Substantial research on the functionality of athletic apparel has been conducted; however little consideration has been given to the plus size figure. Societal messages suggest that overweight women are lazy and therefore would not be interested in athletic apparel. The purpose of this study was to determine overweight adult women’s experience with athletic clothing. The sample consisted of 14 women, ages 30 to 65 who wore size 1X to 3X. They were each supplied with a Nike brand athletic outfit and participated in two in depth interviews. Data collection methods included qualitative interviews, quantitative surveys and guided journaling. The major findings suggest that overweight women have difficulty shopping for clothing. Difficulty and frustration was experienced on a number of levels including: limited stores, limited selection and styles, fitting issues, over-priced items and less color options compared to smaller sizes. The findings suggest overweight women experience emotional
anxiety when trying on clothing for the first time. Dissatisfaction with clothing fit was attributed to the belief their body is unsuitable and needs to change. Satisfaction with clothing fit was attributed to the ability of the apparel designer. Many negative experiences have left this sample feeling disappointed and marginalized. Some participant’s experienced increased desire to participate in physical activity while others felt exercise was a necessity regardless of the clothing available. By trying on the Nike brand clothing, it gave the women in this study an alternative way of dressing themselves which has enabled several women to feel differently about their size and their body in athletic clothing. The current sample showed behaviors of internalization by using dehumanizing terms to describe body parts. The sample felt discriminated against in the media and wanted to see larger women modeling clothing. Apparel companies should include a wider variety of sizes in their brick and mortar stores as to not alienate a population. Apparel companies should incorporate diverse models into advertisement to include the plus-size population. Proving high quality athletic apparel to plus size women provided an opportunity for them to experience their bodies in a new perspective. Future studies should develop new pattern making, grading and sizing techniques in order to provide better fitting athletic apparel for large size bodies. Studies expanding on fit and comfort of athletic apparel for large bodies should be explored. This paper provides an initial indication of how plus size women experience athletic apparel. Further understanding of clothing, fit and exercise behavior are needed.
PHYSICALLY ACTIVE ADULT WOMEN’S EXPERIENCES WITH PLUS SIZE

ATHLETIC APPAREL

by

Deborah A. Christel

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Dean of the Graduate School

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Deborah A. Christel, Author
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CHAPTER 1. INTRODUCTION

The purpose of the study is to explore the experiences overweight adult women have with athletic apparel. Inactive adult overweight women are at risk for numerous psychological and physical disorders (Rosen, Reiter & Orosan 1995). The stigmatization that fat people face discourages them from engaging in physical exercise as a means of maintaining health (Faith, Fontaine, Cheskin & Allison, 2000). Studies indicate several factors contribute to being physically active such as gender, being a single parent, race, marital status, income and employment status (Arikawa, O’Dougherty, Kaufman, Smith, Thomas, Warren & Schmitz 2010). “Social factors such as fear of being ridiculed by others; inaccessible exercise equipment’s, clothing and facilities negatively influence fat people's motivation to exercise, and has an especially strong impact on women” (Packer, 1989, p. 52). An often over-looked portion of exercising for overweight populations is the clothing that is worn. As the US population grows in size there is a need for more suitable athletic apparel. Studies show large-sized women have felt frustrated with everyday clothing in regards to the limited selection of styles, little contemporary styles, and large women feel that apparel retailers' and manufacturers' are reluctant to be affiliated with large sizes (McReady, 1987). However, the area of athletic apparel for overweight women remains unexplored. With the increase of sedentary lifestyles, engaging in physical activity is of more importance than ever. If it is expected that overweight women exercise, addressing their clothing needs is essential. Clothing is the closest article to
the body and greatly impacts the overall experience when the human body is in motion.

The need for proper fitting athletic apparel is critical during physical activity. Wearing and exercising in clothing is a very personal experience. Comfort is often used to describe both psychological and physical aspects of experiences in clothing. Slater (1985) defines human comfort as, “a pleasant state of physiological, psychological and physical harmony between human beings and the environment” (p. 7). Athletic apparel needs to be comfortable, and no research to date explores the comfort of athletic apparel for large bodies. Therefore, an understanding of the experiences overweight women currently have with athletic apparel is necessary. Exhausting all environmental factors that contribute to improving our nation’s health is essential. I feel providing well-fitting and comfortable athletic apparel for all body shapes and sizes will facilitate everyone’s ability to enjoy exercise. Studies show that those who enjoy exercise are more likely to continue engaging (Halberg, Lindhal, Nyberg, Hellenius, 2009). Therefore, the purpose of this study is to determine the experiences overweight women have with athletic apparel. There are five main objectives to the study.

**Research Objectives**

The main objectives of the study are:

1) To determine overweight adult women’s experiences with athletic clothing.
2) To describe the preferred styles of athletic apparel for overweight adult women.
3) To determine if clothing for physical activity among overweight adult women is a factor to engaging in physical activity.

4) To describe how overweight women view the purpose of athletic apparel in relation to physical activity.

5) To determine what coping behaviors overweight women engage in associated with social comparison of self to the cultural beauty ideal.

**Definition of Terms**

*Athletic apparel* is functional clothing worn with the intention of participating in physical activity.

*Appearance management* is the process of constructing and interpreting body images (Kaiser, 1997).

*Body image* is the subjective picture or mental image of one's own body.

*BMI (body mass index)* is a key index for relating body weight to height

   Height: Given in inches to determine BMI

   Weight: Given in pounds to determine BMI- formula is as follows, women over a BMI of 25 or higher are considered overweight.

\[
\text{BMI} = \frac{(\text{Weight in pounds} \times 703)}{\text{Height in inches}^2}
\]
Body cathexis is defined as “degree of satisfaction with the body, rather than the image” (Kaiser, 1997, p. 108).

Brand is a product, service, or concept that is publicly distinguished from other products, services, or concepts so that it can be easily communicated and usually marketed.

Clothing Fit is defined as the way a garment conforms to a three-dimensional human figure.

Created appearance is defined as, “the techniques an individual uses to present personal identity through dress, symbols, cosmetics, facial expression, body language, attitudes, moods, and values of self-worth” (Stone, 1962, p.165).

Cultural ideal is the ideal image of the human body and form in a specific region, time and place throughout history.

Depression is a psychological illness, involving your body, mood, and thoughts. It affects the way you eat and sleep, the way you feel about yourself, and the way you think about things.

Dehumanizing is to strip a human of humanizing qualities.

Discrimination is the unjust or prejudicial treatment of different categories of people.

Emotion is defined as a felling or a mental state that arises spontaneously and is accompanied by physiological responses (Webster’s, 2011).

Exercise motivation is defined as a desire to engage in physical activity.

Experience is a particular instance of personally encountering or undergoing something.
Global self-esteem is an individual’s positive or negative attitude toward the self as a totality.

Grading is a technique used in the apparel industry to change the size of a garment from a determined sample pattern.

Human comfort is, “a pleasant state of physiological, psychological and physical harmony between human beings and the environment” Slater (1985, p. 7)

Inc. (Incorporated) signifying that a corporate entity has been legally recognized

Mood is an emotional state, either long lasting or temporary.

Obesity refers to a human with a BMI of 30 or higher.

Overweight refers to a human with a BMI or 25 or higher.

Pattern is an original garment from which other garments of a similar style are copied.

Perceived Fit is an individual’s thoughts and feelings about how clothing forms on their body.

Plus size refers to numeric clothing sizes 14 and higher and alpha sizing XL and higher.

Role identity is a socially expected behavior or dress pattern usually determined by an individual's status in a particular society (i.e., business woman, mother, teacher, athlete).

Self is defined as a representation of one's identity.

Self-esteem is defined as “one’s overall feeling of self-worth and is through to be relatively constant overtime and situations, however, it can fluctuate some due to external events” (Baron & Byrne, 1991, p. 317).
Social comparison is a process that includes the desire to affiliate with others, the desire for information about others, and explicit self-evaluation against others.

Social physique anxiety refers to the anxiety experienced by some individuals when they perceive that other people are judging their bodies (Hart, Leary, & Rejeski, 1989).

Symbolic interactionism is a role a person identifies with coincides with the symbols they wear or consume.

**Assumptions and Limitations**

There are several assumptions and limitations in the study. A recognition and disclosure of my potential biases as a researcher is important. I have been a group fitness instructor and personal trainer for over seven years. I have worked with a variety of genders, ages, heights, races, weights and self-esteem levels. I have developed a personal interest in helping people, especially women, learn to enjoy exercise. I find joy in exercise and want to help others find joy in moving their bodies in ways that feel good to them. Some overweight adult women I have worked with view exercise as a chore. I believe women can be physically active and healthy at any weight. I strive to help women view activity as a fun and liberating pursuit. I have a deep invested interest in apparel design and understand the complex connection between clothing and physical activity. It is my intention to further understand how larger women experience athletic clothing and contribute to improving it.

**Limitations**

It is necessary to address the limitations of the study. Several limitations exist in the study, most notably the sample size. Time and financial constraints prevented
the collection of a larger sample size. I was able to recruit 14 women for the study and recruiting a larger and more diverse sample would have further contributed to the study. In addition, the majority of the women in the study identified themselves as Caucasian, which makes it difficult to generalize the results of the study to non-Caucasian women. Age can affect an individual’s self-esteem and clothing preference. Exploration of plus size women outside the current samples age range is suggested.

The recruitment method limited the scope of participants involved in the study due to the location flyers. Flyers were posted by personal friends, family and colleagues throughout the United States. The email recruitment may have also limited the potential sample from obtaining further diversity.

Another limitation concerns the reliance on self-reported measures. Participants may have felt uncomfortable responding openly to certain questions during the interview or in the journals. For instance, some questions dealt with issues related to how participants felt about their bodies and body shapes. Additionally, some participants completed both in-depth interviews, while others completed one in-depth interview, which could present limitations. It is also understood that the wording of questions may lead to responses that are confusing so that data results are unclear. The accuracy of the study is contingent on the willingness of respondents to answer truthfully and completely.

Furthermore, findings might be unique to the people included in the research study and may not be transferable to the general population. I also recognize the results are influenced by my personal biases and characteristics.
CHAPTER 2. LITERATURE REVIEW

The purpose of this research is to explore the experiences overweight adult women have with athletic apparel. Several psychological and physical concepts contribute to experiences with clothing and exercise. Comfort is frequently used to describe both psychological and physical aspects of experiences in clothing. Slater (1985) defines human comfort as, “a pleasant state of physiological, psychological and physical harmony between human beings and the environment” (p. 7). The review of literature will explore comfort as well as the following categories that are related to appearance and physical activity. Cultural ideal of physical attractiveness, clothing, comfort, factors to exercise, social physique anxiety, social comparison, and obesity, discrimination, body image, and appearance management. A summary of research related to experiences with clothing utilizing these concepts is presented and the description of how these topics will be utilized in this study is also provided.

To develop a theoretical foundation for the research, literature was reviewed and summarized. In the current study, the Rudd and Lennon’s (1994) model of body aesthetics will be used to investigate overweight women’s understanding of aesthetics and beauty in the present society. It is widely known that women engage in social comparison behaviors, and using this model will assist in understanding how large women feel about their bodies in present society.

From an apparel perspective, understanding the totality of physical appearance is
important to understanding individuals’ experiences with clothing. Rudd and Lennon’s (1994) model of the effects of social comparison on the construction and evaluation of appearance will provide guidance. “This model was developed to depict the complex relationship between the cultural aesthetic ideal and the creation and evaluation of personal appearances” (Rudd & Lennon, 1994, p.167). From this perspective, self-image is the apex of the model (See Figure 1). Self-esteem is defined as “one’s overall feeling of self-worth and is thought to be relatively constant overtime and situations, however, it can fluctuate some due to external events” (Baron & Byrne, 1991, p. 317). The cultural ideal is the ideal image of the human body and form in a specific region, time and place throughout history. The construction process or appearance behavior is a conscious or unconscious process in which people attempt to influence the perceptions of other people about a person, object or event. The creator does this by regulating and controlling information in social interactions such clothing or environment. The created appearance is defined as “the active creation of appearance in response to the cultural aesthetic ideal” (Rudd & Lennon, 1994, p. 168). The central premise of this model is that by the process of social comparison one continually assesses their personal aesthetic value and that of others. If one’s evaluations come close to that of the ideal, self-esteem in increased and in turn leads to stronger self-image. However, if the creator’s appearance does not meet the appearance ideal then one of four coping mechanisms is utilized. The first coping strategy is when an individual continues to accept the aesthetic standard of appearance and then works harder than before to attain it. Methods of attaining the aesthetic standard of
appearance include consistent exercise, diet, cosmetics, tanning and potentially plastic surgery (Wolf, 2002). The second strategy is when an individual accepts the aesthetic standard of appearance, but ceases to try to reach it. This coping behavior, a person agrees with the standard of beauty but does not participate in the methods of attaining the aesthetic ideal. For example, they may exercise, diet and use cosmetics but their goal is not to attain the ideal image. The third approach involves modifying one’s personal standard of devotion to the aesthetic ideal. This approach involves redefining one’s definition of beauty. Not only does the definition of beauty change, but new definition becomes the standard to meet. Lastly, the fourth strategy is to raise social identity by changing the societal norms, such as the cultural aesthetic of appearance. This coping behavior involves participating in activism to change the cultural ideal of beauty. In doing this it is though the group’s characteristics will become more valued.
Figure 1. Model of effects of social comparison on the constructional and evaluation of appearance (Rudd and Lennon, 1994).

**Cultural ideal of physical attractiveness**

The cultural ideal of physically attractive women of the 20\textsuperscript{th} century is evident through several sources. Through content analysis, researchers have defined an ideal body type of slender, large breasts, small waist and hips, long legs and a narrow range of facial features including a narrow nose, high cheek bones and big eyes (Frith, Shaw & Cheng, 2005). An exploration of Miss American beauty pageants through a 20 year period found that: 1) winners were on average thinner than the rest of the contestants and, 2) the women were significantly thinner over the time period (Garner, Gerfinkel, Schwartz, & Thompson, 1980). Advertisements emphasize thinness as a standard for female beauty, and the bodies idealized in the media are frequently atypical of normal, healthy women. In fact, today's fashion models weigh 23\% less than the average female, (Holzgang, 2000) and a young woman between the ages of 18-34 has a 1\% chance of being as thin as a supermodel (Olds, 1999). In one study, 69\% of girls indicated that magazine models influenced their idea of the perfect body shape (American Academy of Pediatrics, 1999) and the persistent acceptance of this unrealistic body type creates an impractical standard for the majority of women (Grabe, Ward & Hyde, 2008). The impractical standard can have a profound impact on self-esteem and body image (Green & Pritchard, 2003). Therefore, the antithesis of beauty is fat or overweight.

Women experience greater anxiety than men about becoming fat and are more
sensitive to small changes in their weight (Cash & Brown, 1989). This worry with weight gain could explain the predominance of women on current weight loss programs. The majority (89%) of women in Charles and Kerr’s study reported they were concerned with their weight and 77% indicated they were currently on a diet or had dieted in the past (1986). The women who dieted indicated they did so because they felt their bodies did not conform to an ideal image. However, whether or not the women were concerned with dieting, all expressed dissatisfaction with their body image.

Anxiety over weight gain is often attributed to women who are of normal weight but who tend to view themselves as too heavy. Normal-weight women, compared with normal-weight men, have more of a tendency to view themselves as overweight (Cash, Winstead & Jandas, 1986). Regardless of their actual size, women who see themselves as overweight show decreased satisfaction with their bodies, reduced levels of self-esteem, and lowered psychosocial well-being, as compared with men and with women who do not consider themselves overweight (Cash & Hicks, 1990). In general, women desire changes from the waist down and wish for smallness of body parts with exception of the bust. Men are often displeased with body dimensions from the waist up (Calden, Lundy, & Schlafer, 1959). However, overall, the research seems to demonstrate that women are more dissatisfied with their current weight and consistently desire a smaller body.

Studies on women have shown that overweight women had a stronger drive for thinness and a higher negative body image than normal-weight women or underweight
women (Brodie & Slade, 1988; Cash, Counts, & Huffine, 1990; Cash & Green, 1986; Cash et al., 1986). Overweight women, have more negative views about their appearance, fitness, and health. Normal-weight women who had previously been overweight also reported greater body dissatisfaction and regarded their bodies as fatter than normal-weight women who had never been overweight. When factors of age and weight are examined, younger women (under the age of 30) tend to be more dissatisfied with their bodies than older women (Berscheid, Walters & Bohrnsteadt, 1973; Cash et al., 1986).

A person’s preoccupation with his or her weight has been related to body image dissatisfaction. College students who were preoccupied with their weight and with the possibility of being overweight were more inclined to have a lower body image and an increased fear of fatness (Cash, Wood, Phelps, & Boyd, 1991). Cash, Wood, Phelps, and Boyd (1991) found that heavier subjects reported a greater preoccupation with their weight and reported greater body dissatisfaction than normal-weight subjects. Similar results were found in Brodie and Slade’s (1988) study of 100 women in which higher levels of body fat were associated with greater body dissatisfaction and a desire for weight control (1988). Whereas, being overweight has been associated with body dissatisfaction for both men and women, women who reported greater dissatisfaction with their bodies have also reported that they felt “more fat” (Wardle & Foley, 1989). Striegel-Moore, McAvay, and Rodin (1986) also found additional factors contributed to a woman’s feeling of fatness. These factors included perfectionism and perceived social pressure to be thin.
When race is examined as a factor in studies of women and body image, African-American women appear to be more satisfied with their body and appearance than other races. African-American women were less concerned with being overweight than Caucasian women (Cash & Henry, 1995; Lennon, Rudd, Sloan & Kim, 1999), even though African-American women weighed on average 25 pounds more than the Caucasian women (Lennon, Rudd & Sloan, 1999). Asian-American women have reported levels of body satisfaction similar to African-American women. Compared to other races, Caucasian women have demonstrated higher levels of dieting behaviors (Akan & Grilo, 1995), a greater fear of fatness, and a stronger desire to be thin (Rucker & Cash, 1992). Caucasian women’s ideal body size was thinner than their current size, while there was little difference between the current and ideal body size for African-American women (Rucker & Cash, 1992). A possible cause of this could be that the majority of the images of the “ideal figure” used by the media are of Caucasian women.

These studies demonstrate that women have reported a great concern with being overweight and have expressed a desire to be thinner. Women rated their ideal body size as smaller than their perceived current body size, and were therefore dissatisfied with their bodies (Davis, 1985; Jourard & Secord, 1955; Monteath & McCabe, 1997). When looking at specific races, Caucasian women have reported greater body dissatisfaction than African-American women and Asian-American women (Akan & Grilo, 1995; Cash & Henry, 1995; Lennon et al., 1999; Rucker & Cash, 1992). In conclusion, women who considered themselves to be overweight have
indicated less satisfaction with their appearance than those who considered themselves to be normal-weight. Furthermore, in addition to body weight, the type of clothing and environment a woman is in contributes to body shame, body dissatisfaction and negative moods.

Other studies have shown that overweight women displayed higher levels of body shame, body dissatisfaction, and negative mood than the normal weight group, who in turn displayed higher levels than the underweight group (Tiggeman & Andrew, 2010). Wearing bathing suit scenarios led to significantly higher states of body shame, body dissatisfaction and negative mood than the sweater scenarios. The wearing of bathing suits is a negative and stressful experience for most women, most likely because they cannot match the current societal-defined thin beauty ideal. “These results suggest that clothing can have significant consequences for women’s well-being” (Tiggeman & Andrew, 2010, p. 412). These studies confirm that women use clothing for many purposes, including as a mean of self-presentation. When people do not feel capable of presenting themselves in a socially desired manner, additional feelings of anxiety may arise. However, this anxiety can be managed through clothing (Doss, 1990; Jourard, 1958; Ogle & Dahmorst, 1999; Sontag & Schlater, 1982).

