3) physical condition. For women body esteem dimensions include 1) sexual attractiveness, 2) weight concern, and 3) physical condition. The results of this study indicated men and women differ in their opinion of what body esteem is for each sex and that it is not a unidimensional construct. The BES was found to be reliable and valid for use on the young adult population. I utilized the BES because it has been proven to be appropriate for the age range in my study.³¹

Background on Theoretical Support. Leon Festinger's Theory of Social Comparison Processes³² is the theoretical basis of this study. For this study I utilized Festinger's hypothesis, "the tendency to compare oneself with some other specific person decreases as the difference between his opinion or ability and one's own increases."^{32(p120)} This means that the higher levels of body satisfaction a woman has of herself, the less she feels like she needs to compare herself to others. Knowing that a person does not tend to evaluate their ability by comparison to others who are too different than themselves, Festinger also adds a corollary to this hypothesis "given a range of possible persons for comparison, someone close to one's own ability or opinion

will be chosen for comparison.”^{32(p121)} If the person of comparison is too different in abilities, an individual cannot accurately make a comparison against that person. For example, a college student will not evaluate their education and abilities to that of a prison inmate.³² In regards to my research, I think that these collegiate female athletes will find professional female athletes as well as other collegiate female athletes appropriate models to compare themselves to. The closer in abilities a person is to their comparison, the easier it will be to create that comparison.

Based on this theory, it is plausible to assume that female athletes compare themselves to their teammates and other athletes on social media websites and think these standards are attainable, and are willing to do anything to achieve such standards. This creates a behavior of social comparison by a higher level of attention paid to content on social media. This study utilized this theory because of how easy it is to make comparisons to other people, athletes, actresses, models, and thin-ideal media on social media websites. Anything on social media websites can be construed as a standard to which body figures should look like or how to attain the perfect body figure.

CHAPTER III: METHODS

Introduction

This chapter discusses the research design and instrumentation of the survey. Details on the participants, recruitment of participants, data collection and data analysis is provided.

Research Design

This research study is a mixed-methods exploratory design. I collected data via an online survey comprised of quantitative and qualitative questions described as concurrent procedure.³³ I used quantitative data to examine the research questions and determine if a relationship between the amount of time spent on social media and collegiate female athlete's level of body dissatisfaction. I utilized qualitative data to help better understand the relationship found.

Several studies have presented different methodology for finding the effects of media on body image and for the most part the results are all the same.^{5,16,22-27} Previous research has typically been designed with a group of women entering a laboratory, looking at pictures and advertisements that depict all types of body shapes, and then being asked to rate their body image. Multiple studies have shown this does have an effect on women's perceptions of body image, but this method also integrates a level of artificiality that has been thought to limit the external validity of research.^{6,16,25-27} A meta-analytic review suggests it would be best to combine lab-set experiments with studies where participants report their actual media use and observations are obtained from

naturalistic studies.⁶ Therefore, in this study I did not expose the female athletes to further social media influences at the time of data collection.

Instrumentation

For this study, I created an online survey titled the Perceptions of Body Satisfaction (PoBS) survey to obtain information related to body satisfaction in collegiate female athletes. The PoBS has three sections: participant demographics, the BES, and a series of closed and open-ended questions.

All responses were reported anonymous via the online survey. Missouri State University IRB approval (#15-007: 7/23/2014) was obtained prior to the survey being sent out for validation. Face validation was obtained in July 2014 prior to distribution to participants. Face validity was established by review of the survey by experts in content who have worked with collegiate female athletes and psychosocial matters. Validity of the survey was important in order to ascertain the ability of the content of the questions to measure individuals' body satisfaction in reference to their social media use and the outcome of the research. Suggestions from content experts to change the amount of time spent on social media for a "check in" were made. No other changes were made.

The survey required participants to read and sign an informed consent form (Appendix A) before being allowed to move forward to the questions. If participants did not agree to participate in the study, the survey was skipped and the participants were thanked for their time.

Items two through six are demographic questions that include information about age, sport affiliation, school affiliation, and academic year (Appendix B). Items seven

through eleven where for measurement of the amount of time spent on social media sites. For each of the five social media websites (Facebook, Twitter, Pinterest, Instagram, and Tumblr), participants were given three options for response: 1) text entry for “Check in” (definition for a “check in” is any time the participant spends more than 5 minutes on social media); 2) infrequently (definition for “infrequently” is when a participant checks social media less than five minutes per day); and 3) do not have account.

The second section, items 12 through 19 on the PoBS survey, is the list of characteristics from the BES (Appendix C). A short introduction to the BES was included in the survey. The BES was utilized to obtain participants’ self-reported body satisfaction scores. The BES is a 35-item scale that lists different body parts and body functions. Participants rate the specific body part or body function on a 1-5 Likert scale that ranges from “have strong negative feelings” to “have strong positive feelings”. The BES was used to assess participant’s self-reported levels of body satisfaction. All 35 characteristics were then summed to produce a total score ranging from 35 to 165 for each participant. Higher scores indicate greater satisfaction with one’s body. The BES is a self-report measure comprised of 35 items derived from test and re-test studies. Original researchers have identified that women’s body satisfaction has three primary components: sexual attractiveness, weight concern, and physical condition.¹¹ The BES has shown adequate internal consistency with subscale alpha values ranging from .78 to .87.³⁰

The third section consists of author designed closed-and open-ended questions. See Appendix D for the full list of questions in this section. These questions include fifteen questions related to feelings of weight, appearance in uniform, and the relationships of being an athlete and a woman in society. Items 20 through 22 on the

PoBS survey are questions regarding feelings of how the participants feel they look in their uniforms. Items 23 through 26 are questions regarding feelings of changes in body satisfaction dependent upon how the participant feels about their weight. Items 27 through 29 are questions regarding types of information the participants are using social media for. Items 30 and 31 are questions regarding changes in body satisfaction since entering college and participating in a collegiate sport. Items 32 and 33 are open-ended text-entry questions regarding feelings of how the participants feel about their bodies in relation to being an athlete, as well as how participants feel about their bodies in relation to being a woman outside of sports. These two questions were taken from previous qualitative research.²⁸ I felt items 32 and 33 were important to my research because it allows participants to describe their thoughts and feelings about everyday life, and being an athlete. All responses were analyzed, coded and descriptively reported.

The final two items are text-entry responses for height and weight. The responses were used to determine body mass index (BMI). Previous research has shown the BMI is not the most reliable measure, but I chose it to make a quick determination of underweight or overweight athletes.³⁴ It has been determined that BMI has a high correlation with fat content, but not muscle percentage in athletes.³⁴ Responses to these two items were not required.

Participants

I asked collegiate female athletes from four Mid-Western universities (NCAA DI FCS, NCAA Division II private non-denominational, NCAA Division II private religious, and NAIA Division I private religious) to participate in my study. According to

each university's athletic website, the four universities are similar in the number and types of female sports they support. Refer to Table 1 for a description of each university's collegiate female teams.

Table 1. Description of Collegiate-Sponsored Varsity Athletics at different types of Universities.

Sport	University Type			
	NCAA DI ^a	NCAA DII ^b	NCAA DIII ^c	NAIA DI ^d
Basketball	X	X	X	X
Cross Country	X	X	X	X
Cheer/Spirit Squad			X	X
Field Hockey	X			
Golf	X	X	X	
Soccer	X	X	X	
Softball	X	X	X	X
Swim and Dive	X	X		
Track and Field	X	X	X	X
Tennis		X	X	X
Volleyball	X	X	X	X

^a Public University

^b Private, Non-Denominational University

^c Private, Religious University

^d Private, Religious University

Recruitment

To be eligible for inclusion, participants had to be on the varsity roster of a collegiate-sponsored female athletic team. Participants were identified via online rosters from each university's website. A total of 374 athletes received an email soliciting their participation. I expected to have at least a 25% response rate.

Each participant received an initial email with a brief explanation of the research study and a link to the electronic survey. A follow-up reminder email was sent one week after the initial email. A second reminder email was sent two weeks after the first reminder. The last reminder email was sent three weeks after the first. Approximately five weeks after the initial email was sent, the survey was closed and data analysis began. I utilized the Missouri State University Qualtrics account to distribute the survey and obtain data for this research.

Data Collection

I sent the initial survey email to collegiate female athletes on August 25, 2014. The survey was closed on September 29, 2014. Only the investigators had access to the password-protected data. No personal information was collected with this survey. All responses remained 100% anonymous.

Data Analysis

I utilized two different methods of data analysis due to the mixed method design. For the quantitative data, I uploaded the output from the PoBS survey into a Statistical

Package for the Social Sciences (SPSS) version 22. If participants did not complete the survey, their data were deleted.