**Clothing and Body Image**

An individual's body image and how one feels about him/herself plays a key role in clothing preferences and attitudes (Kaiser, 1997). Clothing is an extended dimension of one’s bodily self (Shim, Kotsiopulos, & Knoll, 1991) and can be used to
change the appearance of the body (Schilder, 1950). Therefore, a change in clothing could result in a change in the attitude toward the body and self (Jourard, 1958). Clothing can reduce the discrepancy between an individual's ideal and actual body image, and can be used as a means to attain the aesthetic ideal (Jourard, 1958). Clothing can also be used to improve body image by making some characteristics of the body salient, while masking other less desirable characteristics. Hwang (1996) found that individuals with greater dissatisfaction for the lower body, torso, and weight would be more likely to seek clothing that disguised perceived figure flaws. Therefore, clothing can compensate for one’s dissatisfaction with body image and can enhance self-esteem (Doss, 1990; Jourard, 1958; Sontag & Schlater, 1982). Women who were dissatisfied with their body, or with certain parts of their body, have used clothing to conceal, minimize, or de-emphasize those body parts (Ogle, 1999). In Ogle’s study, clothing was used most often to alter the appearance of the bust, waist, or hips. Participants often used loose or oversized clothing to conceal those body parts perceived to be too large (i.e., long shirts to hide stomach, hips, and/or buttocks), but participants also reported using clothing to make one body part look larger so that another would look smaller (i.e., wearing shoulder pads to make the waist look smaller). Ogle also reported behaviors associated with focusing attention on one body part to draw attention away from another (i.e., wearing scarves to draw attention to the face and away from the lower torso). Participants used colors, fabrics, and styles to minimize certain areas of the body, such as wearing black to appear thinner and choosing dresses and skirts that didn’t emphasize the hips. Results showed that they
also used clothing to enhance certain body parts with which they were more satisfied.

How an individual perceives their body can also affect clothing choices. The results of Kwon and Parham’s (1994) study indicate that when individuals perceived themselves as fat or as gaining weight, they were most interested in the camouflage function of clothing, followed by comfort, individuality, and assurance. For weight conscious women, clothing’s camouflaging function played the most important role in differentiating the two states. Consistent with Ogle’s (1999) findings, women in Kwon and Parham’s study tended to use clothing to camouflage areas of the body with which they were dissatisfied, thereby increasing body satisfaction. The satisfaction with the fit of clothing is strongly related to an individual’s body cathexis. Higher body cathexis scores have been related to greater satisfaction with the fit of clothing (Hwang, 1996; Shim et al., 1991). Individuals who were more satisfied with their bodies and had a favorable attitude toward clothing were more likely to be satisfied with ready-to-wear clothing, enjoy shopping, be confident in choosing proper clothes for themselves, and be heavy purchasers of clothing (Shim et al., 1991). Lower body cathexis scores for weight have been related to dissatisfaction with the fit of clothing at the thighs, hips, and waist (Hwang, 1996).

Overweight women tend to have a lower body image and lower body cathexis scores than normal-weight women (Cash et al., 1990; Cash et al., 1986), and tend to

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1 Body cathexis is defined as “degree of satisfaction with the body, rather than the image” (Kaiser, 1997, p. 108).
express greater dissatisfaction with the fit of clothing. Normal weight women, when compared to overweight women, were more satisfied with their bodies and expressed greater satisfaction with the fit of clothing (Frederick, 1977). Frederick suggested that overweight women were in need of clothing that would enhance their self-image because of the negative feedback they receive as a result of being overweight (1977). Dissatisfaction with the lower body has also been related to decreased satisfaction with the fit of garments in the lower body (LaBat & DeLong, 1990). LaBat and DeLong contended that, when clothing does not fit, the consumer might perceive the cause as related to the body and not the clothing (1990). Further, they believed that clothing fit problems could result in negative feelings about the body particularly when fashion dictates a close fit in the lower body. LaBat and DeLong suggested that the apparel industry’s sizing systems and the sized garments themselves provide symbols of expectations for women. The ideal female body type, with slimmer hips than the average American woman, is reflected in sizing systems used by manufacturers. This in turn may influence the more stringent evaluation of clothing fit at the lower body.

Many studies have indicated a relationship between clothing and body cathexis. Women with a decreased body cathexis have reported a higher dissatisfaction with the fit of clothing, especially for the lower body. Studies have also indicated that weight conscious women tend to camouflage certain body parts with clothing, thereby compensating for body dissatisfaction and improving their body image perception and appearance. Therefore a component of one’s body image and
self-concept is clothing.

**Clothing and Behavior**

There are few studies that have examined the impact of clothing and behavior. The studies range from therapy techniques, children and capes to gang affiliation. It is known that clothing has a profound impact on self-perception, mood and behaviors. However, the question remains about how clothing impacts actual behavior in the exercise domain. There is limited empirical research on the impact of athletic apparel on the individual’s feelings of self-esteem or self-concept and behavior. However, there are some. The following section reviews clothing, the self and behavior.

Clothing has the ability to provide its wearer with feedback that may encourage physical activity. For example, children’s footwear that lights up as they walk or run encourages children to move. Graduate student Lindsay Lymann-Clark from Cornell University designed orange capes with wrist mounted pinwheels for children. The pinwheels spin and the orange cape flaps in the wind as the child runs. A pilot study suggests that children in a day care were more physically active in the days they wore the cape than on non-cape days (Lyman-Clark & Wells, 2005). “Further research is needed to explore the efficacy of clothing interventions to encourage physical activity among various ages and populations” (Lyman-Clark & Wells, 2005, p. 59).

On the other hand, another recent study suggests that adolescent girls prefer not to participate in physical education courses in part due to concerns about appearance and image while playing sports. A study conducted by Slater and
Tiggemann (2010) explored the reasons adolescent girls cease participator in sports. They conducted six focus groups with girl’s aged 13 to 15. They found there were numerous reasons for ceasing to play sports, including losing interest, lack of competence and insufficient time. They girls also reported feeling that they were crossing traditional gender boundaries, particularly sports considered more masculine. Additional concerns related to teasing as well as concerns about appearance and image while playing sports were mentioned. The adolescent girls mentioned the uniforms were not attractive, and would prefer not to play than have to wear the uniform. This is an example of how clothing influences a desired behavior in a negative way.

Prohibition of clothing has been used as a means to decrease gang behavior. In an attempt to reduce the amount of robberies and mischievous crimes in gang-affiliated neighborhoods in California, police began interrogating anyone wearing and using gang signs or clothing. This type of anti-gang injunction had consistently reduced the amount of gang activity where they were enforced (Rosen & Venkatesh, 2007). Clothing is used as a way to change the perceptions about oneself as well as the perceptions of others. People pass judgment and assume characteristics based on overall appearance and clothing. Before I continue discussing fit and comfort of apparel I feel it necessary to describe the sizing and grading systems in the United States.

**Sizing Standards in the US**

“In 1937, the U.S. Department of Agriculture prepared to conduct a study of women's body measurements for the purpose of creating a sizing system in which the
entire industry could follow. That was the last time the US government has extensively researched a large sample of women’s body measurements for the purpose of creating a clothing sizing system. The USDA data was augmented by data received from the Research and Development Branch of the Army Quartermasters Corps during World War II when measurements were taken of 6,510 Women’s Army Corps (WAC) personnel. WAC personnel are not a wide representation of the women population. The study from 1937 that was updated during WWII is inadequate and needs to be updated. The Department of Commerce officially withdrew the commercial standard for the sizing of women's apparel on January 20, 1983. Currently, only pattern companies continue to use the traditional sizing standards” (NIST, 2003, p .4).

Currently in the US, each company has their own sizing standard. Bodies come in many different shapes and sizes and new design techniques need to be developed in order to have clothing that accommodates.

Although there have been anthropometric studies to develop the sizing standards. It is not enough to alleviate poor fit in apparel if the data are used improperly in developing sizing standards (Lee & Steen, 2010). With the spike of larger body sizes, the traditional sizing standards are not applicable. Garments made for plus size women are developed based off a smaller size pattern and the pattern is increased using a technique called grading.

**Grading techniques.**

Grading is the process of increasing a pattern for larger sizes and decreasing it for smaller sizes. The sizes are increased or decreased from what is called a sample
size pattern. Figure 2.(Size and Grading Example) displays an example of a sample size pattern that is graded up to larger sizes. Each company has their own grading rules and often displays a sizing chart to help consumers decide what to try on. The goal of grading a garment is to increase the size of a garment while keeping the overall style (Mullet, Moore & Young, 2009). Sizing charts can be viewed as a simplified version of a company’s grade chart. There is a 1-inch difference between girth measurements between size 2 to size 10 (bust is 33-34-35-36-37, and so on). Between sizes 12 to 16, there is a 2-inch difference between sizes and the alpha sizing is different. There is a 2-inch difference in girth between a size 4 and 8, but between a L and XL there are 4 inches.

Figure 2. Size and Grading Example

This makes fitting size 18 in an XL a challenge because a person may be between sizes. Styles offered in alpha sizing (S, M, L, XL) must be chosen carefully, according to fabric and styling, and to be aware that they will not be workable for all clothing styles. Typically a size S is a 2-4, M is a 6-8, Large is an 8-10, and so on.

“However, there is no mandatory sizing standard for domestic apparel” (Mullet et al., 2009, p.3). Thus the reason a person will fit differently in a Target brand size 10 and Nordstrom’s brand size 10. This contributes to minority sizes experiencing difficulty when shopping for ready-to-wear clothing (Lee & Steen, 2010). A basic understanding of sizing and grading assists in clarifying the complexity of comfort and fit for apparel.

**Fit and Comfort of Athletic Apparel**

In order to exercise one must wear clothing which interacts with the body while it is in motion. First, What is comfort? There are endless definitions of comfort. The individual ultimately decides perceived comfort (Ashdown & Delong, 1995). There are several different views on how comfort can be defined. Wong (1997) suggests that physical comfort might be greatly influenced by tactile and thermal sensations arising from contact between skin and the immediate environment. Bartels (2005) explains the four main aspects in comfort of sportswear being thermo-physiological wear comfort, skin sensorial wear comfort, ergonomic wear comfort and psychological wear comfort. Comfort can be expressed as relation to clothing fit, the relationship of the environment, the textile and personal preference. The major factors that contribute to comfort are physiological, physical and the surrounding environment
Athletes heavily rely on clothing fit because improper apparel can lead to serious skin injuries. Comfort and proper clothing fit is reviewed along with how comfort is related to clothing fit, environment and textile.

**Comfort.**

Injury prevention in sports is largely related to the equipment used. Equipment can range from protective padding, shoes, clothing and helmets. There is substantial research on sports injuries and prevention. The most common injuries among athletes are relative to the skin. These injuries range from bruising, chafing, rashes, calluses, urticarial (hives), blisters, joggers nipple and nail dystrophies. Almost all athletes interact with textiles and the environment to some degree. Those who perform in the winter are susceptible to frost bite and those in the summer to heat exhaustion and sunburns.

“Urticarial or hives is most common among runners” (Adams, 2002, p.315). This can occur in cold and hot environments and is developed by rubbing of the skin or repeated rubbing of ill-fitting apparel.

Calluses and blisters most commonly occur from long term repeated friction. Wearing synthetic socks and well-fitted athletic wear decrease friction and help to prevent calluses. Athletes with sensitive skin are more prone to rashes and joggers nipples. It is shown that wearing semi-synthetic or other soft fiber bras and shirts prevent rashes (Swedan, 2001).

Sunburns can occur from pro-longed sun exposure without proper protection. Pro-longed sun exposure can lead to melanoma or skin cancer. Adams, (2002)
recommended two ways to protect against the sun’s harmful rays. 1) use a water-proof sunscreen, and 2) wear apparel that has sun protective product in the fabric. Clothing with UV rays repellent is available. This is a much better option for those who spend hours in the sun. Instead of re-applying sunscreen they can wear the UV protecting apparel. Those who enjoy winter sports also need protection from the UV rays as well as from cold temperatures.

The major re-occurring solution, among skin injuries, in athletes is to resolve the issue by adjusting apparel. Recommendations from this article (Adams, 2002) are for athletes to be aware of the type of fibers and how they hold moisture, to know the symptoms of skin problems and to use well-fitted athletic wear to decrease friction.

Research has shown that sports burns, abrasions, and chafing can be reduced by wearing proper equipment and apparel. Blaset (2004) found that by preventing sports injuries, it can greatly enhance a participant’s ability to compete successfully over a short and long period of time. The skin is the body’s largest organ and also the one that experiences the most disruption due to repeated friction or pressure in sports. Blaset (2004) described several sports related injuries, how to prevent them, and how to treat them. Abrasion to the skin occurs when the skin cells are abruptly removed from the skin surface. This can expose the layers of skin closer to the blood resulting in either bleeding or what is clinically referred to as a ‘raspberry’. This can occur, for example, when an athlete slides an exposed area of skin across artificial turf. “Because artificial turf has a lower coefficient of friction than natural grass, especially when wet, the athlete slides a greater distance, thus generating heat and producing an injury
that is part abrasion and part burn” (Baslet, 2004, p. 5). If the skin were not exposed, the article of clothing would have taken the brunt of the slide, therefore protecting the skin of the athlete and preventing them from experiencing pain or discomfort.

Another sports injury that appears from more long-term friction is chafing. Mechanical rubbing of the skin by another body part or clothing causes this. The neck, under arms, chest and upper inner thigh are most frequently affected. The upper inner thigh is the most troublesome and occurs in tennis, cyclist and larger athletes because they develop disproportionately large tissue. Baslet (2004) recommends athletes with larger thighs to wear apparel that “is made of elasticized fabric or made of low resistance polyester fabric” (p. 4). Using smoother polyester will create less friction between the upper thighs and in doing this; a protective barrier of fabric between the skins is created.

**Perceived clothing fit.**

Developing proper apparel for athletes that is comfortable and protective can be challenging. Reviewing how other researchers have examined fit and comfort is critical to understanding how plus size women experience athletic apparel.

Humans are perceptive to clothing fit and can distinguish when a specific area has been manipulated or something is not comfortable. Ashdown and Delong (1995) suggest that the fit of a garment is based on both visual and tactile information. Visual information is based on the wearer’s perception of appearance. Tactile information is based on the wearer’s perception of the touch and feeling of the fabric.
Comfort is a very broad term and difficult to explain but easy to personally distinguish. Slaters (1985) definition of comfort also refers to the physical comfort of the wearer and the environment they are in. The interaction between fabric and the body plays a key role in thermal comfort or (warm or cold) in certain environments. Therefore, literature discussing how fabrics and certain climates affect the comfort of the wearer is reviewed.

**Athletic fabrics.**

Current research on the topic of fabrics in athletics is focused on the fiber content, structural knits, breathability, wickability, amount of clothing worn (body surface area covered) and special finishes. Athletic apparel uses a combination of specific fiber blends and fabric knits. Fibers used in fabric for physical activity are cotton, polyester, Spandex, Lycra, nylon, acrylic, rayon, polypropylene and acetate (Senthilkumar et al., 2011). Common knit formations found in fabrics for athletic apparel include warp knits, flat knits, circular knits, jersey knits, tricot, mesh, and wicking knits (Senthilkumar et al., 2011). Each of these factors contributes to keeping the athlete comfortable.

Picking the appropriate fiber content and fabric structure for a sports related activity is critical to the comfort of the wearer. Fabrics used in athletic and recreational end uses should have the ability to transport moisture to the fabric surface for evaporation (Cotton Inc., 2002). In research conducted by Cotton Inc., they compare 100% cotton and Nike Dri-Fit®. The benefits and disadvantages of both fibers and knits were discussed. Cotton is perceived as too heavy when wet, sags when wet due
to the extra weight, takes too long to dry, sticks to the skin that restricts movement and after an activity the wearer often feels cold (Cotton Inc., 2002). When referring to water evaporation and fabric absorption, the factor in determining how much water (or perspiration) can be absorbed by a fabric is fabric thickness. The drying time depends on how much water is absorbed by the fabric. A largely reported benefit of cotton is of its comfort and combination of properties that create the comfort. People report cotton as being soft, and having good moisture transfer. The cotton fabric naturally wicks moisture away from the body but in contrast will absorb more liquid (Varesano, et al, 2008). To increase comfort of recreational apparel the fabric must allow vapor and liquid to pass to the surface of the fabric for evaporation. Moisture vapor transmission is the speed or rate at which moisture vapor moves through fabric. Too much absorbency can have a negative effect in recreational fitness apparel and lead to poor moisture vapor transmission. The fabric becomes too heavy, takes too long to dry and after an activity, the wearer often feels cold. This is where the application of synthetic fibers comes into play. Synthetics have a natural water resistance and much less drying time than natural fibers. In comparison to cotton, the synthetic Nike Dri-Fit® reported the lowest fabric weight, fabric thickness, absorbent capacity and lowest drying time, thus making it an ideal fabric for active wear (Cotton Inc., 2002).

Gavin (2003) studied individual fiber, fabric structure and the amount of airflow effects on mean skin temperature in different climates. For an athlete in a warm climate it is desired to stay cool as for an athlete in a cold environment it is desired to stay warm. His purpose was to understand the effects of clothing on thermal
balance. Gavin states that the following six factors must be considered when evaluating clothing.

1: Wind speed: increased speed disturbs the zone of insulation. 2: Body movements: pumping action of arms and legs disturb the zone of insulation. 3: Chimney effect: loosely hanging clothing ventilates the trapped air layers from the body. 4: Bellows effect: vigorous body movements increase ventilation of air layers for conserving body heat. 5: Water Vapor transfer: clothing resists the passage of water vapor and this decreases body heat loss by evaporative cooling. 6: Permeation efficiency factor: how well clothing absorbs liquid sweat by capillary action (wicking). (Gavin, 2003 pp.942)

When Gavin (2003) compared the weave structure of underwear for physical exercise among several types of knits: 1x1 rib knit, fleece, fishnet, interlock and double-layer rib. Recording mean skin temperature, Gavin found that the more open a weave structure; the more airflow to the skin will result in a cooler mean skin temperature. Therefore, the fishnet construction allowed the most air to sweep over the skin and kept the athlete the coolest. Keeping moisture off the skin assists the athlete is staying cool and is ideal for physical exercise. Wearing a fabric that is not breathable during physical exercise will increase heart rate and rectal temperatures much faster than fabrics that are breathable (Umbach, 2001, 2002). When fabrics are more breathable, the skin has more access to air therefore staying cooler and the athlete is able to withstand longer periods of activity. Therefore, having a breathable fabric is critical.

“Wickability is the fabric’s ability to move liquid or sweat from the skin and penetrate through the fabric by capillary action” (Slater, 1985, p.189). Capillary action is the force of a liquid being pulled up and through a tube. Synthetic fibers with a fiber crimp, the way in which the individual fibers zig zag along their length, influence the
ability to move moisture. With the crimp in the fiber, it creates a tube or tunnel for the moisture to flow to the surface of the fabric, through capillary action.

For example, Slater (1985) describes the difference between cotton and polyester responses to sweat. Suppose it is a hot day and a shirt or blouse is being worn. Areas of high perspiration (under the arms, for instance) in a cotton fabric will absorb moisture and transport or spread it to other areas where it can evaporate from the cloth surface. A crimped polyester garment in the same location would soon become saturated, because the water produced isn’t absorbed and because of the specific crimp in the fibers the moisture would be pulled away from the skin and evaporate at a faster rate.