I used quantitative data to answer the three main research questions. I utilized qualitative data to further understand the meaning behind the three research questions. I used a Pearson's correlation to determine if there was a relationship between the amount of time spent on social media and BES score. I conducted a mediation analysis to examine the affect social media use had on collegiate female athletes' perception of their weight and the BES scores. For further analysis, I utilized a Pearson's correlation between the BES weight concern subscale and the total amount of time on social media. I used the weight concern subscale due to the direct relationship between the research question and the subscale items. The other two subscales (sexual attractiveness, physical condition) were not individually analyzed as they were not specific to my research questions. I conducted a second mediation analysis to examine the affect social media use had on collegiate female athletes' perception of appearance in uniform and the BES scores. I used mediation for the last two research questions to explain how the external physical events affect the internal psychological significance of the questions. The mediator variable is the external physical event (participants use of social media) and is the intervention on the independent and dependent variables. Full mediation is achieved by the significant affect of the mediator variable (participants use of social media) on the independent (BES, perception of appearance in uniform) and dependent variables (perception of weight, BES).

Qualitative data analysis began by reading through all of the qualitative responses multiple times to understand a general sense of the information that was collected. This

process included looking for setting, context codes and perspectives held by the participants.³³ I also utilized a summative content analysis approach to all responses.³⁵ In the later rounds of analysis, I wrote down my general impressions of the overall responses. I re-read responses and described my understanding of each response. Once this step was completed, I grouped words and phrases from the previous step and created categories. I then counted the number of times the categories were seen in responses to show the amount of usage of words and phrases. This also allowed me to understand latent interpretation of content. Meaning, I looked for words or phrases that referred to the same categories. From there, I was able to distinguish recurring words to create the domains used to categorize the responses. From domains and categories, I was able to understand a general sense of the overall perception and feelings of each question from participant responses. I also examined the amount of times participants referred to the same category to show the frequencies of each category. As a final step, I asked an independent researcher to conduct a peer-review of the responses and complete their own coding process. After the individual researcher completed coding responses, we met and reviewed our findings. We found we had a 96.58% agreement rate for domains and categories.

CHAPTER VI: RESULTS

Introduction

This chapter discusses participants, demographic results, frequencies of several variables. Data analysis is explained in detail to answer research questions and domains revealed during review of participants' comments and responses to narrative questions.

Participants

Three hundred and seventy-four (374) collegiate female athletes from four Mid-Western Universities were sent the PoBS survey and asked to participate. A total of 102 participants submitted a completed survey for a 27% response rate. The average age of the collegiate participants was 20 ± 1.32 .

Participants self-reported the following academic status for fall 2014: 21% freshman ($n=22$), 20% sophomore ($n=21$), 36% junior ($n=38$) and 20% senior ($n=21$) (Figure 1). The breakdown of participants by university type were as follows: 63% from NCAA DI FCS University ($n=66$), 31% from NCAA CII private non-denominational university ($n=32$), and 4% from NCAA Division II Private Religious and NAIA Division I Private Religious ($n=4$) (Figure 2). Distribution of sport was as follows: 21% from XC/TF ($n=22$), 20% from soccer ($n=21$), 16% from swim and dive ($n=17$), 5% from volleyball ($n=16$), and <1% from basketball ($n=5$), field hockey ($n=6$), softball ($n=10$), tennis ($n=4$) and golf ($n=1$) (Figure 3).

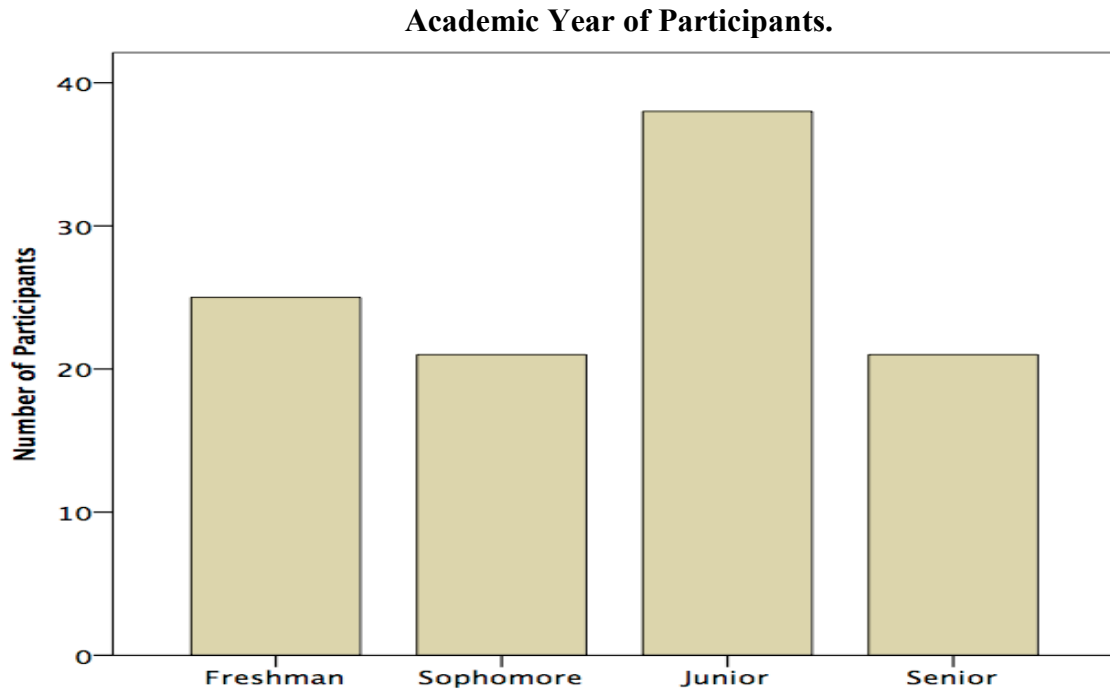


Figure 1. This figure shows the distribution of participants by fall 2014 academic year.

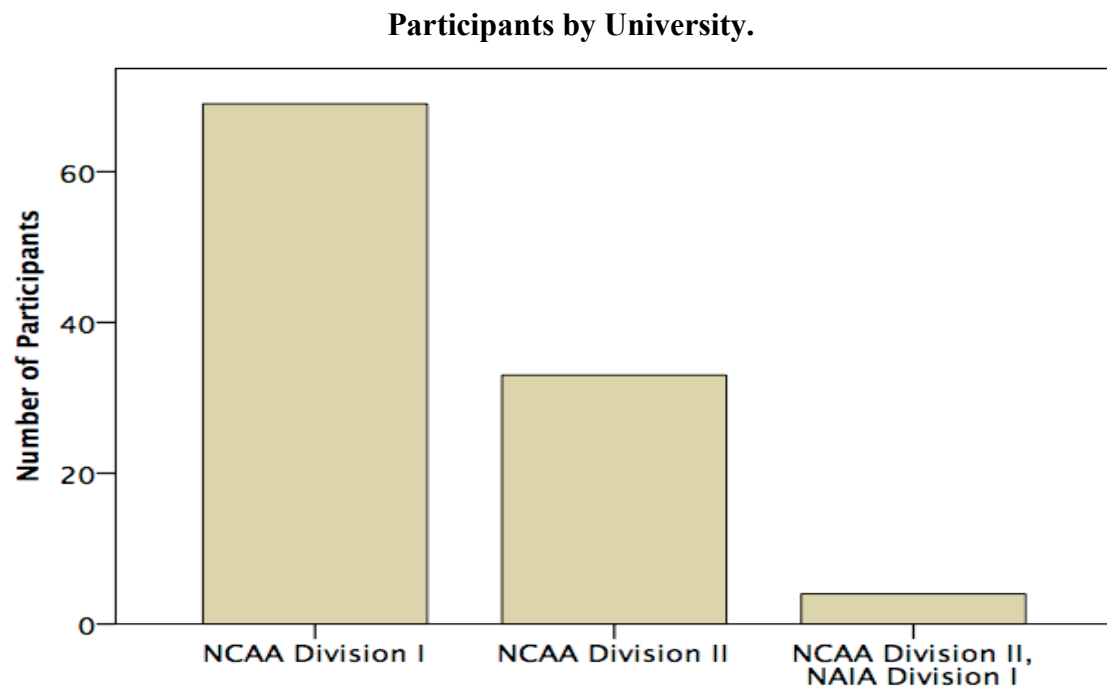


Figure 2. This figure shows the distribution of participants by University.