Zou and McCullough (2004) researched the heat transfer of individual sports apparel. Heat transfer occurs when a warm object comes in contact with a cooler object and the warmer is transferred to the cooler to attempt equilibrium of the two. In this case, the warmth of the human body, clothing and the interaction with cooler exterior temperature established heat transfer. The purpose of the study was to measure the thermal resistance (insulation value) and evaporative resistance of football, basketball, baseball, soccer, track, tennis, golf and cycling outfits using a heated, sweating manikin in an environmental chamber (Zou & McCullough, 2004). Each garment was chosen by considering applicable National Collegiate Athletic Association (NCAA) attire requirements. Since each of these sports is played during different seasons, the ambient room temperature for the study was held consistent for tests to get an accurate and comparable measure of each outfit. Descriptions of the
individual garments, their individual fabrics, textiles thickness and weight were reported. “Ensembles for a given sport often vary with respect to the amount of body surface covered by garments, the number of fabric layers on different parts of the body, the looseness or tightness of the fit, the type of garments to be worn (e.g., knee-length socks versus ankle-length socks), seasonal differences, and the thickness and permeability of the fabrics” (Zou & McCullough, 2004, p. 9). Results showed that football uniforms provided the highest insulation values in the data set. It is concluded from this study that clothing insulation increases as the amount of body surface area covered by garments increases and as the thickness of the garment layers increases. The evaporative resistance of an ensemble depends on the moisture permeability characteristics and wicking properties of the component materials used in the clothing and the amount of skin surface that is covered.

Fiber content has little to do with the moisture permeability of textiles. It is the openness of the fabric structure and type of surface treatments that have more of an impact (Zou, 2004). Fiber content has some impact on moisture permeability but is not as significant as the openness of the fabric weave structure.

Other studies have concluded the same finding. For example, Zhang, Gong, Yanai & Tokura (2002), “investigated the combined effects of the properties of clothing materials and wind on human thermoregulatory responses by studying the effects of air permeability during exercise in controlled environments with and without wind” (p. 241). They used two sets of experimental clothing, type A and type B, both consisted of underwear, outerwear and socks, both type made from 100% cotton. Type
A was reported at a thickness of 0.18mm and type B reported thickness of 0.23. Each subject cycled on an ergometer for one hour. One group was tested with wind and the other without wind during exercise. They recorded rectal temperature, skin temperature, body mass loss, salivary lactate and clothing microclimate relative humidity. Their study concluded that physiological responses to heat are influenced by wind and the air permeability of clothing materials. During the exercises, skin temperature, clothing microclimate temperature, body mass loss and salivary lactic acid concentrations are significantly lower for the clothing with higher air permeability in the environment with wind.

Ciesielska, Mokwinski and Orlowska-Majdak (2009), analyzed the influence that clothing material may have on human physiology and thermal comfort both at rest and during physical effort to answer the question, which fabric is better, a natural or synthetic? The study involved twenty young healthy volunteers, (six females and 14 males, between the ages of 21-29). They performed a 15-minute treadmill exercise test two times. The first time they were asked to wear a 100% coarse wool clothing set. The second test they wore 100% acrylic clothing set. Physiological parameters, perceived comfort, psychomotor skills and well-being questionnaire were asked before and after each exercise. Perceived comfort data was collected in a qualitative method. Before exercise: Subjects reported that the course wool set of clothing was extremely unpleasant in contact with the skin and they felt uncomfortable wearing it. Subjects reported the opposite with the acrylic set before exercise. However, after exercise, their opinions changed. Subjects reported feeling cooler and dryer in the 100% course
wool set and felt discomfort in the acrylic set of garments. According to this research, this finding is due to the yarn and fiber structure of the two materials. Acrylic has a lower air and liquid permeability than the woolen textiles. This article concludes that clothing materials, whether made from natural or synthetics, has an impact on physiological parameters in humans during physical exercise. “The type of material for the clothes to be worn during physical effort should be selected depending on the type, intensity and duration of the effort and taking into account the potential effects on human physiology” (Ciesielska, 2009, p. 220).

Breathability of the fabric is essential for prolonging exercise. Wearing a fabric that is not breathable during physical exercise will increase heart rate and rectal temperatures much faster than fabrics that are breathable (Umbach, 2001, 2002). When fabrics are more breathable, the skin has more access to air therefore staying cooler and the athlete was able to withstand longer periods of activity. Therefore, having a breathable fabric is critical. Along with clothing, several other factors must be considered before engaging in exercise.

Factors Associated with Starting or Sustaining Exercise

Chen and Millar (2001) examined the factors associated with starting or sustaining physical activity during leisure time using data from the longitudinal household components of the National Population Health Survey. The sample consisted of 11,026 respondents who were aged 20 years and older in 1994/95. Many predictors of starting or sustaining activity were: sex, age, educational attainment, smoking, and sense of mastery. However, some factors were only significant for one
gender. For instance, overweight and the presence of children were deterrents for women, but not for men. Weight was not significantly associated with taking up physical activity, but active people who were overweight had lower odds of continuing that level of effort, compared to those who were not overweight. Other studies, exclusively examining women between the ages of 22 and 44, indicated that race, marital status and employment status also are factors to being physically active (Arikawa et al., 2010).

Lack of physical activity has been related to several physical and psychological health risks including weight gain, obesity and depression (Faith et al., 2009). Women who are overweight and do not participate in any form of physical activity are at the highest risk for depression and low self-esteem (Rosen, Orosan & Reiter, 1995).

Social Physique Anxiety

Social physique anxiety (SPA) refers to the anxiety experienced by some individuals when they perceive that other people are judging their bodies. It is a form of social anxiety that arises when individuals doubt their own ability to present a positive image of themselves (Hart, Leary, & Rejeski, 1989). Whereas, both men and women can experience social physique anxiety, it is more common for women than men (Fallon, 1990). Research has shown that women are far more likely than men to feel self-conscious with their bodies and their overall appearance (Berscheid et al., 1973; Cash et al., 1986; Garner, 1997; Miller, Coffman, & Linke, 1980; Silberstein, Striegel-Moore, & Rodin, 1987). A woman is also more likely than a man to try to change her body shape. A common way of changing body shape is through weight
loss, or weight gain at an athletic facility or gym. However, this is an environment where women tend to experience high social physique anxiety. Social physique anxiety may be aroused when clothing norms require people to wear more revealing attire than they feel comfortable wearing. For example, participating in physical activity at the gym may lead to social physique anxiety (Brewer, Diehl, Cornelius, Joshua, & Raatle, 2004).

Several studies highlight the relevance of SPA among women in physical activity settings (Brewer et al., 2004; Eklund & Crawford, 1994). Undergraduate women who experienced high SPA seem particularly sensitive to social aspects of the exercise environment. In one study, women with high SPA reported (relative to their peers low in SPA) (a) being adversely affected by appearing less fit than their aerobic dancing classmates and having spectators observe them participate in aerobic dancing, (b) thinking extensively about their appearance while participating in aerobic dancing, (c) believing that they are being judged by others while participating in aerobic dancing, (d) disliking coed aerobic dancing classes, and (e) being highly aware of members of the opposite sex who are participating in aerobic dance classes with them (Eklund & Crawford, 1994). It appears that if SPA influences exercise motivation, it must be through an interaction of situational factors related to the display of the body.

Overweight women who attend group fitness classes have expressed a preference in clothing. Brewer et al., (2004) examined relationships among body mass index (BMI), social physique anxiety (SPA), and protective self-presentational behaviors. Eighty-six female participants with a mean age of 33 years enrolled in a
university aerobics class. 83% identified as Caucasian, with 6% Asian, 5% African American, and 4% American Indian and 1% Hispanic. The questionnaire administered included items assessing demographic, exercise history, aerobic floor position preference, and exercise apparel worn on the day of testing and social physique anxiety. BMI was calculated using the self-reported height to weight ratio. Results indicated a positive relationship between SPA and self-protective presentation behavior. This means that SPA increased as self-protective presentation behavior increased. Self-protective presentation behaviors included preferring to stand in the back of the aerobics class (farther away from the instructor) and preference to wear concealing fitness clothing. There was not a correlation between SPA and BMI. This could be because of the setting of the study, at a college gym, or a socially desired response from the subjects who self-reported normal height and lower weight.

“Women with higher BMI may choose to wear concealing exercise clothing more in response to deviating from a cultural thinness ideal than to feeling anxious about how their bodies appear to others.” (Brewer et al., 2004, p. 52). This study is limited, because women with high SPA who choose not to exercise in public were not represented. Body image concerns in general and SPA can decrease enjoyment of exercise and possibly lead to nonparticipation or withdrawal from physical activity altogether. Overall, it is apparent that SPA is a barrier for overweight women to engage in physical activity. People are clearly concerned with what others think of them, and this concern can affect their behavior in sport and exercise settings (Leary, 1992). Therefore, an exploration of social comparison is necessary.
Social Comparison

The desire for self-evaluation is a natural act that stems from belonging to groups and associating with others. Social comparison theory states, “The subjective evaluations of one’s abilities in regards to important tasks are some of the satisfactions that people attain when comparing to others” (Festinger, 1954, p. 125). Research shows overweight and normal weight women compare themselves regularly and are subject to negative impact. Studies show that when women view images of the thin ideal, they engage in social comparison and results in more negative mood and negative body satisfaction (Tiggeman, 2004; 2009). Body satisfaction is much lower for overweight women when compared to women of normal weight (Tiggeman & Andrew, 2010). Overweight and obese persons are prevalent in the United States and this demographic needs further understanding.

Obesity

The National Institute of Health defines obesity as having a BMI of 30 or higher. The BMI (body mass index) is a key index for relating body weight to height. Currently 60% of Americans are considered overweight or obese and 68% of American women are currently overweight or obese (Carr & Friedman, 2005). Obesity is often multi-factorial, based on both genetic and behavioral factors. Treatment of obesity often requires more than just dietary changes but also including exercise, counseling and social support. Overweight and obese persons are at risk for a number of health problems and social difficulties (Puhl & Brownell, 2001). These difficulties range from higher risk for a variety of disorders, including hypertension, infertility,
back pain, type II diabetes, stroke, heart attack, and others (Faith, et. al, 2000). Research has shown that obesity is associated with psychological issues including depression, reduced self-esteem, poorer body image and social physique anxiety (Carr & Friedmann, 2005). Each of these difficulties, such as body image and SPA, presents an opportunity for intervention

**Obesity and body image.**

Obesity is linked to poor body image. In general, women are significantly more dissatisfied with their bodies than men are, so simply being female is a risk factor for body image distress in our culture (Cash & Roy, 1999). The key risk factors identified thus far are degree of overweight, being female, early age of onset obesity, and race. There is a large misconception that the best way to improve self-esteem and body image among overweight women is through weight loss. Research has emerged to demonstrate that body image and self-esteem can be successfully treated in a number of different ways in a number of different populations with cognitive-behavior therapy (CBT) (Cash & Strachan, 2002). Rosen, et al., (1995) provided CBT for body image to obese women. They found that all measures of body image distress improved, as well as self-esteem and binge eating behaviors. Importantly, most subjects did not experience weight change, and the changes in weight that did occur were not significantly related to other measures of outcome. Rosen et al., (1995), and Bacon (2010) suggest that body image and low self-esteem can improve independent of weight loss. There is a large body of evidence examining the relationship between obesity, body image and self-esteem. With social anxiety and discrimination prevalent,
exercising in public can be an additional stress to overweight and obese women.

**Obesity and depression.**

Psychological health and depression have been shown to impact performance in several areas of life. These performance issues range from work, family, personal feelings, daily routines and eating habits (Beach, Martin, Blum, & Roman, 1993; Weissman, Paykel, Seigel, & Klermanm, 1971).

Several studies have found a connection between obesity and depression. A study conducted explored if depression and obesity were related (Blaine, 2008). The study revealed that “depressed compared to non-depressed people were at significantly higher risk for developing obesity. The risk among depressed people for later obesity was particularly high for adolescent females (odds ratio: 2.57, 95% CI: 2.27, 2.91). “These findings highlight the importance of depression screening and treatment programs, especially among adolescents, to assist the prevention of adult obesity” (Blaine, 2008, p. 1193). Another study (Simon et al., 2008) evaluated the association between obesity and depression among middle-aged women. A total of 4641 females, ages 40–65 years, who completed a structured telephone interview including self-reported height and weight, and a questionnaire assessment of depression. The results showed a prevalence of moderate or severe depression increase from 6.5% among those with body mass index (BMI) under 25 to 25.9% among those with BMI over 35. Prevalence of obesity increased from 25.4% among those with no depressive symptoms to 57.8% among those with moderate to severe depression. Among middle-
aged women, depression is strongly and consistently associated with obesity, lower physical activity and (among the obese) higher caloric intake. Public health approaches to reducing the burden of obesity or depression must consider the strong association between these two common conditions (Simon, et al., 2008).

Obesity is clearly associated with an increased risk of developing a variety of health and mental health disorders. The following study supports using women as a sample due to their increased risk for psychological disorders when overweight or obese (Zhao, 2009). Zhao (2009) found significant differences by gender and BMI levels, especially for those who were overweight and obese. Women had a higher prevalence of current depression than men. Women also had a higher prevalence of lifetime depression and anxiety than men for all BMI categories (except for those who were underweight). Women had a significantly higher prevalence of current depression, lifetime diagnosed depression and anxiety than men with the same socioeconomic status and conditions. Among men, the prevalence of physiological disorders was found in those who were underweight compared to those who were normal weight. In regards to racial/ethnic groups, non-Hispanic whites had the lowest prevalence of current depression but had the highest levels of lifetime depression; non-Hispanic blacks had the lowest levels of lifetime depression and anxiety. For age, those who were over 70 years, contained a High school diploma and were married showed the lowest levels of depression, anxiety and lifetime depression (Zhao, 2009). Along with the emotional and health stress of being overweight and obese, several studies have explored the discrimination that overweight and obese people experience.
In some cases, the damaging psychological implications developed by overweight or obese persons in the Western culture, influenced their self-esteem and choice of participation in physical activity (Cash and Roy, 1999, Zhao, 2009). In conclusion, women who are overweight or obese are at the highest risk for psychological disorders such as depression. It is possible to decreases symptoms of depression through physical activity. However, it is shown to be difficult to engage in physical activity at a gym when overweight people are experiencing antifat bias.

**Discrimination associated with obesity.**

Current literature shows there are prejudicial attitudes Americans hold towards obese and overweight individuals (Puhl and Brownell, 2001). Starting from a young age, if a child is overweight, they are socialized not to participate in sports and are treated with different expectations in the physical domain compared to average weight children (Greenleaf & Weiller, 2005). Physical education courses in elementary school are a source of negative social comparison. Although scholarly articles explore childhood obesity and health related issues, there are lifelong implications of socialization that effect quality of life for those who are adult and overweight or obese (Carr & Friedman, 2005). Robertson & Vohora (2007) aimed to asses implicit attitudes towards obesity among two major groups of people in a public exercise setting. Fitness professionals offering exercise advice, and regular exercisers were recruited from gyms across Central England. A total of 57 fitness professionals (mean age 29-30) and 56 undergraduates who were considered regular exercisers (mean age 20) participated in the study. Participants filled out a demographic questionnaire (sex,
age, height, weight, personal experiences of being overweight and beliefs about factors governing obesity), and completed an implicit association test (classification of randomly ordered stimuli words into subordinate categories, example: fat people, thin people, good, bad, motivated, lazy).

Results reveal that both fitness professionals and regular exercisers show a strong antifat bias. The results also suggested that there is both negative construction of obesity as a state, but also as a facet of personality. Fitness professionals and regular exercisers, who reported they had not been overweight in their lives, thought overweight people were unmotivated and lazy more than other stimuli words. This was expected, because personal experience has not challenged the stereotype. However, those regular female exercisers reported a higher antifat bias than professionals and male regular exercisers. The study revealed that women might be more susceptible to the internalized ‘thin ideal’ than males. Both groups reported greater antifat bias on the motivated/ lazy measure if they themselves have not been overweight in the past.

Exercise professionals and regular exercisers are not immune to antifat bias. For overweight and obese persons to be discriminated against by the very professionals and co-exercisers who could help them the most may make it even more challenging to exercise in the public domain. The attitudes of educators, fitness trainers and peers perhaps create a consequence on an obese person’s intention and perceived ability to exercise. I will now share further studies that address adult overweight women’s attributions for ceasing an exercise regime.
**Exercise Motivation**

Adult women have reported body and weight related concerns as a major motive for engaging in physical activity. A recent study by Segar, Eccles, Peck, & Richardson (2007) suggests that midlife adult women (40-60 years old) identify five distinct reasons for engaging in physical activity. Over one third of the sample reported being physically active to pursue body and weight related goals. A random sample of 262 US workingwomen volunteered in the study. The study resulted in supporting other findings that self-objectification is associated with women exercising for body-shaping reasons. Women who exercised for body shaping reasons experienced more imagery related to appearance and body shape compared to those who exercised for other reasons. Exercise levels increase and decrease throughout life as well as the reasons for being active.

Furthermore, the Mayo clinic reports the top five barrier to fitness are: 1) I don’t have enough time; 2) I think exercise is boring; 3) I’m self-conscious about how I look; 4) I am too tired after work and 5) I’m too lazy to exercise (Mayo Clinic, 2011). In conclusion, it is clear that people worry about their external appearance when considering physical activity and overweight women have a higher chance of dropping out due to several reasons including social physique anxiety. Therefore, one way to increase self-esteem and reduce social physique anxiety is through clothing and appearance management.

**Appearance Management**

Appearance management includes behaviors in which an individual engages to
improve one’s appearance (Rudd & Lennon, 1994). For the purpose of the present study, these clothing behaviors will be controlled through the athletic clothing. There is speculation that the participants may feel motivated to exercise. However, each person has unique life experiences with physical activity and that will influence a person’s motivation to exercise.

Summary

In American society, the impractical standard of beauty can have a profound impact on body image. Women report greater dissatisfaction with their weight than men, and often indicate they want to weigh less than they currently weight (Birtchnell, Dolan, & Lacey, 1987; Cash et al., 1986; Garner, 1997). Studies focusing on women have shown that overweight women had a stronger drive for thinness and a more negative body image than normal-weight or underweight women (Brodie & Slade, 1988; Cash, Counts, & Huffine, 1990; Cash & Green, 1986; Cash et al., 1986). A woman is also more likely than a man to try to change her shape. A common way of changing a body shape is through weight loss or weight gain at an athletic facility of gym. However, this is an environment where women tend to experience high social physique anxiety. This anxiety may be aroused when clothing norms require people to wear more revealing attire than they feel comfortable. People are understandably concerned with what others think of them, and this concern can affect their behavior in sport and exercise settings (Leary, 1992). Lack of physical activity can lead a person to several physical and psychological health risks including weight gain, obesity and depression (Faith et. al, 2009). The damaging psychological implications developed by
overweight or obese persons in the Western culture, in some cases, influences their self-esteem and choice of participation in physical activity (Cash & Roy, 1999, Zhao, 2009). It is possible to decrease symptoms of depression through physical activity. However, it has shown to be discouraging to engage in physical activity at a gym when overweight people are experiencing antifat bias. As we have seen, there have been studies that examined body image and its relationship to clothing as well as studies that examined self-esteem and body-image among overweight women. However, there have been no studies, that we know of, that have examined athletic clothing for overweight women in American society. Therefore, research regarding the experiences of athletic clothing for overweight women in American society is warranted.
CHAPTER 3. METHODOLOGY

Researcher's Philosophy

I conducted this study from a feminist perspective in an attempt to interpret the experiences overweight women have with athletic clothing. “Feminist research assumes that the subjective experiences of women differ from that of men” (Nueman, 2009, p. 102).

I first recognize that the choice of research question is a subjective choice and therefore, no research is entirely objective. Even after I have decided on my question I understand that the choices from what to measure to the words in reporting are also subjective (Devault, 1999, Letherby, 2003). Second, I have worked to ensure that every person is heard and effectively represented. Feminists often study women because traditionally research has used men as the focus (Sprague, 2005). My research is motivated by a desire for change in social institutions, structures, and cultures. During my interviews, I strived to create empathetic connections between myself and the participants in the study (Maguire, 1987). In order to “elicit authentic accounts of subjective experience” (p. 83), an emotionalism method was used to conduct semi-structured in-depth interviews (Silverman, 2001). These characteristics of feminist research align with the purpose of the study as well as my personal feelings.