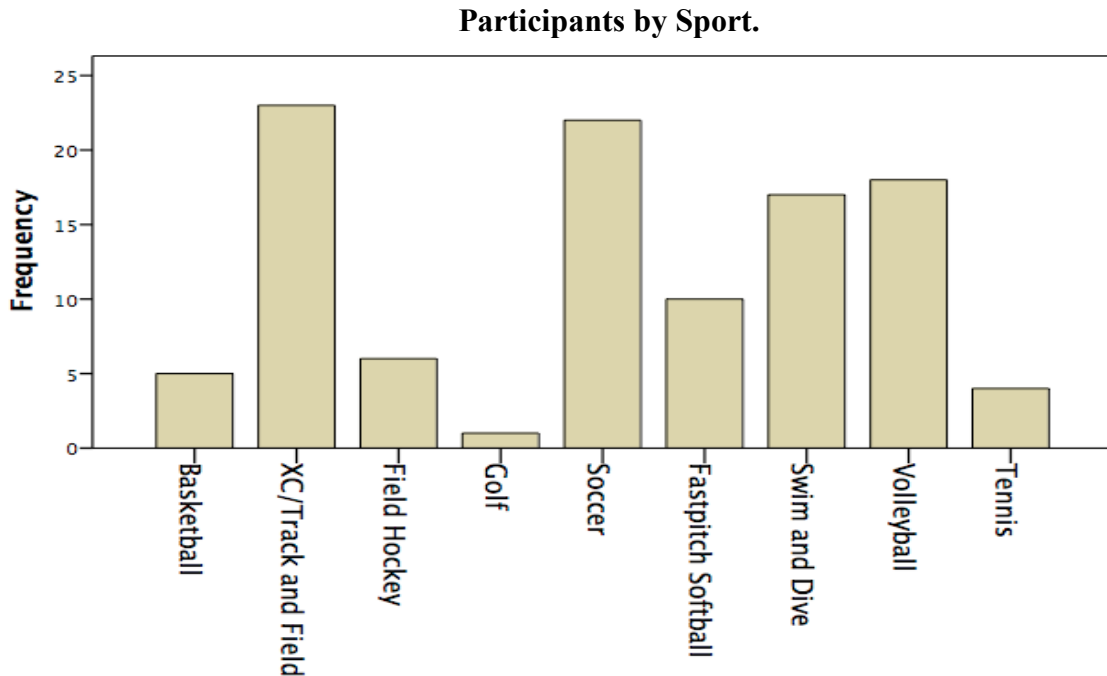


Figure 3. This shows the distribution of participants by collegiate sponsored sports.

BES Scores and Total Time Spent on Social Media by Participants

A total of 102 participants responded to the BES on a Likert 5-point scale to determine body satisfaction. Figure 4 shows the distribution of responses and frequencies of total BES scores. All participants also estimated their total time spent on social media among the five websites defined for this study. Figure 5 shows the distribution of total time spent on social media by participants and frequencies of time spent on social media.

A Pearson's correlation was calculated to assess the relationship between BES scores and the total time spent on social media by collegiate female athletes. The Pearson's correlation calculation proved to be not significant ($r = -.16$, $P = .10$). This suggests that there is no relationship between the amount of time spent on social media and a collegiate female athletes' BES score.

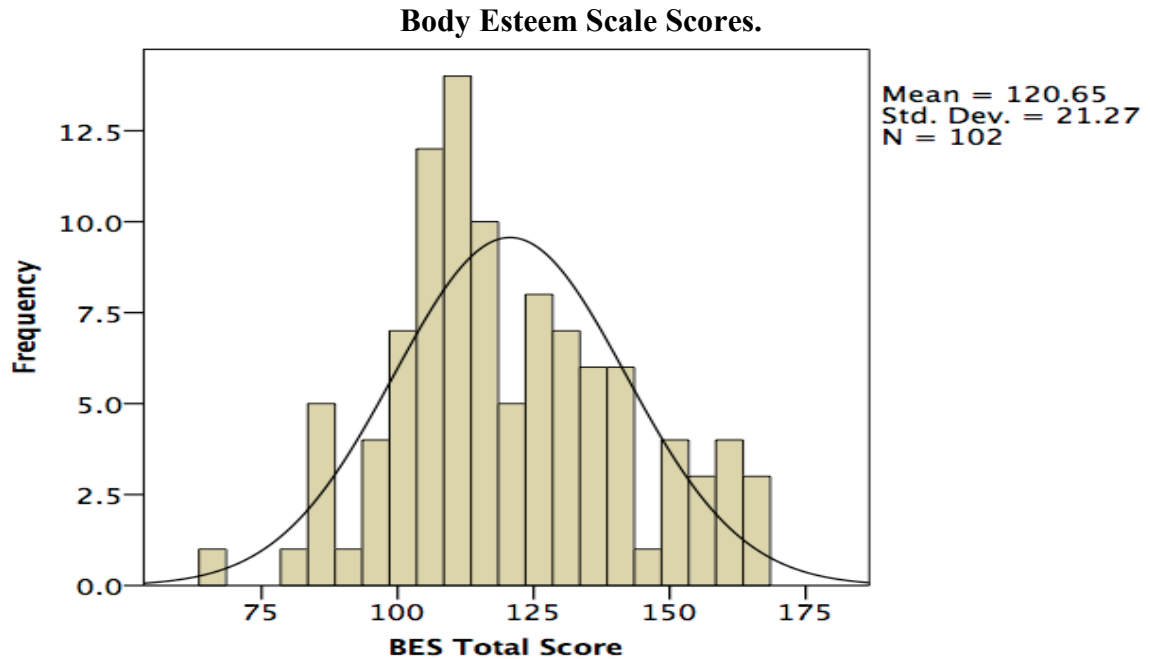


Figure 4. Distribution of Total BES scores from Participants (N= 102)

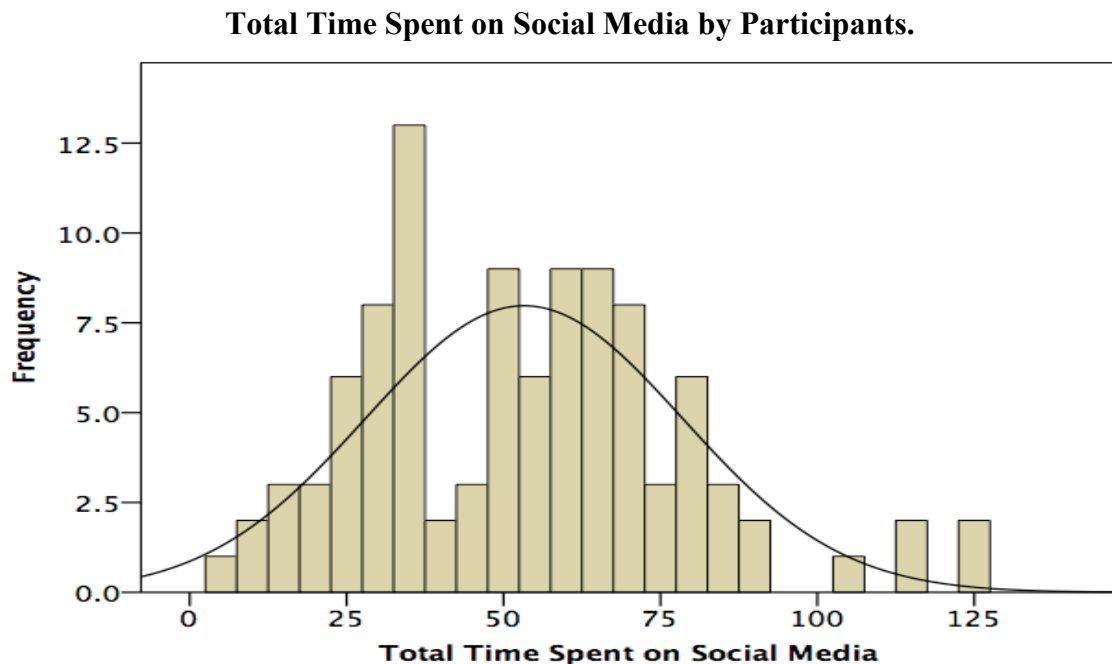


Figure 5. Distribution of Total Time Spent on Social Media by participants (N= 102). Increments on the X axis are measured in five-minute intervals for total time spent on social media.

Affect of Social Media on BES Scores and Perception of Weight

A mediation analysis was conducted to assess the effect total time spent on social media had on collegiate female athletes' BES scores and their perception of weight. Total BES scores were used to predict collegiate female athlete's perception of the way their weight changes their opinion of themselves with total time spent on social media expected to mediate the relationship between BES scores and their perception of their weight. Figure 6 shows the full model of the mediation calculation.