I believe I used an emotionalism interview method. An emotionalism interview method follows certain beliefs. The main focus when using an emotionalism method is with the lived experience of the participant. The emotions of the participant are treated
as central to the experience or phenomenon being explored. This technique encourages interviewers to become emotionally involved with the participants and to convey their own feelings to both participants and readers (Gubrium & Holstein, 2003). “If interviewees are to be viewed as subjects who actively construct the features of their cognitive world, then one should try to obtain inter-subjective depth between both sides so that a deep mutual understanding can be achieved” (Silverman, 2004, p. 219).

This method utilized a semi-structured or unstructured interview style. The main reasons for this preference are “1) It allows respondents to use their unique way of describing the world, 2) It assumes that no fixed arrangement of questions is suitable to all respondents, 3) it allows respondents to raise important issues not contained in the schedule” (Silverman, 2004, p. 221). Lastly, in alignment with a feminist perspective and in order to facilitate cultural change I have shared my final conclusions of the study with all participants. I have also sent Nike Inc. recommendations to incorporate for their plus size clothing items.

As a former employee of Nike Inc., I knew they developed a plus size clothing line. However, Nike Inc. does not advertise this line of clothing and in my opinion is difficult to find on-line and are not available in stores. I decided to give each participant an outfit of their choice with the Nike brand to see what experiences they had with it. From here on out, personal athletic clothing will be referring to items that were selected and purchased by the participant. When I use the term Nike brand athletic clothing, I am referring to the Nike brand athletic clothing items that were selected by the participant and then which were purchased by me and shipped to the
participant.

**Research Design Strategy**

A triangulation method was used to collect data and complete the research objectives. Triangulation research method utilizes different perspectives to gain an accurate account of the phenomena under study. The three methods of data collection I used were quantitative surveys, semi-structured interviews and guided journals.

**Sampling.**

Purposive sampling was used to recruit participants for the study. Based on empirical data, I used my judgment to select a sample that I felt would provide answers to the research questions. The population under exploration was overweight women ages 30-65 years. “A decline in basal metabolism occurs in the 40’s for most men and women, resulting in weight gain if the individual does not substantially increase exercise and decrease food intake” (Garner, 1997, p.332). Women also have less leisure time than men (Verhoef, Love & Rose, 1992) Women who work full time or have children at home also have the added constraints on their ability to regularly participate in physical activity (US Department of Health and Services, 2005). This sample also has an elevated risk of being sedentary compared to younger women and men (Scharff, Homan, Kruteer & Brennan, 1999). Additionally, women place more importance on clothing and external appearance than do men (Kwon, 1994). Therefore, self-identified women ages 30-65 years, who currently wear between a size 16W and 26W with access to Internet and Skype, were asked to participate in the research.
Data Collection Procedure

There were seven phases in the data collection procedure. The seven phases included: Phase 1: Recruitment, Phase 2: Participant contact, Phase 3: Introduction, Oral Consent and surveys, Phase 4: Nike brand clothing selection, Phase 5: On-line guided Journal, Phase 6: First in-depth interview and Phase 7: Second in-depth interview, member checks and concluding remarks.

Phase 1: Recruitment.

Overweight adult women were recruited through flyers, emails and a snowball method. These methods were used because it helped reach women in different geographic locations. I had friends and family members throughout the US post flyers, in their community’s at grocery stores, community centers and other local public posting spaces (See Appendix A- Recruitment Flyer). I also asked friends and family to email a recruiting script (See Appendix B- Recruitment Script), to people they knew or thought might be interested in the research. If a participant was interested in learning more about the study they contacted me via email.

Phase 2: Participant contact

Upon receiving an email from the participant, I emailed the participant the alternative consent document and an outline of the study (Appendix C- Informed Consent). The email included the following statement “Thank you for contacting me about volunteering for a research study about overweight women’s experiences with athletic clothing. Based on your interest you are a woman ages 30-65, with a waist between 34.5” to 51.5”, a bust between 44.5” and 56.5”, (Size W16-W26) with Internet access.
and Skype™. This study is to explore your experiences with athletic apparel. If you are interested, please read the attached documents. After reading the documents and you are interested in participating, and then email me to schedule a phone conversation to clarify the research process. Thank you! Sincerely, Debbie Christel.”

**Phase 3: Introduction, Oral Consent and Survey**

During the first phone call we introduced ourselves and talked about the research process. If she agreed with the process each participant volunteered for the study and gave oral consent. She was then emailed a link to the demographic profile survey including socioeconomic status, race, ethnicity, income, marital status, occupancy, mailing address, whether she had children, the Rosenberg self-esteem survey and a Social Physique Anxiety Survey. The combined surveys took approximately 10 minutes or less to complete.

**Phase 4: Nike Brand clothing selection**

Once I received a confirmation of the on-line survey completion, I asked each participant to select an athletic outfit from 4 Nike brand items. Items included a tank top, t-shirt and shorts or capris. Appendix D- Nike brand Clothing Selection Guide is a copy of the PDF document that was sent to each participant that included a sizing guide with pictures. Each participant selected a top and one bottom that were mailed to her given address.

**Phase 5: On-line guided Journal**

Following garment selection, each participant was introduced to the online-guided journaling. The journal was for the participant to reflect and write her thoughts and
observations. Specific prompts were given to encourage writing on the specific topic of athletic apparel. The participant and I had access to each participant’s online journal at all times during the data collection process.

**Phase 6: First in-depth interview**

Within seven days of receiving the clothing, each participant scheduled a Skype™ interview with me. The first interview took approximately one to two hours. At the end of the interview, we scheduled the follow-up interview.

**Phase 7: Second in-depth interview, member checks and concluding remarks**

The second in-depth interview took place four weeks after the first interview. The interview took approximately one to two hours and included the member check to ensure data validity. At the end of the second interview, I thanked the participant for her time and informed her of the closing steps. I informed her that I would email a summary of the participants’ responses to Nike Inc., and as well to the rest of the participants.

**Qualitative interviewing.**

There were two in depth interviews. All interviews were conducted in English. During the initial contact, oral consent was given and I documented this consent in my field notes. I reviewed the research process with each participant and answered any questions about the study. Then, I emailed each participant pictures of the four Nike brand athletic clothing items. They were informed to select a top and a bottom. Each participant emailed me the style, color and size she wanted. I ordered her clothing online and had the items shipped to her address. If an item was out of stock on the
Nike Inc. website, I emailed the participant and asked for her second choice. After receiving the Nike brand clothing, each participant emailed me and we set up the first in-depth interview and discussed experiences with the clothing. (See Appendix E-Interview Guide).

Four weeks after the initial interview we had the second, follow-up interview. The purpose of the second interview was to confirm the experiences with the clothing. Member checks took place during the second interview to ensure that I correctly interpreted the responses from the first interview. The same questions from the first interview were asked again to ensure reliability. At the end of the second interview, I informed them that I would email a summary of their responses to Nike Inc., to them, as well as to the rest of the participants.

**Data analysis procedures.**

Quantitative data of each survey were analyzed to describe the sample. Descriptive statistics are reported for the Rosenberg Self Esteem Scale (RSES) and the Social Physique Anxiety Scale (SPAS). Rosenberg Self Esteem Scale can be found in Appendix G- Rosenberg Self Esteem Scale. The RSES measures an individual’s global self-esteem. The scores are calculated by adding item 1,2,4,6 and 7 with the Likert Scale points as Strongly agree=3, Agree=2, Disagree=1 and Strongly Disagree=0. Items 3,4,8,9 and 10 are reversed in valence. This means that those items are scored as Strongly agree=0, Agree=1, Disagree=2 and Strongly Disagree=3. The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.
Social Physique Anxiety Scale (SPAS; Motl & Conroy, 2000) can be found in Appendix H- Social Physique Anxiety Scale. The SPAS measures the extent to which a person experiences anxiety regarding their physique in social situations. The participant ranks each item on a Likert-type scale ranging between 1 (not at all) to 5 (extremely), depending on the degree to which the particular statement is characteristic of them. A person’s score was calculated by summing together the responses, noting question 5 is reverse scored. The scores range is 7-49. The higher the score, the more the person was considered to experience high levels of SPA (Scott, Burke, Joyner & Brand, 2004). Motl and Conroy (2000) examined the validity of the 7-item SPAS.

Qualitative data were coded and categorized. I transcribed both interviews for each participant and compared them. I looked for similarities and differences among the participants. All similarities between the interviews were considered a ‘confirmed experience’ and were combined into one record. Any discrepancies were documented and emailed to the participant in order for them to clarify their response. Once all answers were confirmed, I combined them into one document for each participant. Then, I changed participant’s names and moved their identifying documents to a locked electronic file.

I grouped all participants’ answers by each question. For example, everyone’s answer to the same question was moved into one word document. (See Appendix F for Sample of Coding Method). Once each question and all corresponding answers were
grouped into one document, the responses were analyzed for similarities and emergent themes.

These similarities were formed into categories, and the main categories are discussed in the results section. It is understood that each person has unique experiences in life. Therefore, if no one shared a similar experience, I feel it is necessary to include everyone’s voice. However, if similar responses were found, one response was used to represent the culmination of those responses. The results are reported in a fashion that shares the experience in groups. For example, if all participants except one shared a similar experience, I consider the majority experience as being the most salient. However, you will find that I have still reported the outliers experience as well. If there was no singular experience identified, then any similar experiences were grouped into categories of experiences as needed to equally give voice. Unanticipated findings and corresponding theoretical concepts are reported after the objectives.

**Verifying data accuracy.**

In order to assure validity and truthfulness I included member checks. A member check was a way for me to summarize the preliminary findings and let the participants access them for accuracy (Angen, 2000). I summarized my interpreted results from the first interview, and during the second interview asked the participant if those interpretations are correct. If there were any discrepancies between my interpretation and the intended response from the participant we discussed it.
**Limitations of Methodology**

“Feminist research cannot claim to speak for all women, but can provide new knowledge grounded in the realities of women’s experiences and actively enact structural changes in the social world” (Brayton, 2012, p. 3). I understand that a limitation of a feminist method is that my findings may not represent all women and my analyses of the interviews are subjective. I do not intend to generalize to the population of all obese women, only intend to give an in-depth account of the women under study. Member checking also has its’ limitations and can lead to confusion rather than confirmation because participants may change their mind about an issue (Angen, 2000). This event occurred and an example of a Member check is in Appendix I (Member Check Technique). Member checking may also remind participants of a story that they later regret sharing. This occurred in my study and I was asked to remove a specific story. I respected the participant’s wishes and the story has been extracted from the transcription.

**Ethical Issues**

This study was conducted in adherence with Oregon State University Institution Review Board. The Oregon State University Institution Review Board approved this study on March 8\textsuperscript{th}, 2012. The approval notice is in Appendix J (IRB Approval Notice). I felt reassured in my interviewing abilities because one participant shared intimate stories with me. It also affirmed her comfort level when she regretted sharing a story and she requested I remove it from her transcription. I feel honored to have heard the experiences plus size women have with athletic apparel and I respected
their confidentiality through extracting stories when requested (Wolf, 1992). Once the final results are emailed to the participants, I will destroy all remaining identifying data.

**Analytic Strategies**

The interviews were audio recorded via the Skype Call Phone Application and later transcribed. After the first interview, I created my member check that involved summarized my interpretations of the conversation. During the second interview, I verbally confirmed with the participant that my summary was correct. If there were any discrepancies, I corrected them and proceeded with the second interview. Once the first and second interviews were transcribed, I compared them for similarities and differences. Any differences were documented and emailed to the participant for further clarification. All repeated or similar responses confirmed the findings and were combined into one interview document per participant. Once each participant had a singular transcription to reference, I developed code books to search for similar themes. Code books are used to assist in data reduction and provide a sample of data analysis methods for readers (Miles & Hubberman, 1994). Examples of my data reduction methods can be found Table 4.1, Appendix F, Appendix I and Appendix K. These are code books that show text (quotes) from themes of the study. Table 1.1 displays the participants and follow-through with the interviews and member checks. Eight participants completed both interviews while six completed one. All six, who completed one interview, responded to a member check via email to confirm and/or correct my summary from the first interview.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Interview 1</th>
<th>Interview 2</th>
<th>Member check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Brittany</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Cynthia</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Donna</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Melissa</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Jennifer</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Laura</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Susan</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Heather</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Julie</td>
<td>√</td>
<td>-</td>
<td>√</td>
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<tr>
<td>Michelle</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Lisa</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td>Karen</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Tammy</td>
<td>√</td>
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</tbody>
</table>

Table 1.1 Interviews and Member Check
CHAPTER 4. RESULTS

The purpose of this research was to explore the experiences overweight adult women have encountered with athletic apparel. The specific clothing items which are the focus of the investigation included personal athletic clothing and Nike brand athletic clothing. To determine their experiences, each participant was asked to provide responses to two in-depth interviews, on-line guided journal questions and an on-line survey.

Participant Summary

Participants included 15 overweight women who live in the United States. Fourteen completed the research process. One participant was deemed to have withdrawn from the study after completing the on-line demographic survey because of her non-response to subsequent emails and phone calls. Her information is only used in describing the sample, including the demographic descriptors, Rosenberg Self Esteem Scale and Social Physique Anxiety Scale. Due to time and resource limitations, a substitute participant was not recruited.

The 15 participants were women with a mean age of 43 years (range 30-59). The mean height was 5’6” (range 4’7”-6’). The mean weight was 265 pounds (range 200-375). The mean BMI was 42.1 (range 30.4-62.7). The BMI classifies Obese I as a BMI of 30-34.9, Obese II as a BMI of 35-39.9 and Obese III as a BMI over 40. Based on those criteria, our sample has three Obese I participants, two Obese II participants and the remaining ten participants are Obese III. At the time of the study, all
participants wore a clothing size between 16W-26W, or more commonly sized as, 1X-3X. The majority (12) of my sample identified race as Caucasian and ethnicity as White. One identified her race as African American and ethnicity as other\(^2\). One identified her race as Asian and ethnicity as Multicultural\(^3\). One identified her race as Hispanic/Mexican and ethnicity as Hispanic. The participant deemed withdrawn identified as Caucasian. The mean personal annual income was $50,000 (range $16,000- $150,000). Of the sample, six reported being currently married, five single, two divorced, 1 widowed and 1 engaged. Four women had children and 11 did not. All four corners of the mainland US territory are represented in the sample. This includes 1 participant from New York, 1 from Pennsylvania, 1 from New Jersey, 1 from Florida, 2 from California, four from Oregon and five from Washington State.

**Physical Activity Levels**

Physical activity levels are listed in Table 4.1. Most of the respondents perceived themselves to be physically active during the last month. However, in a few cases those who did not consider themselves physically active reported high levels of physical activity.

\(^2\) Other: More than 4 generations American born from slave trade. I do not identify with African as much as American.

\(^3\) Multicultural: Latin, Asian-Indian, American-Indian, African.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Consider yourself active</th>
<th>1\textsuperscript{st} interview</th>
<th>2\textsuperscript{nd} Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>“I do, but not as active as I'd like to be. I go to the gym 4-5 days a week and am doing more active things on the weekends. (Like walking to the top of Multnomah Falls, or walking on the beach instead of sitting on a log, or going door-to-door with my nieces selling girl scout cookies!) When I think of marketing suggestions of what an &quot;active person&quot; is, I think of participating in sports or skiing...and I'm not at that level of activity. Yet.”</td>
<td>“I go to the gym Monday through Thursday and on Monday and Wednesday we do circuit training so it is like 30 machines and you stay on each one for 1 minute and then on Tuesday Thursday we have been adding on either 20 minutes on the elliptical or treadmill.”</td>
<td>Same routine-email member check.</td>
</tr>
<tr>
<td>Tammy</td>
<td>Yes, I would say moderately active.</td>
<td>I walk everywhere. That is my main source and I wouldn’t call it an exercise routine it is just part of my daily transportation.</td>
<td>Same, walking. - email member check.</td>
</tr>
<tr>
<td>Jennifer</td>
<td>Yes, I consider myself physically active. I work out 4 to 5 days a week, running, jogging and weights.</td>
<td>Swimming at the pool and circuit training and cardio with elliptical and hikes and things then there are 2 days a week I like to go hiking.</td>
<td>Hiking and playing outside if I can. Same routine, I have the support system we help keep each other motivated. - email member check.</td>
</tr>
<tr>
<td>Melissa</td>
<td>Most days I do consider myself physically active. I try to lap swim at least 4 mornings/week before work and go to the gym 2-3 times/week after work. I am also physically active at home. I work outside</td>
<td>I am getting married in a month and life is crazy right now. I still lap swim about 3 days a week. I haven’t been as good about going to the gym so just 1 or 2 times a week usually.</td>
<td>Less, getting married and I have not had any time to do my weights at night. So just swimming in the AM.</td>
</tr>
</tbody>
</table>
mowing my large lawn and doing other yard-work.

<table>
<thead>
<tr>
<th>Heather</th>
<th>No. I used to be physically active, but not in the last several years.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>My mom was diagnosed with cancer 3 years ago and died a year and a half ago and I have not been doing anything. I am much heavier now that I have ever been.</td>
</tr>
<tr>
<td></td>
<td>I got up and walked the next morning. Played Wii with my son and been walking regularly. Injury and have taken past week off. - email member check.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laura</th>
<th>Yes, I work 4 jobs, walk approx. 10 miles every two days,(School nurse for two school lots of traveling. . .walk to get to each one). . . But I would have to say . . . NO, it not like it should be. One Zumba class a month doesn't cut it . . . Does it? ( :</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taking Zumba at the school on Wednesday and Thursday so I try to make it to at least one session out of the week is my goal and of course right now I am babying a shoulder so umm just once a week.</td>
</tr>
<tr>
<td></td>
<td>Zumba every Wednesday.</td>
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<p>| Michelle | My athletic life (I ride horses primarily in the English discipline of dressage) is another story. For one the clothes are by nature tight fitting (breeches are like tights with leather reinforced seat and legs). There is no way to camouflage cellulite in riding breeches. But I am passionate about riding so it's not a choice. Additionally because I ride a horse I know some of the people at the barn wonder if I am too large to be riding. In 2010 I had knee replacement. I worked so hard thru the rehab and made a great I ride about 5 days a week and spend 30-40 minutes grooming, I don’t just sit on the back it is an athletic pursuit. |
|          | Still riding and now that the sun is out for good, I can spend more time gardening and at the barn. |</p>
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<tr>
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<th>recovery. I wish I could put that same determination into losing weight. I don't like being this heavy. I know it isn't good for me or my horses.</th>
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<tr>
<td>Karen</td>
<td>Yes, Weekly routine: Work Monday-Friday; Work out 3-5 days a week (running, stationary bike, weights); eating out 3-4 times a week; drinking 1-2 times a week. I just did a half marathon on Sunday so, I usually do 3 or 4 times a week and do the Wii fit on my days off. Nothing too strenuous. Still running and planning another race.</td>
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<tr>
<td>Lisa</td>
<td>No – sadly, not anymore. As far as a workout routine – none. Otherwise it’s just work 5 days a week, errands and shopping on weekends, collapse in a tired heap on Sundays, start it all over again on Monday. “Not as active as I like, the only thing I ever get a chance to go is a little walker here and there. Any working out that I do is walking and that is very little right now.” Same- walking. - email member check.</td>
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<tr>
<td>Julie</td>
<td>No. I do not. Just walking around a little, you know. I don’t really do any video tapes or anything it has been extremely busy and I worked quite a bit so unfortunately that is how that works out. I mean I walk 20 minutes at work around the courtyard. Work is so busy I haven’t done much walking. - email member check.</td>
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<tr>
<td>Brittany</td>
<td>As I tend to put myself second, no - I'm not active physically. When my horse is well - which is recently back in good health - I am much more active. I have several sports at which I am competent, but physical It has been really hit and miss lately and frankly I work out in about 2 different places. Home and barn. Joined a yoga studio, been going for 2 weeks, 3 times a week.</td>
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<tr>
<td><strong>Cynthia</strong></td>
<td>Under normal circumstances I consider myself physically active. I have a very physical job involving lifting, carrying, walking, crawling etc. (I have been home on medical leave for 7 weeks doing nearly nothing.). I would like my activity to be more pleasure and less work related. I believe being physically active involves whole body muscular movement for a duration of time.</td>
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<tr>
<td><strong>Amy</strong></td>
<td>Yes, I do consider myself physically active. I work full time in an office environment that encourages healthy living. However, it doesn't seem like anyone follows the models set before us. I make it a daily habit to start each day with stretches. During my day I wear a pedometer. I try to make it a point to hit between 5000-7000 steps during my 8 hours. I attend Water aerobics classes 2-3 times a week. I do a minimum of 20-30 minutes of Zumba every other day. I cap off my week I attend a 2 hour boot camp (8</td>
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week sessions) take a break and then attend another 8 week session. Prior to all the exercise I currently do I still considered myself physically active. I walked upstairs and would walk the malls/grocery stores for 2 hours every other day. my comfort zone at the time. I couldn't have said any of this 6 months ago.