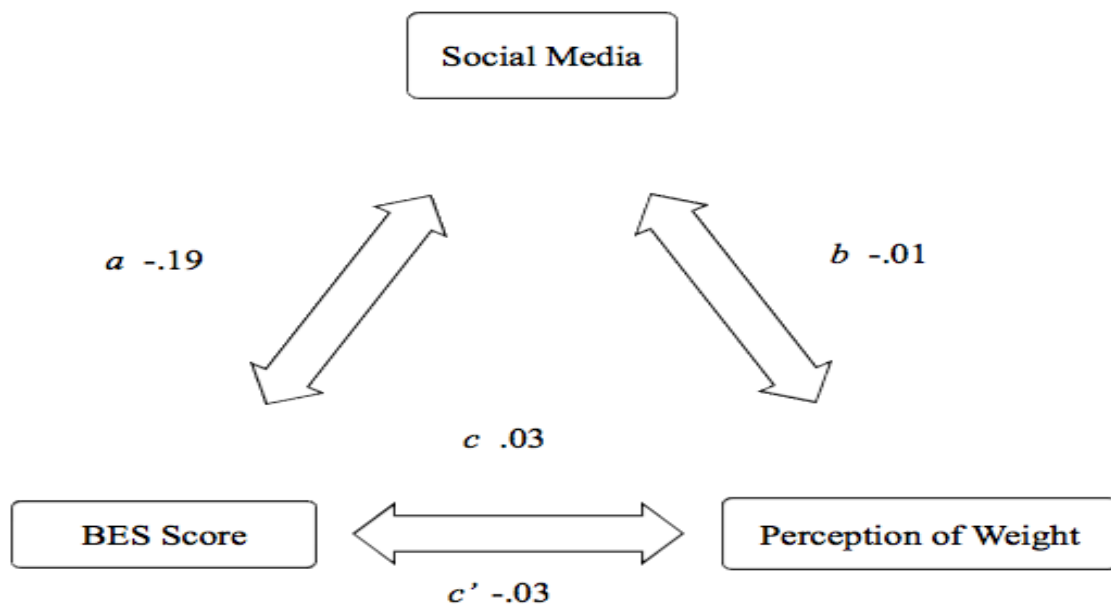


Figure 6. Diagram of the mediation for affect of total time spent on social media and the perception of weight.

First, the BES score was a significant predictor of perception of weight (the c pathway). The BES scores showed a significant relationship with the perception of weight not changing the way the participants felt about themselves $t_{99} = 5.38, P < .001$. Second, the BES score was used to predict the mediator variable of social media use (the a pathway), which showed that BES scores did not have a relationship with social media

use $t_{99} = -1.64$, $P = .10$. Third, the relationship between the mediator social media use and perception of weight in collegiate female athletes was examined controlling for BES scores (the b pathway). Total time spent on social media showed a significant relationship with perception of weight among collegiate female athletes, $t_{98} = -1.95$, $P = .05$. Lastly, the mediated relationship between BES scores and perception of weight was examined for a drop in prediction when the mediator was added to the model (the c' pathway). Full mediation was not achieved because the relationship between BES scores and perception of weight was still significant after controlling for use of social media, $t_{98} = 5.06$, $P < .001$. The Sobel test was used to determine that the ab effect was not significantly greater than zero, $Z = 1.17$, $p = .24$, $K^2 = .03$.

An additional Pearson's correlation between total time spent on social media and the BES subscale for weight concern was conducted. The Pearson's correlation proved to be insignificant ($r = -.16$, $P = .11$).

Affect of Social Media on Appearance in Uniform and BES scores

A mediation analysis was conducted to assess the effect total time spent on social media had on BES scores and perception of appearance in uniform. Total BES scores were used to predict collegiate female athlete's perception of their appearance in uniform with total time spent on social media expected to mediate the relationship between BES scores and their perception of appearance in uniform. Figure 7 shows the full model of the mediation calculation.

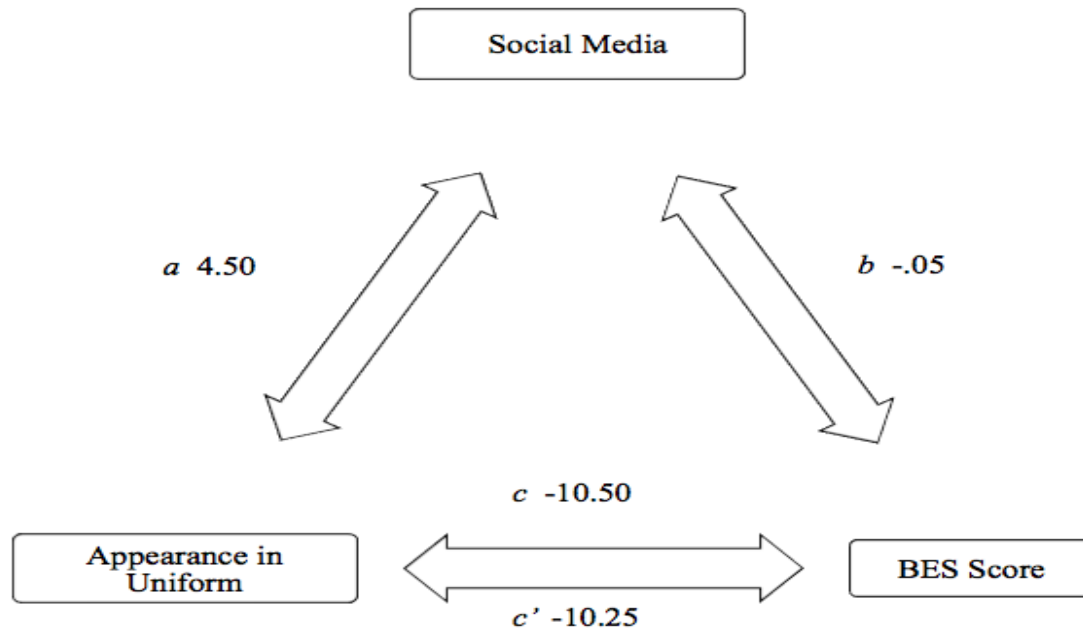


Figure 7. Diagram of the mediation for affect of total time spent on social media and the perception of appearance in uniform.

First, the perceived appearance in uniform was a significant predictor of BES scores (the c pathway). Perceived dissatisfaction of appearance in uniform showed a significant relationship with BES scores $t_{99} = -6.31$, $P < .001$. Second, the perceived appearance in uniform was used to predict the mediator variable of total time on social media (the a pathway) which showed that perceived appearance in uniform was positively related to use of social media, $t_{99} = 2$, $P = .05$. Third, the relationship between the mediator variable total time spent on social media and BES scores among collegiate female athletes was examined controlling for perceived appearance in uniform (the b pathway). Total time spent on social media did not show a significant relationship with BES scores among collegiate female athletes $t_{98} = -.71$, $P = .50$. Lastly, the mediated relationship between perceived appearance in uniform and BES scores was examined for a drop in prediction when the mediator was added to the model (the c' pathway). Full

mediation was not achieved because the relationship between perception of appearance in uniform and BES scores was still significant after controlling for use of social media, $t_{98} = -6.03$, $P < .001$. The Sobel test was used to determine that the *ab* effect was not significantly greater than zero, $Z = -.60$, $p = .55$, $K^2 = .02$.

Relationship between Body Mass Index and BES scores

While not an initial primary research question, I decided to run a Pearson's correlation to look for a correlation between body mass index (BMI) and the total BES score. A calculation was considered under the assumption that an individual with high BES scores would have a low BMI, and an individual with low BES scores would have a high BMI. With the use of an online calculator,³⁶ the 98 participants (96%) that reported their height and weight were assessed for their BMI and their result was rounded to the nearest hundredth decimal point. None of the 98 athletes proved to have a significant correlation between their reported BMI and BES scores ($r = .11$, $P = .28$).

Qualitative Analysis

Initial analysis of participant's qualitative responses identified several domains. The peer-review reliability process of coding produced 15 categories and six domains from the qualitative data. At the end of the coding process, it became apparent that four domains identified in this study were in alignment with previous qualitative research conducted on a related topic²⁸: 1) social comparison; 2) opinion athletes' body shape in and out of competition; 3) opinions of size, appearance and weight; and 4) internalization of beauty standards. These domains matched my research because of the questions asked

in the survey. As I was reading the responses, I noticed that the domains used in previous research described the types of responses I had read very well so I used these four as a guide. If no reference was made to their body, the response was coded on the content. The two remaining domains that emerged from the data included control of weight, and time. These responses were seen from questions regarding the use of extreme strategies to control weight and the amount of time participants spent on appraisal of their body. Through a peer-review process, it was determined that there was a 96.58% agreement rate of all domains and categories established. Table 2 details domains, categories of domains, descriptions of categories, and frequency of responses. According to previous research in nursing, this method matches summative content analysis.³⁴

Table 2. Descriptions of domains, categories and frequencies of responses.