Donna

If I compare my experience over time and average moments of sedentary versus active I would say the scale tips more to the sedentary. Wanted to get up and needing to get up and move around is the main factor when determining active or inactive. If I do not have obligations to meet for others my first instinct is to stay put! It is very easy for me to watch 6 hours or more of television a day.

2-3 times a week on average. I walk everywhere because I don’t have a car.

2-3 times a week- same. Going to the gym meeting a friend at the Pearl and that will be my second time.

Table 4.1 Summary of Physical Activity Levels During Three Response Times

Summary of the Results

To further describe the sample, responses utilizing the Rosenberg Self Esteem Scale (RSES) and Social Physique Anxiety Scale (SPAS) were collected from each
participant. The RSES ranges from 0-30. Scores between 15 and 25 are considered within normal range; scores below 15 suggest low self-esteem and score above 25 suggest high self-esteem. The sample scores ranged from (8-30) with an average score of 21.8. With the exception of 2 low self-esteem outliers and 1 high self-esteem outlier, self-esteem levels were within normal range.

The SPAS measures the extent to which a person experiences anxiety regarding their physique in social situations. The SPAS scores indicate the higher the score, the more the person was considered to experience high levels of SPA. The range of SPAS scores is 7-49. The sample reported a range of (24-43) with an average score of 30.4. Scores above 20 are considered moderate to severe social physique anxiety (Raedeke, Focht & Scales, 2009). The remaining results of the study will be presented in the order of the objectives.

**Objective # 1**

The first objective was to determine overweight adult women’s experiences with athletic clothing. In order to categorize the vast experiences one can have with athletic clothing, this section is divided into five categories. The categories were developed through the interview questions and are: 1- Experiences shopping for athletic clothing; 2- Experiences dressing oneself; 3- Experiences wearing and exercising in athletic clothing; 4- Social comparison experiences; and 5- Exercise motivation experiences.

**1- Experiences shopping for athletic clothing.**

Shopping experiences for most (13) were described to be frustrating. The two methods
of shopping include shopping on-line and shopping in a brick and mortar store\(^4\). Between shopping on-line and in a store, all women except one preferred to shop in a brick and mortar store. Thirteen experienced frustration while one participant experienced no difficulty when shopping for athletic clothing. The thirteen participants said they prefer to shop in a store because they want to try on the clothing. The store names where people reported shopping in the store are listed below in Table 4.2. Lane Bryant was mentioned nine times, and Target, Wal-Mart, Big-5, Old Navy and Fashion Bug were mentioned three times. The rest were mentioned once or twice.

\(^4\) Refers to retail shops that are located in a building as opposed to online shopping, door-to-door sales, kiosk or other sites not housed within a structure (Stone, 2012).
<table>
<thead>
<tr>
<th>Store</th>
<th>References</th>
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<tr>
<td>TJ-Maxx</td>
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<tr>
<td>Target</td>
<td>3</td>
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<td>Fred Meyer</td>
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<tr>
<td>Marshalls</td>
<td>1</td>
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<td><strong>Lane Bryant</strong></td>
<td><strong>9</strong></td>
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<tr>
<td>Macy’s</td>
<td>2</td>
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<tr>
<td>Nordstrom’s</td>
<td>1</td>
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<tr>
<td><strong>Wal-Mart</strong></td>
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<td>Shopko</td>
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<td>K-mart</td>
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<tr>
<td>Kohl’s</td>
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<td>Nordstrom’s Rack</td>
<td>1</td>
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<tr>
<td><strong>Old Navy</strong></td>
<td><strong>2</strong></td>
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<tr>
<td>Catherine’s</td>
<td>1</td>
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<tr>
<td><strong>Fashion Bug</strong></td>
<td><strong>2</strong></td>
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<td>Boscos</td>
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<tr>
<td>Sears</td>
<td>1</td>
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<tr>
<td>JC Penny’s</td>
<td>1</td>
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<tr>
<td><strong>Big 5</strong></td>
<td><strong>3</strong></td>
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<tr>
<td>Thrift Store</td>
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Table 4.2 Frequented Retailers for Plus-size Women

A total of 13 participants experienced frustration while shopping and 1 participant said she did not experience feelings of frustration. For the latter person, she indicated shopping was easy because she wears a 1X, the smallest and easiest to find of the plus size clothing. One participant, Donna, felt so frustrated with shopping that she stopped all shopping and purchasing of workout clothing until she had lost weight.

The frustration of shopping occurs for several reasons. The sample responses revealed several categories of frustration in the in-store shopping process including: a-limited stores; b-limited selections and styles; c-fitting issues d-high prices; and e-
fewer color options compared to smaller sizes. Frustration in each of these areas can be seen in the following examples.

a- Limited stores: Here is an example of the response to the question, *Do you think you encounter any issues when shopping for athletic clothing that are unique to women of your size?*

Brittany stated, “Sure, you don’t find them. And when you do, when I try something on there is this ‘is it going to work??!’ I am big and tall with a rounded figure. Workout pants that fit my width are hard to find.’’

Susan’s response to the same question shows how she feels there is no space made for plus size clothing and the items that are available are over-priced. Susan stated,

Selection is a huge thing. Seriously, any major shopping store like Target or Wal-Mart have massive sections for women and men then it seems like the plus size is a quarter of the size of everything else and of that plus size clothing more than ¾ is 1 and 2X, there is no room for people bigger than that and there is no difference. Maybe in the last 5 years there has been better selection but there is not a GOOD selection and the prices are really crazy too! Like three times as much!

Lastly, Linda simply states, “Shopping is an exercise in frustration.”

b- The next area of frustration identified was the limited selection and style of clothing items. The group felt that as the sizes got larger the style options decreased. Several participants expressed their frustrations over the limited style selection. Jennifer stated,

It’s hard to find plus size clothes that don’t try to hide your body. You have sashes and bows and flowery crazy things that stick off the body and you have so many sequins that it’s just crazy looking. So, you know for those kinds of things it is hard to find clothes that are mellow and we can look sharp without having all the extra, and we get lost behind it. So, there is no body under there, it is just the shape of the clothes and that is hard.
In another situation, Michelle has resorted to very little in-store shopping and instead orders online because of her repeated negative experiences at stores.

Michelle stated,
There is always less to choose from in style and color. Either going to a store like Lane Bryant it seems like they are very limited, there is a certain look that they carry that isn’t always what I am looking for. I have always thought that I look nice in an A-frame skirt and you never see that in plus size, it is more like muumuus. Sometime, I just don’t know who is designing the plus size clothes, it doesn’t seem like a plus size person, it is like ‘really horizontal stripes?? Did you not get that memo in design school??’ I mean I have a very large derriere and I have a hard time finding things that fit my back, the rise is never long enough. So, I just go on the Internet and mail order and I haven’t bought nice clothes since, I buy a lot of stuff through the Internet because finding things in the store is very very difficult.

Brittany also shared her frustration with the limited selection and style options.

Brittany stated,
I have been in professional sports stores and as a larger person usually the plus size departments are tucked away and hidden away. So, having it be part of the normal store would be nice and I mean clothes that are appropriate and they have so much on them, Why do plus size clothes have to be so ugly and the terrible patterns? We need a little help and we don’t want to look like bumble bees with sequins exploding on them.

c- The next area of frustration experienced was with sizing. Women described the distinct difference between the size and the fit of clothing. The women felt that the industry was getting the plus-size sizing wrong. Large women want to try on clothing because fit and sizing is variable. Karen stated, “I have to try everything on, that is just part of my process, I would say finding something that is fitted but it not too tight is the biggest challenge.” Not everyone felt frustrated with fit of standardized clothing. Melissa does not experience challenges when searching for athletic clothing.
Melissa stated,
I don’t buy it (athletic clothing) very often because what I buy lasts quite a while. Let’s see, like before the stuff you sent, it has been a while. I mean it is not hard to find, I guess I can shop in the normal stores. I only wear a 1X so I don’t have a hard time finding things. I got my last pants at Kohl’s.

Cynthia shows a good example of how finding the right fit is most challenging.

Her response to the question, *Do you think you encounter any issues when shopping for athletic clothing that are unique to women of your size?*

Cynthia stated,
I think the rise is difficult when you are larger, I carry my weight in the front and I call it my front ass, (laughter), so I have a lot of weight there which makes me have to buy a different size waist and then it is way too big in my legs so that is a problem for me. Some of the clothes my friend Joanna brought over were way too small for me and it is just because she carries her weight in a different place than I do. You can never dictate where the weight comes off; it comes off wherever it feels like.

d- The cost of plus size items were also felt to be more expensive than the smaller sizes available. Here are a few examples of the participants expressing frustration with the price of plus size clothing. In response to the question, *What has been your experience with outfitting yourself with athletic clothes?*

Heather states,
I could never find them and when you could find them, they were so overpriced umm because an average sized person could go to Wal-Mart and get a Danksin pair of shorts for $12.99 and a plus size couldn’t and 90% of the time I would end up at Lane Bryant and the pants would be 50-60 dollars to workout in.

e- The next limitation identified in shopping was the lack of color options available. Jennifer stated, “Most of the clothes tend to be in all black or extremely wild patterns and neon colors with sequins and you know things that just don’t need to stick
Julie stated,

The selection is horrible! They tend to be in grey or black and the summer I would think that lighter color would be less hot if you are out in the sun but maybe they just don’t have that in yet, I mean it is 70 degrees today and it’d be nice to go outside but (pause) limited color options.

There are tones through each of the above quotes that express the frustration in several areas of shopping. There were comments about finding clothing in the right size, fit, color, style and price is the most challenging for plus size consumers. The following example summarizes Heather’s experience in her search for acceptable athletic apparel.

Heather stated,

I could never find them and when you could find them they were so overpriced and of course the availability, the sizing usually was not correct either. But then again my expectations weren’t very high either. The Nike clothing that you sent I absolutely loved but I could never find those in the retail environment.

Donna had a similar experience and faced additional barriers when finances were introduced. She implemented a ‘no shopping rule’ until she lost weight. Here is her response to the question, What has been your experience shopping for athletic clothing?

Donna stated,

I have not gotten there yet because finances is another thing that needs to get in shape and I promised myself that I would not shop for clothes until I absolutely had to, like I was down a size and then I would treat myself to a new workout outfit and pair of jeans.

Her experience of shopping in the past was similar to others, here is her
response to the question, *Do you think you encounter any issues when shopping for athletic clothing that are unique to women of your size?*

Donna stated,

Even if something has the right size it does not mean that is going to flatter my figure because a lot of the bras and tops they are sleeveless and just too short or one of the biggest problems are the size of my arms. Even if there was something that is form fitting to my arms because you HAVE to exercise the arms and have all the flailing and if it is giggling you are conscious about that and who is watching and what not and that deters the activity.

Lisa expresses her overall frustration with clothing shopping.

Lisa stated,

It’s frustrating because they don’t truly plus size the clothes. The tag will say 2X or 3X and them I’ll put it on and it’s like ope, no, I don’t know what they think a 2X or 3X is. The shape is the same and it is frustrating. I am really curvy and hourglass and they (designers) think that people who are plus size are straight. I am really very hippy. Something else that really bugs me about buying plus size clothing is that for some reason, somewhere, someone said that when a woman reaches a certain size she doesn’t care what the style looks like as long as it fits her. Lane Bryant sometimes gets it right they keep the styles really trendy and attractive and it doesn’t look like a Florida resort with a big giant print and umm but it is just once a woman reaches a certain size she doesn’t care what she looks like and that is not true.

It is evident that shopping for most plus size women is frustrating. They feel there are not enough stores that supply clothing items in their size. They feel clothing in their sizes are limited in style options and colors. There are also fitting issues and they feel clothing items are overpriced.

2- **Trying clothing on.**

The second part of the first objective was to describe the experiences dressing oneself (or trying on) clothing. This includes both athletic clothing and everyday clothing. A representative comment on this subject came from Amy. Here is her
response to the question, *What did you do when the (Nike brand clothing) package arrived?*

Amy stated,

Well, I pulled them out of the box and thought ‘OOHH what is that fabric?’ And then, I thought ‘OK OK are these gunna fit? Oh god they are gunna look horrible on my legs’, cause I was thinking about my thighs and natural insecurities, as I was putting them on I realized that whatever that feeling is, that FABRIC oh my god, it feels awesome, and by the time I pulled them up my hips I realized, ‘what did they do?’ I said, I want to meet the women who designed those pants to get that size right for the butt because for those of us 3X, does not necessarily mean you have a big butt, you could just be really wide around, but I am curvy and I have a butt and (laughter) they fit perfectly around the butt!

Experiences dressing or trying clothing on for the first time revealed a distinct pattern of emotions. Before trying on clothing, anticipatory feelings about the item itself would arise. The participants brought up the following questions pre-trying clothing on, ‘Is it going to fit?’, ‘How is it going to look?’, ‘It looks great on the mannequin but how will it fit on me?’

The emotional feelings around trying clothing on were both negative and/or positive depending on the person’s expectation of how the items would fit and look. Even before putting the clothing on, many women reported negative emotions of nervousness and anxiousness. On the other hand, some women also reported positive emotions of feeling excited and hopeful to try on clothing as it might have the potential to fit well. After trying the clothing on, the participants reported feeling either relief or disappointment. Disappointment led to being discouraged to shop while relief led to encouragement and optimism. Lastly, if a participant repeatedly experienced negative outcomes, they mentioned that they then engaged in coping
behaviors. The three coping behaviors found in this sample are: 1- to buy men’s clothing; 2- to stop shopping all together; and 3- to request hand-me-downs from friends. If the participant had felt encouraged after shopping, it was predicted that they would risk their emotional well-being and continue trying on more clothing. Figure 3 displays a developed model to express the cycle of emotions plus size women experience when trying on new clothing.

Figure 3. Emotional risk taking process of trying-on clothing for plus size women.

Here are examples of the nervousness, anxiousness, excitement and hopeful feelings the participants expressed before putting a garment on the body. These are
some responses to the question, *What did you do when the (Nike brand clothing) package arrived?* Tammy stated, “So, I saw it on the model, and I hope it looks that way on me in my size, and I dreaded it.”

Susan stated,  
I danced around in my living room because I was so excited! I held them up to see what they might fit like, I was very excited. I was so relieved that Nike actually even made a plus size clothing line. I didn’t know anything about it from my shopping trips so I was really excited to see that was maybe going to be an option for me.

Laura’s experience is another example of the anticipation and nervousness.

Laura stated, “I was a little skeptical at first when I took it out of the package and put it on, I thought I should have gotten a 3X but I didn’t.”

After the various anticipatory emotions, after they actually tried the clothing on the participants reported either feeling relief that the clothing item fit or feeling disappointed that the item did not fit. If the wearer reported relief and was satisfied in the fit they attributed that to a well-designed clothing item. Here are a few examples of how the participants praised the designer for creating an item that fit well.

Laura said,  
I mean, I LOVE the product and the style of the shirt, but some clothing, if you have big arms, will identify them (arms) right away but this time they (Nike) did it perfect and even with my big arms I am not conscious and it doesn’t restrict them, as far as the pants I think they hit it right on.

Susan stated,  
They, the top of the pants actually fit exactly where my waistline is so they fit perfect and the band is like, SERIOULSY they could not have designed the waistband any better, there is no bowing so your underwear doesn’t show, I like the wide waistband it helps keep stuff from rolling.

On the other hand, when the wearer reported feeling disappointed in the fit, they attributed it to their bodies lacking the correct shape. Here are a few examples of
how women attributed their miss-shaped bodies to the ill fit of the clothing.

Donna stated,
Of course there was a little let down on the shirt and there was this anticipation and some expectation of how it would fit, and I was a little ‘oh well, that’s me, you can’t hide, you just have to deal with it.

Lisa stated, “The pants are perfect, the shirt fits me but I have a pooch belly. I think when I start to firm up a little more I’ll feel more comfortable using the shirt and then I’ll wear them together.”

Here is an example of feeling relief that the clothing fit while at the same time feeling a continuing disappointment in one’s body.

Cynthia stated,
I was just surprised that they fit and you know, the leg of the pants is probably wider (pause) Well (pause) I think what it is, is that I wish I wasn’t wider, but they look good and I like the wide waistband and if I dropped ten pounds the shirt will fit. The fit is good and that is hard to do when you weigh up here.

Susan stated,
I was totally excited about the pants they really blew me away, I just never find pants that don’t sag weird or just fit weird in the waist you know, long enough and they weren’t super stretchy that it felt like another layer of skin. I was really surprised, really surprised. I was a little disappointed in the shirt, just that I have a long torso and I was really hoping that the way the back looked, I was really expecting it to fit well and it didn’t, so that was a disappointment.

Susan later stated,
I feel discouraged. I keep telling myself that the longer I’m faithful the smaller I’ll be and I’ll have better luck finding clothes, but the reality is that I’m trying to fool myself. I have such a long torso; I will have a constant challenge of finding things that fit no matter what my width.

For those that expressed feeling disappointment, that feeling morphed into discouragement. Conversely, for those that felt relief, emotions of optimism and encouragement followed. For those women, they thought that perhaps there may be
more options available for plus size women than originally anticipated. Below is an example of how Laura and Cynthia felt more optimistic towards the Nike brand potential to design clothing for plus size bodies.

Laura stated, “Nike is really not wanting me to buy from them, they want me to go to Wal-Mart to buy sweatpants because they can’t cater to me. At least that is the impression I had until I got my outfit.” Cynthia stated, “I am impressed. I am SURE I have tried on Nike before. I am surprised; maybe they re-did their sizing and made it more standard. I know a lot of manufacturers are trying to do that so we’ll see.”

Due to these feelings of optimism, I predict that the wearer will risk the potential for feeling disappointed and continue to try on new clothing. If the wearer reported feeling disappointed in the clothing, they were left feeling discouraged about their bodies. Seven women mentioned three ways of coping with the dissatisfaction of clothing fit and discouragement of shopping. Here are a few examples of how the participants felt disappointment and coped after trying on new clothing.

The first coping behavior was to shop in the men’s section for athletic clothing. The second behavior was to discontinue shopping for clothing all together. The third behavior was to ask other plus size friends for hand-me-downs. Here are examples of when women resorted to buying men’s clothing for exercise.

Karen stated,
I buy the Under Armour for my boys and I love the way it feels and it looks and I have bought it in the men’s XL so that I could use it, it conforms so much that it smoothed to my body.

Jennifer stated, “For working out I would just do men’s 2X for t-shirts and
they never fit right but it is one of those things that you give to get.”

Due to Michelle’s repeated negative experience with shopping, she avoids the women’s section completely and only buys men’s workout clothing. Here are her responses to the following questions. *What has been your experience with outfitting yourself with athletic clothes?*

Michelle stated,

“Well, for the kind of things that I am wearing today, the pants and shorts I usually go to Target and get men’s 2XL, umm I don’t even try them on in the store. I don’t bother with it, the dressing room uhhh and the t-shirts and you know extra-large t-shirts that I get wherever I happen to be.

Here is another response to the question; *Do you think you encounter any issues when shopping for athletic clothes that are unique to women of your size?*

Michelle stated, “Oh you know, it would be the regular workout clothes in general, because I am buying the men’s. I am avoiding any issues and I am not even trying to buy women’s.”