Domains/Categories	Description of Data	Frequency ^a
Domain 1: Social Comparison		
a. Towards teammates/other athletes	Athletes reported comparison of their body figure to their athletic peers and other opponents. Also, athletes reported to have made judgements about other athletes based on body structure.	Typical
b. Towards non-athletic females	Athletes reported comparison of their body figure to non-athletic collegiate females.	Typical
c. Social Media	Athletes reported that social media sometimes made them feel worse about their body in comparison to advertising models.	Variant
d. Upward Social Comparison	Athletes reported that other collegiate female athletes and non-athletic collegiate females had better figures than them, and felt that they suffered in comparison.	Typical
e. Downward Social Comparison	Athletes reported feeling of having a better body figure in comparison to other collegiate female athletes and other non-athletic collegiate females.	Typical
Domain 2: Opinions of athletes' body satisfaction in and out of competition		
a. Satisfaction	Athletes felt like they could perform better, had more confidence, and good about their body figure in and out of competition.	Typical
b. Dissatisfaction	Concern over feeling weak, not looking "athletic", decreased performance, and looking "weird" in non-athletic wear.	Typical
c. Neutral opinion	No expansion on whether or not the athletes had a concrete idea of their body satisfaction.	Variant
Domain 3: Opinions of athletes' size, appearance, and weight		
a. Positive opinion	Athletes felt good when they perceived to have a good amount of muscle tone, strength, and overall fit body.	Variant
b. Negative opinion	Other athletes were concerned over too much muscle tone, look of stomach, having flaws exposed, feeling disproportionate, having different types of builds, and not being attractive to the opposite sex.	Typical
c. Weight	Injury caused lowered activity levels and increase in weight, and affected perception of body figure	Variant

^a General= all of the cases; typical= more than half of the cases; variant= half of the cases or fewer.

Table 2 continued.

Domains/Categories	Description of Data	Frequency ^a
e. Build of body	Concern with "athletic build", "feminine build" and "high school build"	Typical
Domain 4: Internalization of beauty standards		
a. Athletic identity/build	Athletes had held the belief that the athletic build was a good standard in which to compare themselves to	Typical
b. Feminine ideals	When in a social setting outside of sports, athletes sometimes felt uncomfortable because of what they were wearing.	Variant
c. Ideal body image	Comments that stated their perception of their opinion, for example, "I don't have what you'd call the 'ideal body figure'"	Variant
Domain 5: Control of weight		
a. Diets	Numerous diets have been used by athletes: extreme, low-carb, raw veggie, cleanses and the use of strict health foods.	Typical
b. Personal choice	Reports of cutting snacks and meals, restricting calories, using supplements and pills to cut weight.	Variant
c. Nutritionist-recommended	Consultation with a nutritionist.	Variant
Domain 6: Time		
a. Time spent thinking about body figure	Athletes reported that they spend less time thinking about body figure even though they do have social media accounts.	Variant
b. Cognitive levels of attention	Athletes reported even with the abundance of media in their lives, they do not think about other body figures most of the time.	Variant

^a General= all of the cases; typical= more than half of the cases; variant= half of the cases or fewer.

Domain 1: Social Comparison

The first domain addressed the participants' actions and thoughts regarding social comparison. Participants acknowledged feelings of comparison to other teammates, other athletes, non-athletic collegiate females, and social media advertisements.

In the context of daily life in sports, social comparisons were made largely to teammates and other athletes. Responses were observed to be largely two-sided, where participants talked about the comparison to other athletes, then ended with a motivational thought: "I like it but I look at other swimmers who have better bodies and it makes me feel bad. But also drives me to work harder."

In the context of daily life outside of sports, comparisons were more often made towards other athletes than non-athletic females. Responses concerning upward social comparison talked about societal norms, fit of clothing, and body figures. "Clothes are not made for tall people that have butts and small boobs. It also annoys me that the social norm is to be super skinny and that athletic is not always appreciated. I would rather be athletic looking than super skinny."

Downward social comparison responses included feelings of being more fit, more toned, and being proud of having a muscular, athletic body. "It's good being an athlete as you come to realize your body is for your sport and helps you be the best player you can be. Rather than something just to look pretty."

Domain 2: Opinions of Athletes' Body Satisfaction In and Out of Competition

Responses in this domain were categorized as satisfaction, dissatisfaction, or neutral opinion if participants stated remarks toward their body. This was a distinction

from the first category in that social comparisons can show differences of opinion in relation to other people, but do not necessarily show the more accurate opinion of one's self.

Responses grouped under the satisfaction category described high opinions of body satisfaction. Participants referred to more confidence, ability to perform better, and feeling good about their body overall. Commonly occurring responses regarded a positive nature: "look good, play good, [and] feel good." These participants had a general sense of high satisfaction of their body because of how often they work out with their team. One participant describes: "I feel like I look good. I look forward to working out and knowing I'll be the best looking one on the beach this summer."

Other participants described opinions of low body satisfaction. Responses were concerned with the athletes feeling weak due to lack of muscles, not looking "athletic", decreased performance and looking disproportionate in non-athletic wear. Responses in this category also talked about social comparison towards other female athletes and non-athletes. These three participants responded in a negative manner: "I do not feel like I look as good as my fellow athletes," "I am not in good enough physical condition to be a Division I athlete," and "I feel like I don't fit the typical soccer girl body of being super defined."

Some of the responses were categorized as neutral opinion. These responses did not reference any opinions of body satisfaction and did not expand on remarks towards their body. Phrases such as "it's getting more toned" were put in this category.

Domain 3: Opinions of Athletes' Size, Appearance and Weight

Responses in this domain concentrated on the opinions of size, appearance and weight. The responses included perceptions of how the participants felt they looked in their uniform and if the participants felt that weight affected the way they feel about themselves. In this domain, five categories emerged from the responses: 1) positive opinion, 2) negative opinion, 3) weight, 4) body parts, and 5) build of body.

Positive opinion responses described feelings of satisfaction when they referred to having a perceived amount of adequate muscle tone, strength, and an overall fit body. One participant responded, "I look very fit and healthy. I look like a college athlete/swimmer."

Negative opinion responses were concerned with feelings of dissatisfaction due to the amount of muscle mass the participants have to gain, the look of their stomach areas, having flaws exposed in their uniforms, feeling disproportionate, and not being attractive to the opposite sex. Other thoughts and feelings referred to feeling fat and large, such as this participant: "When I feel like I look bad, I am just overall not as comfortable, which makes getting focused more difficult. I don't like people watching me, especially when I don't look my best."

The weight category presented itself mainly when participants wrote about being injured. Most responses included concern over weight gain after injury due to the lack of exercise and working out:

I had been injured and I didn't want my weight to go up due to less exercise, so I cut back to one meal a day and then later I started actually losing weight and getting a ton of compliments so I cut back to just snacks every once in a while. When I was rehabilitated I started eating more normally again and most of the

weight came back eventually. Then I went on birth control for some acne problems and that caused me to gain even more weight.

Responses concerning body parts and build of participant's bodies were variant in the number of responses. Participants wrote remarks about being concerned with body parts being exposed or limbs being too big or too small. One participant responded, "I like my body, but because I'm a swimmer I feel like all of my flaws are exposed."

Domain 4: Internalization of Beauty Standards

Internalization is when one accepts the societal standard as a personal choice rather than a product of societal pressure.²⁷ This domain was apparent in many responses from participants, especially when asked about how participants felt about their body in daily life outside of sports. Responses in this domain were different than those above because of their explicit description of how participants felt about their bodies. Most responses focused around this domain and did not mention other opinions. Three categories came from this domain: 1) athletic identity/build, 2) feminine ideals, and 3) ideal body image.

Athletic identity and athletic build was referred to in multiple responses from participants. Responses in this category were primarily positive from participants, in that the participants believed that the athletic body or build they perceived to have was a good standard in which to compare themselves to. Typical responses from participants included, "I'm very muscular and that's admired/praised."

There were few responses relating to feminine ideals. These responses mostly regarded daily life outside of sports, and were negative in connotation. Participants felt

that in social settings outside of sports, they sometimes felt uncomfortable because of what they were wearing. One participant stated: “I don’t always feel womanly because of the amount of muscle I have. I have to buy bigger clothes and it’s hard to make big thighs and huge biceps look attractive in professional clothes. It’s hard to buy shirts that fit my arms and torso adequately.”

The last category in this domain is about the ideal body image. All participants who recorded responses in this category had a different sense of what their ideal body image was. Statements related to the participants perception of their opinion: “I think that being an athlete requires a different style of fitness and nutrition than the ‘ideal body image’. I feel that when I look better, I am not fueling my body with what it needs to perform optimally.”

Domain 5: Control of Weight

This domain emerged from questions pertaining to the participant’s feelings towards their weight. Participants were asked to explain why they felt like they had to use any extreme strategy to control their weight. Categories depicted in this domain were diets, and personal choice. Most responses in this domain were negative in context.

The first category in this domain was about dieting. Most participants that answered this question wrote about the different types of diets they had used in the past to lose weight on their own. Low-carb diets, raw vegetable diets, cleanses, strict health food diets, and extreme diets (no descriptions were available) have been used among many collegiate female athletes. One athlete described why she felt she needed to use an extreme strategy to lose weight: “As a method of control in my life. Nothing else was

stable and it was something I felt was under my control. Images of women in the media do not help.”

The second category in this domain described the personal choice why the participants used strategies to lose weight. These responses included reports of restricting food, cutting snacks and meals, the use of supplements or pills to cut weight. Participants who reported using these strategies without clearance from a nutritionist or a coach felt like they had to take it upon themselves to change their body. Participants also thought their weight had affected their performance during competitions. “I needed to run faster [for] my sport, and I was way too high on weight as well. I had tournaments coming soon so I needed to use a[n] extreme but controlled diet to get [in] shape faster.”

Domain 6: Time

This domain described the fact that even though these collegiate female athletes do in fact have social media accounts, their time on social media is limited due to other time consuming activities. Also described in this category was the perception that collegiate female athletes do not have a lot of time to spend on thinking about their body figure. These time consuming activities included: class, practice, competition and homework time. One participant responded, “I really don’t have a life outside my sport. Every day it’s practice and doing homework so I really don’t have time to critique my body. I am satisfied with my body.”

Conclusion

Data analysis of participants' responses revealed there was no significant relationship between the amount of time on social media accounts by collegiate female athletes and their self-reported body satisfaction score ($r = -.16$, $P = .10$). Total time spent on social media was found to not have a significant affect on perception of weight and their BES scores by a mediation calculation. Another mediation calculation found total time spent on social media not to have a significant affect on BES scores and perceived appearance in uniform. Qualitative data revealed six domains: 1) social comparison, 2) opinions of athletes' body satisfaction in and out of competition, 3) opinions of athletes' size, appearance and weight, 4) internalization of beauty standards, 5) control of weight, and 6) time.

CHAPTER V: DISCUSSION

Introduction

This chapter will discuss results of research questions and recommendations for future studies in this line of research. This study considered the relationship between social media use and body satisfaction among collegiate female athletes. The data obtained in this study does not support the idea that social media use has a significant influence on collegiate female athletes' body satisfaction or their feelings about their bodies in and out of competition.

Quantitative Research Findings and Discussion

The primary focus for this study was to seek an understanding of social media's relationship to collegiate female athletes' BES ratings. Participants were asked to complete the PoBS survey. Information obtained by the survey was utilized to answer the research questions. Findings for each research question are addressed below.

Research Question One. Is there a relationship between the total amount of time spent on social media websites by collegiate female athletes and BES scores?

The Pearson's correlation showed that there is no significant relationship between total amount of time spent on social media and the participant's BES scores ($r = -.16$, $P = .10$). This finding suggests that the use of social media is not directly associated with BES scores. Based on the data obtained in this study, the null hypothesis for this question is accepted.

This non-significant relationship is not in agreement with a meta-analysis conducted by Grabe, Ward & Hyde.⁶ Although this meta-analysis utilized different types of advertising media and not specifically social media, most research showed that higher amounts of exposure to advertising media leads to higher levels of body dissatisfaction and stronger internalization of the thin-ideal.⁶ A study on gender differences of Facebook use shows that females were more likely to agree with the statement that “the photos others post on Facebook give me a negative self body image.”^{7(p95)} Overall, past research has shown that prolonged exposure to advertising media increases body figure anxiety in females.^{6-7,14,22-27}

Research Question Two. Does the use of social media mediate the relationship between BES scores and opinion of weight among collegiate female athletes?

A mediation analysis was conducted to examine the affect social media use had on collegiate female athletes’ perception of their weight and the BES scores. The analysis concluded that some, but not all, pathways proved to be significant. Full mediation was not achieved. Through the examination of this relationship, the most notable findings were that the *a* pathway (using the total BES score to predict the total amount of time spent on social media) was not a significant finding and the *c* pathway (using the total BES score and total amount of time spent on social media to predict the participants’ perception of weight) was a significant finding.

Examination of the *a* pathway shows that the trend is a negative relationship between high BES scores and a low amount of social media use. Although this is a positive result from this data, it is not enough to blankly state that collegiate female athletes have higher body satisfaction. But, knowing that these variables are associated is

an important step to understanding this occurrence. This quantitative finding suggests that as a group, social media use does not affect collegiate female athletes because of three possible reasons: 1) they may not be paying attention to thin-ideal media while on social media websites,²² 2) they may have decided they are better off than their peers on social media,⁵ or 3) they may have chosen to not compare their bodies against others at all.⁵ In line with other research, it appears as though the participants in the current study did not create a deeper cognitive process which could have been a result of the low amount of social media use.^{22,23} It also appears that the collegiate female athletes have not internalized the thin-ideal, and therefore, do not feel a need to compare their body to others.

The significance of the *c* pathway is also a positive finding in this study. Examination of this pathway shows that controlling for the amount of time spent on social media, the higher the BES score an individual reports, the less they tend to agree with the statement that the way they feel about their weight changes the way they feel about themselves.

A Pearson's correlation was calculated to look at the relationship between the total amount of time spent on social media and the score for the weight concern subscale of the BES. The Pearson's correlation proved to be insignificant ($r = -.16$, $P = .11$). In addition to the mediation, this suggests that the use of social media only accounts for three to five percent of variance accounted for. In other words, these calculations show that social media use had little effect on BES scores and weight concern scores for participants in this study. The null hypothesis was accepted for this research question.

Qualitative data from participants discussed other time constraints in their daily lives that prevented further appraisal of their body and the amount of time spent on social media. This discussion of time constraints aligns with the examination of pathway *a*, in which the trend is a negative relationship between BES scores and time spent on social media. Another qualitative finding shows agreement with the perception of weight aspect of this research question. Only nineteen participants (18.6%) answered they have used an extreme strategy to control their weight. Any participant that answered yes to this question was asked to discuss their feelings as to why they felt they needed to control their weight. Most responses related to competition and feeling pressure from coaches. Only one response described that controlling her weight was “the only way to gain control of my life.” While this response is much different than the remainder of the responses, I believe it cannot be discounted by healthcare providers due to the potential for serious side effects related to body dissatisfaction.

Research Question Three. Does the use of social media mediate the relationship between perception of appearance in uniform and self-reported body satisfaction scores?

A second mediation analysis was conducted to examine the affect social media use had on collegiate female athletes’ perception of appearance in uniform and the BES scores. Again, some, but not all, pathways were significant. Most notable about the results of this mediation is that there may not even be a relationship between the variables from the start. There is a small significance in the mediated pathway that perceived appearance in uniform does predict a relationship with BES scores. After examination of the data, it does not appear that participants had an overall negative opinion of their

appearance in their uniforms. Again, the null hypothesis is accepted for this research question.

In the qualitative data, participants discussed the fit of uniform, adjustment of the uniform during competition and lack of comfort frequently throughout the responses. Twenty-eight participants (27%) admitted that they were affected by the way they felt they looked in their uniform at some point during their athletic career. This low occurrence of participants answering yes to the question that addressed the way they felt in their uniform supports the quantitative finding that social media does not have much effect on collegiate female athletes and BES scores. In previous research that addresses the role of uniforms on NCAA DI volleyball players, results only provided insight to the multidimensionality of body satisfaction.²⁸ No concrete evidence was found to support the fact that perception of appearance in uniforms is a significant variable of body satisfaction.

After a careful consideration of all quantitative data, I think it is well aligned with accepting the null hypothesis that there is not a significant relationship between the time spent on social media and BES scores among collegiate female athletes. As stated previously, I think it is too naïve and to solely blame social media for women's body satisfaction discrepancies.

Qualitative Data. At the end of the content analysis process, it became apparent that four domains identified in this study were in alignment with previous qualitative research conducted on a related topic²⁸: 1) social comparison; 2) opinion athletes' body shape in and out of competition; 3) opinions of size, appearance and weight; and 4) internalization of beauty standards. These domains matched my research because of the

questions asked in the survey. Responses from my survey referred to the same description as the previous research so I used those specific domains as a guide. If no reference was made to their body, the response was coded on the content. The two remaining domains that emerged from the data included control of weight, and time. These responses were seen from questions regarding the use of extreme strategies to control weight and the amount of time participants spent on appraisal of their body.

1. Social Comparison – Collegiate female athletes saw other female athletes and non-athletes as a source of comparison in relation to their body figures and satisfaction. Some social comparison was contributed to social media, stating that some athletes felt worse about their bodies in comparison to the advertising media. More often than not, the participants reported feelings of upward or downward social comparison. The collegiate female athletes were more affected by the comparison to other female athletes and non-athletic females than social media's effect on their body satisfaction. This finding that collegiate female athletes compare themselves more often with other athletes or academic cohort aligns well with Festinger's Theory of Social Comparisons. The participants identified accordingly with others that were of the same ability.³² None of the participants deviated from their athletic status or academic cohort for objects of comparison.
2. Opinions of Athletes' Body Satisfaction In and Out of Competition – Collegiate female athletes reported a difference of opinion about their body satisfaction in and out of competition. Some athletes felt satisfied overall, while other athletes were dissatisfied with one or the other social constructs or did not have an opinion at all. Satisfied athletes felt that they could perform better, had more confidence and felt good about their body figure. Dissatisfied athletes spoke of feeling weak, concerned about not looking "athletic," performed worse, and felt like they looked weird in non-athletic wear.
3. Opinions of Athletes' Size, Appearance, and Weight – Collegiate female athletes stated many feelings relating to their size, appearance and weight. In addition to positive and negative opinions, other categories in this domain were statements about weight, body parts and build of their bodies. While some collegiate female athletes were satisfied with their muscle tone, others were dissatisfied with too much muscle tone. Other concerns from the collegiate female athletes were about specific body parts and their body build.
4. Internalization of Beauty Standards – Collegiate female athletes showed an internalization of beauty standards in their responses. Most collegiate female athletes were of the opinion that their athletic identity was a good standard in which to compare themselves to. Other collegiate female athletes had body dissatisfaction, leading them to believe that their body did not fit the "feminine ideal."