Amy used to purchase men’s clothing prior to losing a significant amount of weight.

Amy stated,

“In the past, the pants would be extremely loose because I was buying a men’s 4x. So, it was cut to fit a man and it was too big. Umm, so, originally they used to be but then in the last 6 months, I started wearing girl (laughter) t-shirts which fit a little differently. So, they were more fitting but they were not tight, actually all the workout tops that I found at my regular stores, I found several men’s polyester shirts but not female. They (men’s) were the only ones that fit all around.

Jennifer also experienced issues with fit and resorted to wearing a men’s top at work as well as for exercise.

Jennifer stated,
I can wear a men’s large and it feels more comfortable and my flab is not bouncing all over the place. Like a women’s XL, I can’t even DREAM of putting that on because it is not made for anybody with a chest, that is probably a bigger problem for me than just being overweight is finding things that fit my chest. I have to wear men’s shirts at work and most shirts are not made for women with muscle. I can’t even raise or cross my arms with the women’s (shirts). I don’t like having my back showing and I would rather be covered up so I wear the guys stuff.

Next, the second coping behavior mentioned in reaction to continual disappointment with fit, was to significantly reduce shopping or to stop shopping all together. Here are some examples of those behaviors.

Karen stated,

Athletic tops that I like are harder to find, because I’m more self-conscious about my upper body. Athletic tops are generally too fitted and short for my liking. I rarely shop for athletic tops because it is so difficult to find one that I feel comfortable wearing.

Donna stated,

I like fashion but that is not important to me in my workout clothes. I just don’t buy them. When I lose 30 pounds I might feel differently, right now they are just clothes and they are going to get sweaty so just want to get in and do my thing and get out.

Third, two of the women mentioned how much they enjoy getting hand-me-down clothing from other friends. Here are some examples of that behavior. Cynthia stated, “So, you know I usually get some of my best clothes from other peoples rejects and that way I get to not have to go shopping. I am having a small aneurism just thinking about shopping.” Susan stated, “My favorite top was from Old Navy and my sister bought it for herself, but it was too big for her, so she gave it to me! I think she paid 15 dollars for it and I love it!”
3- Wearing and Exercising.

The third part of the first objective is to discuss the experiences wearing and exercising in athletic clothing. Once more, when I state personal athletic clothing, I am referring to items that were selected and purchased by the participant. When I say Nike brand athletic clothing, I am referring to the Nike brand clothing items that were selected by the participant, purchased and shipped by me.

This section discusses the participants’ experiences wearing and exercising in personal clothing and Nike brand clothing. Women had physical and emotional responses to clothing that reflected both positive and negative experiences depending on how the individual perceived the fit, look, and comfort of the garment.

In order to determine the experiences wearing clothing I first asked, *aside from the Nike (brand) clothing I sent you, what do you normally wear for exercise?* Thirteen women reported wearing a unisex cotton t-shirt. Three women said they needed to wear two bras during physical activity. Four mentioned that they exercise in men’s basketball shorts while 6 said they wore a type of cut-off sweat pant or cotton capri. The positive emotions listed about these items were that they were comfortable, happy, good, and casual and that a level of comfort has been established with these items. The negative emotions mentioned about the same items were stated as uncomfortable, self-conscious, huge, fatter, fat, dumpy, heavy, wet and frumpy. Two women felt indifferent about their personal athletic clothing. See a chart of emotions described in clothing- Appendix K (Experiences per Participant).
The actual exercise experience in personal items ranged from positive to negative. Here is an example of a physically negative experience in personal athletic clothing. Here is Tammy’s response to the question, *Can you describe the material of your personal athletic clothing?*,

Tammy stated,

> Umm I have sensitive skin so I have to be careful to wear things that aren’t going to be abrasive so they are mostly cotton and soft to the touch and umm my undergarments are 100% cotton so I am mindful about that. This one time I got a really irritated dry rash and it is not a yeast infection rash it is totally different, and I was having a problem with it right on my hips and right on my bottom apron roll kind of towards to the front because my pants are getting loose and I didn’t know what was causing it and so they would twist when I was working out and rubbing and causing chafing and between my legs when I would use the elliptical I would get a really bad rash all up and down.

Here are some responses that show the range of experiences in the Nike brand clothing. In response to the question, *How did the clothing make you feel?*

Jennifer states,

> It would make me feel a little frumpy because the options are very few. So, not very put together not very active looking it just looks like you have maybe on a sweat pant and a t-shirt, it doesn’t look like gym attire.

Comparing personal athletic items to the Nike brand, there were positive and negative emotions as well. Eleven capris were ordered, three shorts, eight tanks and six t-shirts. In response to the question, *How did the clothing make you feel?* The positive comments about the Nike brand clothing items were nice, great, comfortable, sturdy, normal, relaxed, comfortable, hopeful and cool. The negative comments about the Nike brand clothing were they felt “too new”, awkward, not great, and too cool. Two of the 14 participants said they felt indifferent about the Nike brand clothing items.
Here are some responses’ that show the range of experiences in the Nike brand clothing. In response to the question, *How did the clothing make you feel?*

Cynthia stated,

> Umm, well when working out in them, the pants you know uh were they fit good and so they didn’t make umm me uncomfortable or anything with my, I wasn’t feeling uncomfortable with the pants but with the shirt I felt like I was needing to pull it out and was touching my skin too much or more than I am used to and it was distracting me from things that I was doing. They were good a little different but overall it didn’t make me feel any worse about myself but I am not sure they made me feel any better about my workout either.

In response to the question, *How does the Nike (brand) clothing makes you feel in comparison to your other clothing?*

Lisa stated,

> I feel a little more confident cause it is nice and new and has the swoosh on it somewhere, yeah it feels good.”

One thing that I noticed about the Nike items, which was not mentioned about their personal athletic clothing, was how cool and dry the Nike clothing kept them.

In response to the question, *How did you feel in the Nike (brand) clothing?*

Here are a few examples of participants describing the experience of the fabric. Amy stated, “Dry, I didn’t feel like I had been sweating, I didn’t even know that was going to happen, I had never heard of dri-fit. I had to research that.” Cynthia described her experiences with the fabric by stating, “Whatever that stuff is that pulls the sweat off you, that is kinda cool.” Julie stated, “Cool- temperature stayed down, you don’t seem to get as sweaty.” Finally, Tammy stated, “I felt relaxed and comfortable in them. They are much cooler to workout in.” The experiences have a common theme of curiosity, and physical positive reaction to the fabric.
The experiences wearing and exercising in clothing varies greatly depending on the individual and type of clothing that is worn. Some women feel safer in their personal athletic clothing while some feel more comfortable in the Nike brand items. Not surprisingly, this finding confirms the predicted result that clothing is a very personal experience and varies greatly for each individual.

4-Social comparison.

The fourth part of the first objective was a finding of social comparison experiences. Women shared how they felt in public and how they compared themselves to others when exercising. Some felt out of place in their personal clothing items and then felt normal in the Nike brand clothing. Some shared how they feel stronger or weaker compared to others when working out as well.

Here are some examples of how the group participated in social comparison in their personal athletic apparel items. These are some responses to the question, *When you exercise, under what circumstances, if any, do you worry about the way you look?*

Donna shared how she struggles to go to the gym because she compares herself to others.

Donna stated,

I am still getting over the anxiety of being embarrassed about going to the gym. People go to the gym to get healthy and I am deserving of being there but I am having issues with stepping inside the door.

Cynthia observed,

I don’t go to a gym for that very reason there are a lot of poser people and they are all wearing their best clothing and are just there to show off and the gym doesn’t work for my life style. I have a history of joining a gym for one week then never going again.
Another perspective came from Melissa who does not think about the way she looks when she exercises. Melissa stated, “Uhhh not really. I guess I don’t really care (laughter) if I am, uhhh it’s more about my workout than what I look like I guess. In the pool, I just roll out of bed and show up.” Melissa prefers to swim in comparison to Donna and Cynthia where they walk or elliptical. When you swim, you are wearing more revealing clothing, however, you are submerged in water and completely covered except for your walk to and from the pool.

Here Laura shares how she feels in the Nike brand clothing and how she engages in self-comparison. In response to the question, How did the clothing make you feel?, Laura stated,

Like oh wow, I actually got something that I can wear from Nike. I mean you know it is like OMG (oh my god) this actually fits me and Nike made this. I teach a class and one of the questions that we do is the two truths and a lie and I said, ‘I am part of a Nike research thing for exercise clothing’, and nobody believed that. Everybody though it was the lie, and I said, ‘No it is the truth. I really am doing a thing for Nike’ and they were like wow, well, I usually tell them my weight, and I am big and beautiful is what they say and they started laughing and I told them that Nike wants to make sure they are hitting all aspects of everybody and I happen to be one of those aspects (laughter) and everyone was like really? And later on, I had one individual come up to me and say, they actually have plus size clothing? She was a little heavier than I was and I said yeah, I was amazed too because I would search on line and never be able to find anything so I mean for the brand and for the way the pricing yeah I could see Nike that price range and I guess I was fortunate enough to be a part of the study and test pilot to be able to have that. Other people, no one said anything and I’m gunna tell you and I was careful about how I approached it because I didn’t know if anybody else was piloting with you from my town so I was conservative about it so if anybody asked I didn’t say, oh this is what I got, what I said was oh yea I’m trying out my new workout outfit and every was like I really like it, ohhh that is from Nike, nice I like it! Nike makes it? And I said yeah I like the way the sleeves are and everything and other than that was it. I was the one who made the
comment. It made me feel great like I was being a part of the group you know? Most of the women that are there that I work with the, if I had to, there are only two other women who are close to my size and three of the other women are very tall so your talking they weigh as much as I do but they are 5’9’’ and so it felt good to be able to, I felt like an equal and in the exercise world I guess. I just felt like I was in, I was able to, even though I couldn’t kick my leg all the way up, I knew that was me and that I wasn’t being restricted, it was because I couldn’t move my leg, it wasn’t because OMG (oh my god) these sweats are bothering me or they are sticking to me.

Laura shares a lot of different aspects of wearing the Nike brand clothing. My conclusion from Laura’s response is that since she was able to talk about fitness clothing with other women in her workout class and that made her feel included and part of the group and therefore normal. I believe, when she exercises in the Nike brand clothing, she feels nothing is holding her back from maximum movement.

**Normalcy.**

Another experience that occurred for four women, when wearing Nike brand clothing, was a feeling of normalcy. During my second interview with Amy she shared with me the experience she had wearing the Nike brand clothing at a boot-camp fitness class. Other people in the class had commented on her outfit and I asked, *How did those comments make you feel? I mean, having the other woman and the trainer giving you positive feedback on your clothing?*

Amy stated,

I felt normal, I felt normal cause this boot camp isn’t just (pause) I can’t offend you, I am a big girl but the boot camp is not full of a bunch of fat people. It is full of people that either just want to change or get in shape or whatever. There are some very fit looking woman and I say ‘looking’ because they can’t touch me on those planks! (laughter) So, there are a couple of ladies that have on their cute little Nike suits and you know pants their little jackets so you know, I felt normal. And one of the ladies that wears those outfits, she is probably about a size 8 and you know, but she is really tall so she looks even thinner,
and um she came over with her cute little Adidas outfit and she made a comment. She goes ‘I really like that’ and another lady recognized the white striping, and she looked at me and says, ‘is that the legendary Nike?’ And I asked her if she worked for Nike and she said yes, and that is why you can’t call it by that name and not work there and that was it. But (pause) it made me feel normal like I had on workout clothes while I was working-out, just like everybody else. You know that is what it felt like. I felt normal.

Laura described her experience and stated,

It comes back to the fact that I think it’s stressful. Up to this point it had been stressful. And oh god my stress, I feel good and I feel like a new me and not that I feel like everybody else now I feel like I have something that is equal to everybody. I feel normal going into a workout, everybody else is wearing an outfit to workout in and Laura doesn’t have to come in with sweats. I am equal to everyone else in the same setting. I don’t feel off to the side. I am in the click.

Lastly in response to, What emotions do you recall when wearing the outfit?

Susan stated,

Especially with the shirt, I was more self-conscious than I remember being because it fit so tightly and was not flattering to my front chub rolls and so umm that was a little frustrating but I have worn the pants without the shirt since and just feel really relieved that they look really nice and like normal workout clothes not like, I don’t look any different than other people working out. It is not so much that I fit in but I didn’t stand out.

Here is what Heather said about wearing the Nike brand clothing.

Heather stated,

When I put the workout clothing on it’s definitely something that I would wear to the ball field. I would go to the grocery store, in whereas the other items that I have worked out in, I would go to the gym and go straight home. I was happy! I was smiling!

I interpreted this response, as her saying is that she feels more comfortable wearing the Nike brand clothing in public than her other personal clothing. Heather
confirmed this for me in another question. Here is her response to the following question, *How did the Nike (brand) clothing make you feel?*

Heather stated,

> They made me feel good they made me feel not embarrassed. Because I have a neighbor, I live on a dead end street and I have a neighbor who jogs three times a week, um, I would not be embarrassed to walk with her in these clothes, anything else I would have been embarrassed the reason why I didn’t know but yeah.

The sample also used the word ‘normal’ in a different manner. The term ‘normal’ was also commonly used as a term to describe smaller body sizes or shopping sections. More discussion on the word “normal” and its other uses is discussed in the unanticipated finding section.

The last social comparison behavior was for women to compare their physical abilities to others. Amy shared her story of swimming and how she compares herself to other swimmers in the class.

Amy stated,

> In swim class I am the only person, on average about 20-25 people, and I am on the only one who doesn’t wear the buoyancy belt, I don’t wear any support or anything and we are in an 11 foot dive well. You know, so it’s like I told the instructor, ‘are you sure you don’t want to wear a belt?’ and I looked at her and said ‘no, what’s the benefit of the belt, it is a flotation device?’ and I told her ‘no, I don’t want it.’ I made a joke cause that is what we do- ‘do you see all this buoyancy?’ (laughter), ‘I don’t need that’, she looked at me and kinda smiled and said ‘we’ll see how you feel’.

Social comparison is a common-place occurrence mentioned by the participants. As noted above, the group gave several examples of how they engage in social comparison with others in regards to clothing. They also compare themselves
with others in regards to physical ability. The next section will discuss clothing and exercise motivation.

**5- Exercise motivation.**

The last section of the first objective was to determine experiences with clothing and its effect on exercise motivation. The following questions were asked to determine experiences with exercise motivation and clothing. *How would you say the clothing impacts your motivation to exercise?, How do your clothing play a role in your motivation to exercise?, and Can you speak about clothing and your motivation to be active?*

There was a wide variety of experiences with clothing and feelings of motivation to exercise. The experiences ranged from women feeling encouraged and excited to exercise and others feeling no motivation. No one reported feeling less motivated to exercise due to the Nike brand clothing. However, some reported that their personal items occasionally contributed to decreased feelings of motivation. Clothing was found to both positively and/or negatively impact exercise motivation for ten women. Four said that it did not contribute to exercise motivation in any way. Additionally, three women said they have used clothing as an excuse to avoid exercise while others used it as a motivational tool. Here are some examples of their experiences.

In response to the question, *How would you say the clothing impacts your motivation to exercise?*

Amy stated,
My workout clothes get my mind set, I have my swim suit in my face at home, unless I have company over, I see it right there every day so yeah my clothes set my mind and I use it as a tool I guess you could say and I am looking at right now and all I can think about right now is tomorrow after work I get to go swimming, it is very motivating to see the clothes.

Cynthia talks about how workout clothing serves a purpose and she uses them to get into the routine. Here is her response to the question, *How do your clothing play a role in your motivation to exercise?*

Cynthia stated,

I think a big mistake people make is wearing workout clothes all the time. Certain clothes have a purpose and they should be used for that purpose. People in pajamas at the grocery stores drive me nuts! I mean your workout clothes put you in the routine, you put the clothes and do the action.

Here is another example of how Donna uses her workout clothing. In response to the question, *What activities do you wear them for?*

Donna stated,

They are kind of like my play clothes. If I am not going anywhere specific they are comfortable AND I also put them on as a motivation to go workout. So if I get up and put my workout clothes on I don’t have an excuse so I just go, even if it is to go outside and walk.

Lastly, Heather had a very impactful initial experience the first time she wore her Nike brand clothing. *Heather responded to the following question, How does your clothing play a role in your motivation to exercise?*

Heather stated,

Umm, the funny thing is that when I received the clothing that you sent, the next morning I got up at 5 o’clock and walked. So, I had the motivation to get
up and to go workout. I think it gives me more motivation to exercise that I have made in the past.

During our follow-up interview, four weeks later, Heather reported that she had not gone walking that week due to an injury. In her case, it is difficult to see if the initial impact of motivation lasted or not. Here is Lisa’s response to the same question,

*How do your clothing play a role in your motivation to exercise?*

Lisa stated,

> It is not a major driving force, you know like I said, the capri sweats I have had, I have had for 2 or 3 years. So, umm, they are not beautiful and fancy or trendy or new but they just cover me where I am need to be covered. So, I can stand on an elliptical, but it definitely feels good to put on workout clothes like the Nike clothes and go ‘hey, I look pretty snazzy!’

Lisa enjoys looking good in her clothing but it does not increase her motivation to exercise. Michelle shared a similar experience as well.

Michelle stated,

> I don’t think it does particularly. My lack of motivation to go to a gym or to workout at home or use the exercise ball or do a yoga tape or something at home, it is not tied to the clothing.

Lastly, Cynthia shares how she has used clothing as an excuse to avoid exercise.

Cynthia stated,

> I think if you have the right clothes, you know I think our brains look for excuses not to do things. Just like excuses to NOT quit smoking or why people need a cigarette. So, if something was restricting my arms that would be a good excuse and I do that a lot.

There were also some interesting responses to the question, *Can you speak about clothing and your motivation to be active?*
Brittany stated,  
When you look good it adds to the feeling good about the work I am doing. If it fits and it is comfortable, if it is looks good that is fun and practical and breathable, knowing that I am going to have fun clothes to wear that does add to the motivation.

Karen stated,  
I would say it (clothing) has a large role, especially getting something new, like when I get the chance I really wanted to work out, like that experiences of feeling confident when you are excited to work out, it plays a large role in motivation.

There was a vast range of experiences with clothing and motivation to exercise. It ranged from women feeling encouraged and excited to others feeling no additional motivation. Women used clothing as an excuse not to exercise because it was uncomfortable while others used it as a motivational tool. It appears that the importance of clothing is different for each individual. Importance of clothing is different for each person as well as the preferred styles of clothing they like to wear. The next objective explores the preferred styles of athletic clothing for overweight adult women.

**Objective # 2**

The second objective of the study is to describe the preferred styles of athletic apparel for overweight adult women. This was achieved through two methods. First, the preferred styles of athletic apparel were determined based on the Nike brand items participants selected. Second, it was determined based on the description of desired styles during the interviews.

First, here are the four Nike brand clothing items available for selection. The
preference of clothing combinations varied slightly. The possible combinations of outfits are tank top and shorts, tank top and capris, t-shirt and shorts or t-shirt and capris. Two of the women ordered the tank top and shorts. Five women ordered the tank top and capris. One woman ordered the t-shirt and shorts and the remaining six ordered the t-shirt and capris.

Figure 4. Nike Brand Capri
Figure 5. Nike Brand Running Short
Figure 6. Nike Brand Tank top
Figure 7. Nike Brand T-shirt
<table>
<thead>
<tr>
<th>Size</th>
<th>Tank-top</th>
<th>T-shirt</th>
<th>Shorts</th>
<th>Capris</th>
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</thead>
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<td>1-Blue</td>
<td>3-Black</td>
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<td></td>
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<td></td>
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<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
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<td>1-White</td>
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<td></td>
<td></td>
</tr>
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<td>6</td>
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Table 4.3. Nike Brand Clothing Ordered

Based on what the women ordered, displayed in Table 4.3, it is suggested that woman prefer either the tank top or t-shirt matched with the capri bottoms. However, during the selection and ordering process not all colors and sizes were available for each participant because Nike Inc. was out of stock of some items.