5. Control of Weight – Athletes expressed concerns that their weight affecting their competitive performance. Some participants wrote that they had taken it upon themselves to change their weight by different types of diets, the use of supplements, or restricting calories. Very few collegiate female athletes mentioned the consultation with a nutritionist to lose weight safely.
6. Time – Some collegiate female athletes expressed the amount of other important demands on their time, decreasing the amount that they actively appraise their body for an explicit decision on body satisfaction. None of the participants made any remarks about their time spent on social media. This could have been due to the lack of direct questioning toward answering in that manner. This was the least common domain seen throughout the responses. I expected to have more participants discuss their use of social media in the qualitative data, but after data analysis I did not have any collected.

Application and Future Studies

While social media use can be a problem for some women, it appears that collegiate female athletes have not taken what they see and compare themselves against a certain standard. Social media (all types of media) will always have the potential to be utilized in negative ways. Fortunately, there are many companies creating campaigns to provide positive television, radio and social media for the female population. Always³⁷ “Like a Girl” campaign and Dove’s³⁸ “#SpeakBeautiful” campaign on Twitter are two examples. I think the society has accepted that social media is going to be a part of our lives and fortunately many individuals and companies are electing to capitalize on the positive impact it can have.

The knowledge I have gained from completing this research project has strengthened my belief that an increase in education on the psychosocial comparison tendencies of collegiate female population in athletic training program curriculum is needed. As described in the NATA 5th edition of the *Athletic Training Education competencies*, athletic training students are expected to have a deep understanding of

psychosocial issues and how to deal with them. The way in which athletic training programs meet the minimum standard for these competencies is specific to each program. In addition to education, I think scales and surveys need to be developed in order to find the missing link between knowledge and the practical application of this topic in a clinical setting. I also think it would be interesting to explore adolescent female athletes' thoughts and feelings on psychosocial matters in comparison to their Tanner Stages of Development.³⁹

The limitations of this study had an impact on the outcome. First, the survey in its entirety was never proven reliable. The BES has been proven reliable and valid in multiple studies, but the inclusion of the other questions may have hindered the reliability of the overall survey. Future studies should obtain reliability before attempting data collection for analysis. Second, some of the questions were worded in ways that may have confused the participant. For example, the questions regarding the participants' feelings of their body in relation to being an athlete and the participants' feelings about their body in relation to daily life outside of sports could have been directed differently to obtain responses of how their social media use affected their feelings. None of the participants discussed how their use of social media changed or affected their feelings on either of these questions. After reviewing the qualitative responses, it was evident that different research questions could have been utilized and all data could have been taken in a different direction. With each round of qualitative analysis, I found myself wanting to understand the psychosocial reasoning behind the open-ended responses. Some responses mentioned the team camaraderie and how it helped certain individuals accept that their body figure was going to be different than the average collegiate female

student. Future studies should focus on the wording of each question in order to obtain qualitative data relating to specific research questions. This can be obtained by validation of the questions by experts in the English language.

Third, the limited amount of participants utilized in the study makes it hard to generalize the results to all collegiate female athletes in the nation. The National Collegiate Athletics Association (NCAA) estimated that there were 191,131 female athletes on varsity teams across the nation during the 2010-2011 school year.⁴⁰ Further studies should focus on obtaining more participants from different regions of the United States. To be able to generalize findings, future studies should set a goal to utilize different divisions of universities to the national average number of collegiate female athletes. Future studies can also focus on obtaining the male's perspective of time spent on social media and body satisfaction.

Conclusion

This research suggests that collegiate female athletes' use of social media has no effect on their perceptions of their body satisfaction. Exposure to social media and other advertising models can have an immediate effect of lower body satisfaction, but has not been shown to carry on long term because at some point the individual will revert to their original thoughts. If a person thinks negatively about their body satisfaction, according to Festinger's Theory of Social Comparison, that person is going to drift towards media that is deprecating in nature because it is easy to compare to. Conversely, if a person thinks positively about their body satisfaction, they will gravitate towards media that is positive in nature.³²

In terms of searching for answers to my research questions, I think this study provided a rather positive outlook for collegiate female athletes' body satisfaction and their use of social media. But, since the literature describes the potential serious side effects related to body dissatisfaction that can occur, I think this is also a situation where the minority trumps the majority of the data. The mixture of quantitative and qualitative data helped provide some evidence that while social media can have an effect on collegiate female athletes, its influence is not a powerful one and therefore cannot be solely blamed for women's body dissatisfaction.

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APPENDICES

Appendix A. Informed Consent

Consent to Participate in Research
Missouri State University
College of Health and Human Services

Perception of Body Satisfaction in Collegiate Female Athletes and Their Use of Social Media.

Principal Investigator: Dr. Tona Hetzler
Co-Investigator: Megan Jeffris

Introduction

You are being asked to participate in a research study that is part of the requirement for a Master's degree in Athletic Training for Megan Jeffris. Before agreeing to participate in this study, it is important to read about and understand all procedures involved.

If you have any questions about the study or your role in this research, please ask the investigator(s). The investigators may be contacted at:

Dr. Hetzler: TonaHetzler@missouristate.edu
Megan Jeffris: Jeffris015@live.missouristate.edu

Purpose

The purpose of this study is to investigate the relationship between body satisfaction in collegiate female athletes and the use of social media.

Description of Procedures

Upon agreeing to participate in this study, you will be asked to complete an online 48-question survey. This questionnaire will take approximately 20 minutes to complete. All responses will be kept confidential. In order to ensure the protection of privacy, no names or other identifiable information will be requested or associated with your response.

Risks

There are no risks associated with this study.

Benefits

Participants will not receive or experience any benefits from participation in the survey due to NCAA compliance.

Consent to Participate

By selecting the button below, you are indicating willingness to participate in this study.

Please note that participation is **voluntary**. If at any point you decide to discontinue with the study, you may do so without any negative consequences. Also, by selecting the button below you are indicating that you have read and understand all the information in the informed consent, that any questions have been answered to your satisfaction, and that you have been informed that you may withdraw from participation in this study at any point.

☐ I agree to the terms above and participation in this study.

☐ I DO NOT agree to the terms above and do not wish to participate

Appendix B. Demographic Questionnaire

What university do you attend?

Missouri State University

Drury University

Evangel University

Southwest Baptist University

Other

What sport are you a member of at a collegiate level?

Basketball

Cross Country/Track and Field

Field Hockey

Golf

Soccer

Fastpitch Softball

Swimming and Diving

Volleyball

Tennis

Cheerleading/Spirit Squad

I am a member of two collegiate teams*

Please indicate your academic status of school as of Fall 2014:

Freshman

Sophomore

Junior

Senior

Please indicate your age in whole numbers: _____

*Selection of this answer displayed a second question with the same options and select boxes to click all that apply. No participants were members of two collegiate teams.