Of the participants, five women had to compromise what they originally wanted because the size or color was not available. Meaning, more than 30% of the sample was obligated to pick from even less items than originally anticipated. I personally experienced feelings of frustration and guilt when having to ask the participants their second choice. I was the person searching for the items on-line,
purchasing and shipping them to the participants and therefore got to directly 
experience the frustration of shopping as a plus size consumer. I directly experienced 
the frustration that was discussed in objective 1 in regards to shopping experiences. 
For further reading see (Appendix L- Reflexivity Entries-March, 13\textsuperscript{th}, 18\textsuperscript{th} and 26\textsuperscript{th}, 2012).

The second method to determine the preferred styles was through questions in 
the guided journal and the interview. Specific questions about athletic apparel were 
asked. For example: What would make athletic apparel more appealing to you?, What 
would you like to tell Nike Inc. about the products? Lastly, questions about preferred 
coverage, sizing, color, trends and overall impact were asked. And in the Guided 
Journal- Why did you choose the top and bottom?

In response to the guided journal question, Why did you choose the top and 
bottom?, the answers varied depending on what they ordered. Each woman had a 
different reason for selecting either the tank top or the t-shirt. Selecting between the 
tank top and t-shirt depended on individual physical and emotional comfort levels. 
Some chose the tank top to provide a wider range of motion through the shoulder and 
others selected the t-shirt for more coverage. Here are a few examples of the reasoning 
women ordered the tank top or the t-shirt. Melissa stated, “I chose the t-shirt because I 
am self-conscious about my arms. They aren’t as toned as I would like, and I don’t 
like to wear tank tops in public.”
Amy stated,

I chose the tank even though I don’t show my upper arms in public either. I 
figured I could cover up with a jacket. That wasn’t the main reason though; the
main reason was they eye appeal of the white chevron neckline. It was very flattering.

Cynthia stated, “I had concern about the shorts and how short they might be and it is winter and still pretty cold, the capri can go into summer. I chose the tank over the t-shirt because they (t-shirt) are more restrictive.” Brittany stated, “I chose the t-shirt because it was the most modest and I would be able to move comfortably in it. I didn’t want to expose my upper body too much!”

There were similar reasons across the women who selected the capri. All participants who ordered the capris said they did not like to show their legs. For example, one participant was insecure about a surgery she had. Melissa stated,

Umm, I picked the capris, I like pants. I have had surgery on both my knees. So, I have scars that I don’t even like to look at so I don’t think anyone else would either so I stick to capri length.

Melissa preferred the capri length to cover her scars while Lisa preferred to cover her legs because she felt her legs are too large to show.

Lisa stated,

I chose the black capri pants and black t-shirt because the tank top and shorts were not something I felt comfortable wearing. I don’t usually wear clothing that’s revealing and the shorts and tank top showed a little too much. I don’t feel comfortable in shorts because I have pretty big legs, and tank tops, I am not there yet to wear tank tops where I am want to be showing off my upper arms and I just don’t think it is flattering for a woman of my size to wear clothing like that when I am as big as I am. I think this is much more complimentary to my shape (capri and t-shirt).

In response to the question, *Why did you choose the top and bottom?* I can hear the anxiety evoked when simply talking about showing legs in public.
Amy stated,

The shorts? Absolutely not no way in ever ever ever ‘cause even the shorts that I wear by myself at home are long. I don’t like that the thighs show, no absolutely not and that is why I chose the capris. In regards to the tank top, I thought that maybe that would be more versatile for me because if I was at home working out I would not have to wear my jacket, and I have other things I can cover with and for comfort because I don’t show my arms, I don’t like them and I didn’t want to take a chance on the t-shirt fitting awkward around my arms. So, I thought the safest was the tank.

For the women who ordered shorts, their reasoning for ordering them and experiences wearing them were different. In response to the question, Why did you choose the top and bottom?,

Michelle stated,

I have never liked capris—I have very large thighs and calves and I worry that anything for tight fitting won’t work. I liked the look of the shorts with the white contrasting piping and the fabric is nice. Unfortunately, because of my dimensions I cannot wear them. The capris looked more form fitting and I didn’t like that so I went with the shorts but once I realized how short the inseam was, I didn’t want either one.

On the other hand, Julie had a completely different experience.

Julie stated,

The shorts looked cooler to wear then the longer capri pant. I originally thought about getting the capri but I think it worked out better that I got the shorts because they are very cool to wear and I carry all my weight in my middle area so my thighs have never had the rubbing. I like the light and you are not sweating and your leg is exposed so then it is good.

The second question, What would make athletic apparel more appealing to you?, revealed interesting insight as to what this consumer group desires for athletic apparel. The majority of the sample (eleven women) said they would like more styles and options. The first response to the above question, for two other women, was to know where they could actually purchase them. However, that will be addressed at the
end of the results because that does not directly apply to the preferred styles of athletic clothing. This section will focus on the design needs of the consumer.

The requests for style changes varied from petite options in athletics (shorter rise and shorter legs), longer tops to provide more coverage and looser necklines without being revealing. There were requests for neutral colors with a small detail or trim detail of a brighter color. For example, one participant shared her desires for petite options. Melissa stated, “Since I am shorter, if you provide options in the rise, like tall, instead of having to roll it (waistband) over so it’s not up to your bra. That would be the biggest thing”.

Another participant shared her frustration with the current workout clothing options.

Susan stated,

I would like to see more options for tops. Especially tops, it is just ridiculous right now, they are either cut extremely short and you have to layer them or you will show everything and the V-necks are cut super low and your showing cleavage and that is not something I choose to do when I am working out, there is so much work that needs to be done.

Donna simply shared, “Sizing, price, easier to access, not on the Internet and I need to feel and touch because to return is a huge problem. I would prefer V-neck to scoops.”

In response to the same question,

Julie stated,

Ohhh I don’t know. Umm more selections. Uhhh, and umm you know nicer styles. Like the tank top that I got has that little bit of black trim on it and I just thought that made it look so much nicer than just the plain thing. Some more detail would be nice.

Susan shared,
I would like to see more options for umm tops especially tops there’s it is just ridiculous right now, they are either cut extremely short and you have to layer them or you will show everything and the V-necks are cut super low and your showing cleavage and that is not something I choose to do when I am working out or the armpits are too low and there is so much work that needs to be done, yeah that is really how I feel.

Jennifer stated, “(Laughter) More options and then color or style are a huge thing for me so the V-neck cause I don’t like things that are tight around the neck, color would be great and different style.” Heather stated, “I think the availability first, price second umm and I think the construction and design third.”

Laura stated, As far as when I got into look for it? Or overall in general? Mmmmm, well I guess I keep going back to the shirt because I feel so awesome in it, having a sexy cut that feels good so if I had clothes that made me good inside and appealing to somebody else then ill want it. Because I am going to tell you that if Nike had put that shirt out when I was looking for a workout outfit because of the cuteness, 45$ would hurt me but I would have bought it anyways because it was going to make me feel, I Think our workout clothing for women in my size really needs to appeal to the body image service because I am lacking in that and lacking in thinking I could be sexy or wanted or nurtured and the clothing nurtures and caters to my body image and I am more susceptible to buying it. Is this going to make me look sexy for my age and where I don’t look like my mother?

Tammy stated, I do like the umm like the color of my shirt I think a lot of times you seem really drab with like back grays and color is good it helps boost and elevate my mood a little bit. Having a wide variety of things to choose from to find what fits your best umm is important. I like V-necks so you don’t feel so constricted. Color and style options would be great. Yeah.

The next question asked, What would you like to tell Nike Inc. about the products?, revealed similar responses. The responses revealed suggestions for design and fit changes, the price of the items, feelings of appreciation, and strong feelings of
isolation in the marketing aspect of Nike Inc. advertisements. However, for this objective, only design and pricing suggestions made by the participants will be reported. The feelings of appreciation and isolation will be discussed in Unanticipated Findings.

Here are some examples of how the participants would like Nike brand clothing to change their designs.

Heather stated,

Thank you (laughter). Ummm, basically I would like to tell Nike all of the good things that I have mentioned and then just the two draw backs that I find is the price of the pants and the transparency of the shirt and to make them more available to you know us in the market place.

Brittany stated,

Umm I like them very much they surprised me with that. Consider V-necks- umm let me think about that and keep the tags small- cut out the tags that are on the back some clothes are using a soft tag.

Laura stated,

I would like for them to do some more, as far as the pants that I think they hit it right on! But, as big women we come in so many different shapes, maybe a 2X- (minus) and a 2X regular or a 2X+(plus), I don’t know only because I am a 2X but if you are coming on the, how do you know they are so fitted? and if I knew that I would have done the 1x and that would have been perfect but if they were a different weight I would have needed a 2X so it is hard to find the right one.

Jennifer stated,

I would say, uhh, maybe cut the underarms a bit higher so they fit more body styles better umm try not to use so much spandex because it is a plus size person doesn’t need to be stretched around. Have more options I saw they offered a tall in the tank top but only for the smaller size but not for the plus size and do they not think that plus size women have different heights? so that would have been a good opportunity to get a better fit.

Susan stated,
I think that the top will always be a struggle for plus size industry because people are shaped so differently and they carry their weight so different, so I really hope that they plan in and realize that one fit is not enough and a normal person for a society that is failing right now in exercise and they have a huge amount of power and say in the athletic community to be able to open doors for people that don’t have a place to go right now.

Lastly, Karen stated, “Nike should mass produce the pants, and the length of the top is too short for me so make the tops longer or give more options.”

Next, questions about preferred coverage, sizing, color, trends and overall impact were asked to further clarify their desired style. Of the fourteen participants, thirteen said they prefer to be modest during physical activity. They do not want to expose several parts of their body. However, one participant said she doesn’t mind being “a little revealing”. In terms of sizing, eight said they prefer a tight bottom with a looser top, two said they like both loose bottom and top, and four said they like clothes snug for support underneath but loose on-top for mental comfort. The next question regarding color determined that all 14 women like either black or dark grey bottoms (shorts, capri, pants). As for the preferred colors on top (t-shirt, tank-top or sweatshirt), five said subdued or black. Two said they like dark red, purple and jewel tones. The remaining seven women said they would like a subdued top with some color detail and/ or piping accents. (See Figure 8. Piping Detail).
Some also mentioned a chevron detail or the brand logo embroidered in a bright thread would be nice. In terms of trendiness, the entire group said they prefer basic, classic and simple athletic clothing. Two stated it might be ‘nice’ to have some more fashionable options however, they were unsure a fashionable style would look pleasing on a plus size figure. Lastly, when asked about the impact or overall attention they wanted to receive from their clothing, they all responded with a definitive attention avoiding. See Table 4.4 for responses from each participant.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Coverage</th>
<th>Sizing</th>
<th>Color</th>
<th>Trendiness</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisa</td>
<td>Modest</td>
<td>Looser- it’s more comfortable to squat in</td>
<td>More grey black</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Karen</td>
<td>Modest</td>
<td>Pants tight top loose</td>
<td>Blacks</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Name</td>
<td>Modesty</td>
<td>Neckline</td>
<td>Color</td>
<td>Style</td>
<td>Avoidance</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>--------------</td>
<td>----------------------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>Cynthia</td>
<td>Modest in public Open at home</td>
<td>Tight underneath loose on top</td>
<td>Dark red or purple</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Amy</td>
<td>Very modest</td>
<td>Tight but looser on top</td>
<td>Basic color with a small detail</td>
<td>Classic</td>
<td>Avoid</td>
</tr>
<tr>
<td>Donna</td>
<td>More coverage</td>
<td>Supported underneath but loose on top</td>
<td>Dark</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Melissa</td>
<td>Very Modest</td>
<td>Loose top and bottom</td>
<td>Black on bottom color on top</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Susan</td>
<td>Modest</td>
<td>Loose top and tighter bottom</td>
<td>Subdued with a little pop</td>
<td>Classic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Michelle</td>
<td>Modest</td>
<td>Snug for support but loose for comfort</td>
<td>Subdued-black on bottom-color is ok on top but not bright</td>
<td>Boring</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Jennifer</td>
<td>Modest</td>
<td>Snug on bottom and loose on top</td>
<td>Subdued</td>
<td>Would love fashion</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Laura</td>
<td>A little revealing</td>
<td>Tight bottom and slightly loose top</td>
<td>Subdued</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Brittany</td>
<td>Modest</td>
<td>tighter around hip and waist but loose on top</td>
<td>I would enjoy more color and piping detail-I prefer darker color b/c of sweat-love accent.</td>
<td>Basic</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Tammy</td>
<td>Modest</td>
<td>Loose</td>
<td>Subdued on bottom-color on top</td>
<td>Basic simple</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Heather</td>
<td>Absolutely Modest</td>
<td>Depends-fitted run-looser yoga</td>
<td>Black bottom-colored shirt</td>
<td>Simple</td>
<td>Avoiding</td>
</tr>
<tr>
<td>Julie</td>
<td>More Modest</td>
<td>Loose fitting</td>
<td>Mostly solid color</td>
<td>Classic, conservative</td>
<td>Attention avoiding</td>
</tr>
</tbody>
</table>
In order to completely understand what apparel items the participants felt most comfortable in, I asked, *Of all the clothing you have for exercise what do you feel most comfortable in and why?* The groupings of items ranged from all Nike brand items, all of the personal items and a mix of both the Nike brand and personal. Five women said they really like the Nike brand and that is their favorite. Four said they just like to wear their own items because that is what they are most comfortable in. Lastly, five said they like to match one Nike brand clothing item with a clothing item of their own.

Here are some examples of their preferences’. Heather stated, “Umm, at this point in time I’d say it would be the Nike clothing umm and I think it is because I feel nice in it.” Brittany, who is a horseback rider, stated, “My riding gear is my favorite, I know that it serves a specific purpose and everyone else knows what I am going to do.”

Laura stated,

> What I got! (laughter) because I usually just wear my sweats or I wear these little capri sweats like sleeper swears and that is what I would wear and they are cotton and after a while in cotton everything gets wet and heavy and so it is just like uhhh.

Jennifer stated,

> The Danskins and my Old Navy shirts because they fit my body style the best and umm the comfort level is already there because they are not brand new. The fabric is different and I guess I prefer the cotton feeling better than the nylon feel.

Susan stated,

> Definitely the Nike pants just because seriously they are just the best material and the best fit and I have really loved them. My favorite shirt is a shirt that is made out of similar material that I got from my sister from old navy and it was too big for her and it is more of a tunic cut with a wide band on the bottom so
it is loose enough that it doesn’t show my fat rolls and it doesn’t slide and the band on the bottom keeps it from riding up so that is my favorite top.

Melissa stated, “Umm. I feel really comfortable in the ones you sent because they are so similar to the other ones I already have. Yeah, I think so, the Nike clothes because it is what I am used to.”

Donna stated, 
Umm. Probably the Nike pants and a t-shirt of my own collection, I have a t-shirt that I wear that is long and had longer sleeves and it is not workout shirts per say but it is cotton and my sports bra.

Lisa stated, 
I think I’ll wear these more often the pants, I think when I start to firm up a little more I’ll feel more comfortable using the shirt I’ll wear the pants with the t-shirt. I have some other yoga pants that I wear sometimes around the house but I don’t wear those working out cause the pant legs are a little long. And I LOVE the pointed waistband on the back of my hips I like that feature, if feels good it feels like it supports my butt a little. It gives more shape or something.

The wants and style needs for this consumer base needs to be understood. It is apparent that each participant has a different comfort level or preferences of style and fit. Clearly, further exploration of how to stylishly cover the body in ways that the consumer feels comfortable is needed.

Objective # 3

The third objective is to determine if clothing for physical activity among overweight adult women is a factor to engaging in physical activity.

In order to determine if clothing among overweight adult women is a factor to engaging in physical activity the following questions were asked, (Guided Journal)
What are the factors to being physically active?, and (Interview) How important do you see clothing in relation to other factors that influence whether you are physically active? The answers revealed there are several factors that contribute to engaging in physical activity. Below is Table 4.5 of the factors reported in the guided journal in response to the question, *What are factors to being physically active?*

<table>
<thead>
<tr>
<th>Factor</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>8</td>
</tr>
<tr>
<td>Motivation</td>
<td>4</td>
</tr>
<tr>
<td>Recovering from injury</td>
<td>4</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Weather</td>
<td>3</td>
</tr>
<tr>
<td>Mind set/ Body image/ mood</td>
<td>3</td>
</tr>
<tr>
<td>Access to facilities</td>
<td>2</td>
</tr>
<tr>
<td>Fun</td>
<td>1</td>
</tr>
<tr>
<td>Finances</td>
<td>1</td>
</tr>
<tr>
<td>Partner to workout with</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.5. Factors related to exercise

It is worth noting that no one mentioned clothing as a factor when asked in the guided journaling. However, when verbally asked the importance of clothing during the interview, the responses fell onto a continuum. Women specifically brought up the importance of shoes as an item that was more salient than clothing. The two main questions asked during the interview were, *How important do you see clothing in relation to other factors that influence whether you are physically active? and To what extent is clothing an issue in whether you engage in physical activity?*

The first question was, *How important do you see clothing in relation to other*
factors that influence whether you are physically active I have listed the responses in an order that I feel represents participants who see clothing as very important, to those who feel clothing is not as important in relation to other factors that influence physical activity.

Susan responded,

A lot. Time, money, location and transportation and being able to find a place that is not geared towards being a meat market or being umm the business side of it being like really pushing personal trainers and stuff like that. I need a place where I have access to anything that I need, so that whatever I need to work on that day, I can do that and I don’t want to feel judged when I go, I am the harshest judge on myself anyways so being able to going to a place and feeling comfortable when you are there is really extraordinary important. The gym that we are going to right now is twice as much as two others that we could have chosen because of the comfort and the location. Clothing is part of that too, I have to wear clothes that are going to be comfortable and not stand out and not be uncomfortable for someone else to look at me wearing it is already a challenge and you kind of get a surprise like OOHH you know. It is not, the gym that we chose is never, has never been a look of disgust but the gym we used to go was turning into that. So we decide don’t to go there anymore.

Karen stated,

Um, I would say it is a huge factor other than how I feel health wise it is probably the hardest factor. Other factors might be finding time, or paying for a membership…I guess I am kind of biased because I get a gym membership free, like the cost of it isn’t a factor for me right now, later it might be but it would be low, because it would be worth it. I guess time is up there, with work and taking my time and everything, for me working out- I feel better after I am done, so I usually try and make time for it.

Jennifer stated,

It would be just as important to me, if the clothing doesn’t if you’re not comfortable just as if you’re not comfortable in the gym you’re at you’re not going to do anything. If you don’t like it you’re not going to put it on.

Amy stated,

Clothing is very important; there is nothing worse than having to pull your shirt down. I can move and stretch and doing wall pushups I am not worried
about my shirt coming up I mean I have stopped in the past in the middle of a workout to pull my shirt down and it has messed up my heart rate and if you don’t have to worry about that you have a better workout. It’s very hard to relieve stress when you’re stressed about your shirt rolling up.

Lauren stated,
I didn’t think it was important until now. I have never felt so good before! I mean I had, I have already been doing the workouts and saving the time to do them but I had no idea clothes could make me feel so good.

Heather stated,
I think it is pretty important I think that um if you don’t have the clothing you are not going to work out if you have the clothing you will make the time you will find the place.

Melissa shared,
I think it probably is you know how the clothing fits and if you are comfortable in to be in public if you know that is where you work out I think it is important for women. You don’t want to be so uncomfortable that you are adjusting your clothes all the time or think that people are looking at them so how they look in their clothing. A couple of my co-workers has trouble working out in public she doesn’t feel comfortable doing that, sooo. She would never go to Zumba in front of everybody. I am pretty confident and don’t care too much what anyone else is thinking, and yeah I get out there and try different things, I do Zumba and I am going the wrong way half the time but I don’t care.