Appendix C. Body Esteem Scale

Instructions: On this page are listed a number of body parts and functions. Please read each item and indicate how you feel about this part or function of your own body using the following scale:

- 1 = Have strong negative feelings
- 2 = Have moderate negative feelings
- 3 = Have no feeling one way or the other
- 4 = Have moderate positive feelings
- 5 = Have strong positive feelings

Characteristics	Frequency	Percent
Body Scent		
Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	9	8.80%
Have no feelings one way or the other	24	23.50%
Have moderate positive feelings	39	38.20%
Have strong positive feelings	28	27.50%
Appetite		
Have Strong Negative feelings	6	5.90%
Have moderate negative feelings	15	14.70%
Have no feelings one way or the other	22	21.60%
Have moderate positive feelings	33	32.40%
Have strong positive feelings	26	25.50%
Nose		
Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	20	19.60%
Have no feelings one way or the other	30	29.40%
Have moderate positive feelings	22	21.60%
Have strong positive feelings	28	27.50%
Physical Stamina		
Have Strong Negative feelings	3	2.90%
Have moderate negative feelings	12	11.80%
Have no feelings one way or the other	7	6.90%
Have moderate positive feelings	40	39.20%
Have strong positive feelings	40	39.20%

Reflexes

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	9	8.80%
Have no feelings one way or the other	21	20.60%
Have moderate positive feelings	36	35.30%
Have strong positive feelings	35	34.30%

Lips

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	2	2.00%
Have no feelings one way or the other	35	34.30%
Have moderate positive feelings	33	32.40%
Have strong positive feelings	31	30.40%

Muscular Strength

Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	8	7.80%
Have no feelings one way or the other	7	6.90%
Have moderate positive feelings	55	53.90%
Have strong positive feelings	30	29.40%

Waist

Have Strong Negative feelings	5	4.90%
Have moderate negative feelings	27	26.50%
Have no feelings one way or the other	14	13.70%
Have moderate positive feelings	35	34.30%
Have strong positive feelings	21	20.60%

Energy Level

Have Strong Negative feelings	4	3.90%
Have moderate negative feelings	18	17.60%
Have no feelings one way or the other	19	18.60%
Have moderate positive feelings	40	39.20%
Have strong positive feelings	21	20.60%

Thighs

Have Strong Negative feelings	8	7.80%
Have moderate negative feelings	35	34.30%
Have no feelings one way or the other	16	15.70%
Have moderate positive feelings	25	24.50%
Have strong positive feelings	18	17.60%

Ears

Have Strong Negative feelings	0	0.00%
Have moderate negative feelings	7	6.90%
Have no feelings one way or the other	50	49.00%
Have moderate positive feelings	16	15.70%
Have strong positive feelings	29	28.40%

Biceps

Have Strong Negative feelings	0	0.00%
Have moderate negative feelings	10	9.80%
Have no feelings one way or the other	27	26.50%
Have moderate positive feelings	44	43.10%
Have strong positive feelings	21	20.60%

Chin

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	7	6.90%
Have no feelings one way or the other	52	51.00%
Have moderate positive feelings	19	18.60%
Have strong positive feelings	23	22.50%

Body Build

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	23	22.50%
Have no feelings one way or the other	15	14.70%
Have moderate positive feelings	42	41.20%
Have strong positive feelings	21	20.60%

Physical Coordination

Have Strong Negative feelings	3	2.90%
Have moderate negative feelings	8	7.80%
Have no feelings one way or the other	15	14.70%
Have moderate positive feelings	40	39.20%
Have strong positive feelings	36	35.30%

Buttocks

Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	17	16.70%
Have no feelings one way or the other	15	14.70%
Have moderate positive feelings	14	40.20%
Have strong positive feelings	27	26.50%

Agility

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	15	14.70%
Have no feelings one way or the other	19	18.60%
Have moderate positive feelings	38	37.30%
Have strong positive feelings	29	28.40%

Width of Shoulders

Have Strong Negative feelings	4	3.90%
Have moderate negative feelings	16	15.70%
Have no feelings one way or the other	31	30.40%
Have moderate positive feelings	31	30.40%
Have strong positive feelings	20	19.60%

Arms

Have Strong Negative feelings	3	2.90%
Have moderate negative feelings	13	12.70%
Have no feelings one way or the other	20	19.60%
Have moderate positive feelings	47	46.10%
Have strong positive feelings	19	18.60%

Chests or Breasts

Have Strong Negative feelings	8	7.80%
Have moderate negative feelings	26	25.50%
Have no feelings one way or the other	13	12.70%
Have moderate positive feelings	35	34.30%
Have strong positive feelings	20	19.60%

Appearance of Eyes

Have Strong Negative feelings	0	0.00%
Have moderate negative feelings	5	4.90%
Have no feelings one way or the other	8	7.80%
Have moderate positive feelings	39	38.20%
Have strong positive feelings	50	49.00%

Cheeks/Cheekbones

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	4	3.90%
Have no feelings one way or the other	33	32.40%
Have moderate positive feelings	30	29.40%
Have strong positive feelings	34	33.30%

Hips

Have Strong Negative feelings	6	5.90%
Have moderate negative feelings	24	23.50%
Have no feelings one way or the other	24	23.50%
Have moderate positive feelings	29	28.40%
Have strong positive feelings	19	18.60%

Legs

Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	23	22.50%
Have no feelings one way or the other	11	10.80%
Have moderate positive feelings	40	39.20%
Have strong positive feelings	26	25.50%

Figure or Physique

Have Strong Negative feelings	2	2.00%
Have moderate negative feelings	25	24.50%
Have no feelings one way or the other	12	11.80%
Have moderate positive feelings	39	38.20%
Have strong positive feelings	24	23.50%

Feet

Have Strong Negative feelings	5	4.90%
Have moderate negative feelings	19	18.60%
Have no feelings one way or the other	38	37.30%
Have moderate positive feelings	19	18.60%
Have strong positive feelings	21	20.60%

Appearance of Stomach

Have Strong Negative feelings	10	9.80%
Have moderate negative feelings	34	33.30%
Have no feelings one way or the other	9	8.80%
Have moderate positive feelings	26	25.50%
Have strong positive feelings	23	22.50%

Health

Have Strong Negative feelings	1	1.00%
Have moderate negative feelings	6	5.90%
Have no feelings one way or the other	10	9.80%
Have moderate positive feelings	48	47.10%
Have strong positive feelings	37	36.30%

Sex Activities

Have Strong Negative feelings	3	2.90%
Have moderate negative feelings	5	4.90%
Have no feelings one way or the other	46	45.10%
Have moderate positive feelings	28	27.50%
Have strong positive feelings	20	19.60%

Body Hair

Have Strong Negative feelings	7	6.90%
Have moderate negative feelings	17	16.70%
Have no feelings one way or the other	46	45.10%
Have moderate positive feelings	19	18.60%
Have strong positive feelings	13	12.70%

Physical Coordination

Have Strong Negative feelings	0	0.00%
Have moderate negative feelings	8	7.80%
Have no feelings one way or the other	3	2.90%
Have moderate positive feelings	48	47.10%
Have strong positive feelings	43	42.20%

Face

Have Strong Negative feelings	0	0.00%
Have moderate negative feelings	12	11.80%
Have no feelings one way or the other	22	21.60%
Have moderate positive feelings	39	38.20%
Have strong positive feelings	29	28.40%

Weight

Have Strong Negative feelings	4	3.90%
Have moderate negative feelings	32	31.40%
Have no feelings one way or the other	15	14.70%
Have moderate positive feelings	26	25.50%
Have strong positive feelings	25	24.50%

Appendix D. Self-Designed Questions

Does the way you feel you look in your uniform ever affect the way you compete?

☐ Yes*

☐ No

*If selected yes, participants were shown this question:

Can you describe in what way you were affected because of the way you felt you look in your uniform? Open-ended text entry

Do you feel your weight changes the way you feel about yourself?

☐ Strongly Agree

☐ Agree

☐ Neither Agree or Disagree

☐ Disagree

☐ Strongly Disagree

What is your current feeling about your weight?

☐ Negative Feeling

☐ Slightly Negative Feeling

☐ Neither Negative or Positive Feeling

☐ Slightly Positive Feeling

☐ Positive Feeling

Have you ever used extreme strategies (i.e. popular diets, cleanses, purging, restricting calories, etc.) to control your weight?

☐ Yes*

☐ No

*If selected, participants were shown this question:

Please explain why you felt like you had to use any extreme strategy to control your weight. Open-ended Text Entry

Which, if any, of the following topics do you seek out information on social media websites?

Fitness Tips: Never/Rarely/Sometimes/Often/All of the time

Nutrition Tips: Never/Rarely/Sometimes/Often/All of the time

Exercise-driven Motivation: Never/Rarely/Sometimes/Often/All of the time

Of the social media sites (Facebook, Instagram, Pinterest, Twitter, Tumblr) do you follow specific pages, boards, accounts, etc., that are related to **fitness or nutrition** for the purpose of achieving your “ideal” body image?

☐ Yes

☐ No

Of the social media sites (Facebook, Instagram, Pinterest, Twitter, Tumblr) do you follow specific pages, boards, accounts, etc., that are related to **exercise-drive motivation** for the purpose of achieving your “ideal” body image?

☐ Yes

☐ No

Has your body satisfaction changed since entering an university and participating in a collegiate sport?

☐ Yes*

☐ No

*If selected, participants are shown this question:

How so? Negatively impacted ----- Positively impacted

How do you feel about your body in relation to being an athlete? Open-ended Text Entry

How do you feel about your body in relation to daily life outside of sports? Open-ended Text Entry

To further assist with my group demographics, please fill our your height. This is not a required response, so if you do not want to supply this information, that is your choice. These demographics will not be calculated or given to coaches, administrators or athletic trainers for their use.

☐ Feet

☐ Inches

To further assist with my group demographics, please fill our your weight. This is not a required response, so if you do not want to supply this information, that is your choice. These demographics will not be calculated or given to coaches, administrators or athletic trainers for their use. Open-ended Text Entry