Michelle shared,
I think it is umm, it is funny because I have this riding and other exercise, riding I am very motivated no matter what I force myself to wear whatever I have because I have to do it besides of comfort or tightness I just gotta go so I wear, in that case I wish the clothing were I like them but I’ll just do it anyways, as for other exercise I have the gear I am just not that motivated to go out and use them for physical activity.

Julie stated,
I work, and I actually have a very stressful job and umm it is long hours and you don’t always get out like my hours are 730- 4 but I don’t always get out at 4 sometimes I don’t leave until 5. I think you need to have clothing ready to go you have to have a couple of outfits that you know you like so you are ready to go and you can get in them quick. You can’t spend time looking in your closet looking for stuff.

Brittany states, “I think it is probably the fourth of the five factors. It is part of the
Donna stated,
    Well, setting a schedule and knowing what I will be doing when I get there. That takes the guessing out of it. I will be prepared already if I know I am going to the gym. I already have them on or ready to put on.

Lisa stated,
    They are not a huge priority I know some people will say they have a huge library of workout clothes to choose from and as long as I have something to throw on and I have some quality shoes are more important to me but clothes are not a huge priority I have never really been a close monger.

Cynthia stated,
    Well, I think like I was saying I think people use it as an excuse, oh it’s uncomfortable or my clothes are dirty so ha-ha I think having the right equipment, is important. Like I have a punching bag at home and that makes it easy but if it was at my friend’s house that would just be another hurdle. That eliminates another excuse about having to go somewhere.

Tammy stated, “Clothing is not an issue at all. It’s nice but in relation to the other factors? no, it’s a non-issue.”

Here are the responses to the question, *To what extent is clothing an issue in whether you engage in physical activity?*

Jennifer stated,
    It’s a huge issue if you are not comfortable in the clothes you are wearing then you don’t feel like going to try something new or engage in something without feeling self-conscious or judged by the people around you.

Heather said, “I think it is a big issue I think if you have clothing readily available to you, if I have the clothes available for myself I would work out more.”

Karen stated,
    Well, it’s an issue. If I didn’t have workout clothes available I wouldn’t work out in just anything. I wouldn’t work out in a top for just everyday- not because of the fit but because it would be uncomfortable, and yeah…. I mean
if I am not comfortable in my clothes I am not going to work out.

Laura stated, 
It comes back to the fact that I think it’s stressful. Up to this point it had been stressful. And oh god my stress, I feel good and I feel like a new me and not that I feel like everybody else now I feel like I have something that is equal to everybody. I feel normal going into a workout, everybody else is wearing an outfit to workout in and Laura doesn’t have to come in with sweats. I am equal to everyone else in the same setting. I don’t feel off to the side. I am in the click.

Amy stated, 
Personally, it is very important, umm to look nice and to feel good and the clothes that I wear have a big part a huge impact on everything that I do. At work, at the grocery store, you know working out walking anything. Umm and it’s not the attention. K, I am not, if you didn’t know and you saw me you, you could probably misconstrue that and think that you know I am a attention wanting hog or something, it is quite the opposite. I am not wearing the outfit for you. Just to put it bluntly, not for you. I don’t care you know if you know Ms. Jones likes it or if that guy likes it I really don’t care because it how I felt you know it I show I feel and I am sure there are some people who do not like my style but I don’t care and I know there are women who do those that feel comfortable enough to say it to me you know. And men as well I have several men co-workers they crack me up one in particular. If I’m wearing something like he come and tell me I like that and that is very nice and and thank you and I welcome those compliments but I am not wearing it to get them. You know I’m wearing it because it felt good and I liked it and I thought it was cute. I am a very self (laughter) not absorbed but it is all about me, it always has been, I have never been that girl I have ever ever dressed a certain way to fit in or to make somebody else happy I have never done that. SO the impact of clothing for me are very very important.

Michelle stated, “Umm as I said before as long as the clothing is comfortable then it doesn’t make or break whether or not I am active, if it is too tight that will restrict my desire to be active.”

Julie stated, 
I don’t really think it is an issue. I do like the more comfortable things. I mean at work I just wear my uniform and walk around the courtyard and that’s not comfortable but I do it anyways. Well it is not too bad because they make large petite scrubs. Comfortable is good when you are walking then you don’t get
any, well it doesn’t, you know chaffing or soreness that kind of stuff.

Melissa stated,
It is really not. I mean, I am going to work out whether I have the right clothes? I guess if that is the right word to use and it is not the deciding factor to whether I go to the gym or not.

Tammy stated, “It’s not the main issue but, it’s not a bad thing if it feels good on and gets you going I guess.”

Brittany stated, “Not (an issue), it enhances it. but most important is doing the workout with clothes that give the freedom to move.” Susan stated, “It’s a non-issue because I HAVE to work out but I can defiantly see where is people don’t have more options, it could be an issue. I have to do it so I push clothing aside.”

Here are the examples of shoes as an important factor.

Lisa stated,
They (clothes) are not a huge priority. I know some people will say they have a huge library of workout clothes to choose from and as long as I have something to throw on and I have some quality shoes are more important to me but clothes are not a huge priority I have never really been a close monger.

Donna also felt that the shoes were very important when it comes to being active.

Donna stated,
Well really it is about shoes. If I am somewhere and I need to be active, I will dress the part, but if I am wearing regular clothes and non-functional shoes, I won’t engage, so it is the shoes that are the most important.

Each woman shared a different relationship with athletic clothing and its importance in relation to other factors that influence physical activity. Some felt that clothing was very important while others felt that exercise was a necessity regardless of the clothing options available. Women in this study feel clothing were not a factor
to being physically active. Additional factors that revealed themselves during the interview were transportation, shoes, location and environment. A safe environment was mentioned as a factor to engage in physical activity because, if you are worried about people looking at you, there is little attention on the activity. Women in this study noted that clothing is a way to reduce feelings of worry but not a key factor to engage in physical activity.

Each woman had her own opinion regarding clothing is a major issue in whether they engage in physical activity. Some said it is a huge issue because if you intend to exercise then you need comfortable clothing. On the other hand, some women said it was not an issue and exercise was imminent regardless of the options.

I believe there are countless factors and issues that contribute to being physically active. Each participant shared unique barriers, factors and issues that contribute to being physically active. The importance of clothing in relation to other factors is different for each participant due to unique life situations.

**Objective # 4**

The fourth objective was to describe how overweight women view the purpose of athletic apparel in relation to physical activity. In order to determine how overweight women view the purpose of athletic apparel in relation to physical activity, they were asked the following questions, *What is the purpose of athletic apparel? and, What are the circumstances when athletic apparel is working for you?*

The answers to those questions revealed three main purposes for athletic apparel in relation to physical activity. The purposes are: (1) to set the tone/ get the
mind set for physical activity, (2) to avoid attention from other gym goers and/or people and, (3) to support the body during physical activity.

The first purpose of athletic clothing is to (1) set the tone and get the mind set for physical activity. Several women said that exercise clothing should only be worn for exercise and not lounging. Lounging removes the ‘trigger’ for your body and mind. Here are examples of how five of the women used clothing as a method to set the tone.

Cynthia stated, 
I think a big mistake people make is wearing workout clothes all the time. Certain clothes have a purpose and they should be used for that purpose. People in pajamas at the grocery store drive me nuts! I mean your workout clothes put you in the routine, you put the clothes and do the action.

Karen stated, “My clothes, I plan around my clothes that I want to work out in, if they are out and set then I put them on.” Heather stated, “When I have the clothes on I feel like I am supposed to be doing something.”

Julie stated, 
I think you need to have clothing ready to go. You have to have a couple of outfits that you know you like so you are ready to go and you can get in them quick. You can’t spend time looking in your closet for stuff, that’s just another excuse to not do it.

Amy stated, 
My workout clothes get my mind set, I have my swim suit in my face at home unless I have company over, I see it right there every day so yeah my clothes set my mind and I use it as a tool I guess you could say and I am looking at right now and all I can think about right now is tomorrow after work I get to go swimming, it is very motivating to see the clothes.

The second purpose of athletic apparel is to avoid drawing attention from other gym members and/or people. My sample explained that they do not want people looking at them while they are exercising because it makes them feel self-conscious.
Here are some examples of those who want to avoid extra attention that may be brought on due to clothing.

Jennifer stated,
Women need to feel comfortable with themselves and it (clothing) should give them some self-assurance that they look good and that they aren’t going to be embarrassed by what you are wearing in public and you are not going to cause a negative reaction by the color or shape of the clothes, all of that plays a role into them going out and being active anywhere.

Amy stated,
I see them, and no offense to a friend of mine who is a size 2 and, I know why she wears it because, she wants to get attention, she wants that cute guy to look at her and she told me so, I am the complete opposite but that is not what I am there for. I don’t want you to look at me at all! That is not me.

Lisa stated, “I don’t want to get any attention because I don’t want to be bothered. I am not trying to pick up anybody or show off. I am just there to do what I want to do then get home.”

The third purpose of athletic apparel is to support the body during physical activity. Clothing should not physically distract the wearer with rubbing, chafing, pinching or pulling. It appears that if clothing is physically distracting then, it mentally distracts from the workout. Here are some of the responses to the question, “What is the purpose of athletic apparel?” Michelle stated, “The purpose of athletic apparel is to optimize your ability to execute whatever athletic endeavor you are doing. It needs to suit the activity in a way that optimizes your comfort while you are doing it.”

Susan stated,
It should cover me up and I don’t want to feel like I am being watched because, I am having to pull my pants up every two seconds or if I am moving fast on the treadmill and my clothes fit right. I am not worrying about if my fat rolls are giggling too much, and it is going to make a noise on the machine or
getting someone’s attention. I am not worried about what other people are thinking. I can focus on not falling off the machine and being able to pay attention to the way my body feels and the way my muscles move, and if I need to adjust if something doesn’t feel right. I am not distracted. I can pay attention to what I am doing.

Here are responses to the question, “What are the circumstances when athletic apparel is working for you?” that yield similar.

Heather stated,

It makes me want to walk longer and work harder because I am not tugging at it (clothes). I am not being weighed down with perspiration and I can concentrate on what I am doing as opposed to worrying about my clothes.

Melissa stated,

I guess you don’t even think about it if it is the right clothing, it is just not impeding what you are doing. You are just able to work out and not thinking about your clothing. So, that is how it works for me.

Brittany stated,

It has to be the right and appropriate item for the job. It has to be comfortable to move in so if I am hiking I’ll do long workout pants that are warm. The item has to fit the activity because, if not you have to fuss with them. I have a favorite shirt for yoga because it doesn’t ride up and my head isn’t covered by a t-shirt.

Here is an example of a participant experiencing no restriction from her clothing while also feeling like she ‘fit-in’ with the exercise group. Here is her response to the question, How did the clothing make you feel?

Laura stated,

…. It made me feel great like I was being a part of the group you know? Most of the women that are there, that I work with the, there are only two other women who are close to my size and three of the other women are very tall so your talking they weigh as much as I do but they are 5’9” and (pause) so it felt good to be able to (pause) I felt like an equal in the exercise world I guess. I just felt like I was in, I was able to, even though I couldn’t kick my leg all the way up, I knew that was me and that I wasn’t being restricted, it was because I couldn’t move my leg, it wasn’t because OMG (oh my god) these sweats are bothering me or they are sticking to me.
In conclusion, the three main purposes of athletic apparel for overweight women in this sample were to (1) set the tone/get the mind set for physical activity, (2) to avoid attention from other gym goers and/or people and, (3) to support the body during physical activity. Developing clothing that incorporates the determined purpose of athletic apparel is essential to having a satisfied consumer. This sample has clearly stated they want clothing that helps them get mentally prepared to exercise; clothing that is attention avoiding and clothing that is not physically distracting.

**Objective #5**

The fifth objective was to determine what coping behaviors overweight women engage in associated with social comparison of self to the cultural beauty ideal.

The coping behaviors were determined using (Figure 2) the Model of effects of social comparison on the constructional and evaluation of appearance (Rudd & Lennon, 1994). This portion of questions was the most challenging for participants to answer. There were several pauses, ‘sighs’, and ‘deep breaths’ taken during the responses. I got this feeling this topic was not pleasant to discuss. Responses slightly varied, nevertheless distinct themes emerged. See Appendix F for a chart of responses and a sample of coding methods (Appendix F- Sample of Coding Method). The following questions were asked to the participants.

*What would you say are the beauty standards of our society? Do you feel you meet the beauty standards of our society?* If no, the following questions were asked, *(Coping behavior A) How did you react to that? Do you keep trying to meet those standards? (Coping behavior B) Would you say you accept the standards but have*
given up trying to meet them? (Coping behavior C) Would you say you do not accept the standards and have internally redefined what is beautiful to you? (Coping behavior D) Or, you do not accept the standards and you participate in activism to change the cultural beauty standards?

Here are the question and the corresponding responses.

What would you say are the beauty standards of our society?

In order of most cited to least, the cultural beauty standards were described as thin, pretty, small waist, youthful, fashionable, perfect hair, shapely butt, confident, big breasts, tall, flat stomach, sexy and, graceful.

Do you feel you meet the beauty standards of our society?

All women responded no. These responses included laughter and a perceived tone of awkwardness. According to the model, if a person does not feel they meet the ideal societal beauty, then they are predicted to engage in coping behaviors. The following questions were asked regarding coping behaviors. The responses following each question show that several engaged in more than one behavior and often felt torn between feeling obligated to meet the society ideal of beauty and their own ideal of beauty.

(Coping behavior A) Do you keep trying to meet those standards?

Ten participants firmly agreed that they persistently try to meet the standard of beauty. Two said they try to meet their own version of beauty. Three, said they do not accept the standard and do not try to meet it. One firmly stated they refute the standard and in no way try to meet it. The findings here are complex because some women said
they do not accept the standard but they try to meet the standard.

(Coping behavior B) Would you say you accept the standards but have given up trying to meet them?

In regards to coping behavior B, six said they do not agree with the standard but have not given up trying to meet the standard. Two women said they accept the standard but have given up trying to meet the standard. Expressing her opinion on giving up trying to meet the standard of beauty, Melissa stated, “I mean, I think that is what everybody sees as perfect but you can’t be that person so you might as well be happy with who you are.”

(Coping behavior C) Would you say you do not accept the standards and have internally redefined what is beautiful to you?

Several (ten) had developed their own definition of beauty (coping behavior C). Additionally, four others clarified they waiver between believing societies definition of beauty and believing their own definition of beauty. When asked why they changed their minds, the four women said they simply have “good days and bad days”. Sometimes they feel good about themselves and experience self-acceptance and other days they don’t feel good about their appearance. Here is an example of how Donna waivers.

Donna stated,

When I get caught up in the superficial parts of life, yes, but, umm, when I am in the mindset of just loving me and accepting who I am regardless, then it is easy for me to let go of those trends.

The last coping behavior asked in regards to the model is, (Coping behavior D)

Or, you do not accept the standards and you participate in activism to change the
Only one participant agreed that she did not accept the standard and participated in activism to change the cultural beauty standards. She clearly refuted the standard and does not try to meet them.

Here is Amy’s response to coping behavior D, *Or, you do not accept the standards and you participate in activism to change the cultural beauty standards?* Amy stated,

I guess I do. Yeah I am very passionate about sharing information with people about food. This month at my work is food awareness and I am in charge of giving presentations about recipes and the importance of eating non-processed foods. I actually feel like they are listening and there are a few people wondering what authority do I have to say that. I mean look at me, but they have to know I am not talking about weight loss I’m talking about healthy eating.

Amy has defined her own concept of beauty and gives presentations in her workplace about health and nutrition.

In conclusion, all participants felt they did not meet the societal definition of beauty. According to the model, Model of effects of social comparison on the constructional and evaluation of appearance (Rudd & Lennon, 1994), they would engage in one of four coping behaviors each time they felt they did not meet the beauty standard. Overall, the majority of the participants did not identify with one singular coping behavior, they identified with one or more. According to this model, the participants are in a cycle of self-comparison and therefore not experiencing an increasing self-esteem or personal identity. Only one participant does not accept the standard of beauty and actively strives to change it. Other than that, the rest have engaged in several coping behaviors such as (A) trying harder to meet the standard,
giving up on trying to meet the standard, or (C) not accepting the standard and re-defining beauty for themselves. The contradictory responses to these questions display the internal struggle some women experience when attempting to achieve standards of beauty.

**Explanation of Unanticipated Findings**

There were several unanticipated findings in this study. Overweight women in this study felt isolated and left out of advertising for athletic apparel. They used dehumanizing terms to describe their bodies. Lastly, the word ‘normal’ was used to describe smaller figures and retailers that cater to smaller sizes.

First, while keeping in rhythm with a feminist perspective, I thought it was important to directly ask the participants, “What would you like to tell Nike Inc. about this product?” the responses revealed feelings of appreciation, suggestions for design changes (discussed in Objective #3), and strong feelings of isolation in the advertising and marketing of Nike Inc.

The feelings of appreciation were expressed in gratitude and an overall pleasure with Nike Inc. Due to the study, a few women had changed their negative perspective to a positive one about Nike Inc. and Nike brand clothing. Design suggestions are reported in Objective #3 and will be addressed further in the discussion.

The group reported that they felt underrepresented in the media and they wanted to see more advertising targeting plus size consumers. Only one participant knew that Nike brand clothing was available in their size. The remaining 13 said they
had no idea that Nike brand clothing was available 1X-3X for women. Some of them knew Nike brand clothing was made for plus size men, but not for women. The group requested that Nike Inc. advertise more and specifically to their market. The strong feelings of isolation in the advertising and marketing of Nike Inc. can be heard through the following quotes.

Donna stated,
I think they should spend more advertising dollars on the plus size aspect of what they are offering and not hide them in the store, give it a platform and let people know, the commercials right now they emphasize people who like, they have already accomplished goals and don’t need to work out and everything is made for THEM and, I think I should see people that look like me with the clothes.

Heather stated,
Umm I would like them (Nike Inc.) to make more available to us in the marketplace, like to see it in every sporting goods store in the marketplace whether it is pivot sports, or sports authority any place they normally sell the clothes, plus size should be able to get it there also. They should go through Weight Watchers or Jenny Craig or any of those weight loss programs and offer the clothing through there and you know I would want to see larger women wearing the clothing.

Amy stated,
I would like them umm to know #1 Good job, (laughter) and thank you um for even, you know, attempting because they didn’t have to. They just could have just been another company that doesn’t offer it. So thank you, #1 as far as the actual product that I have had the pleasure of trying on, keep doing it! (Laughter) you know, keep doing it and put it out there though cause how else are we going to know. I guarantee you that I am NOT the only woman my size that’s out there exercising. I can think of 20 off the top off my head and for a fact that one of them doesn’t wear athletic wear at all! She wears a t-shirt and jeans or capris, that’s her work out and her store of choice is Target for economical reasons and they have some but it is not, (pause) no she doesn’t know that it is out there. And if she knew that she could actually wear Nike, I think she would but I know she doesn’t know. So, Nike, my thing is that you have got to put it out there; there is a market for it unfortunately now, were the fattest country in the world. Yeah so, you know, obviously we are out there and, like I told a friend of mine, ‘I have never owned a Muumuu and, I won’t ever own one!’ I want to look cute and I am not trying to get tiny, I just, you
know, if I could dress cute at this size, it is only going to get better and, that is how I feel about it but they have to get it out there! Thank you, keep doing it and advertise.

In particular one participant, Karen asked me, “You never see a plus size model actually modeling, are they (Nike Inc.) embarrassed to make plus size clothing?” What Karen points out, has been documented in literature and, “women as represented in the media have gotten thinner and thinner” (Valdivia, 1997, p.227). These types of feelings are commonly found in literature that discusses symbolic annihilation. Symbolic annihilation occurs when a major group of people are underrepresented in the media and this leads to misperception about their role and worth in society. There have been several studies about the media’s limited yet consistent negative portrayal of obese people (Gaesser & Blair, 2002).

In the following quote, Susan demonstrates how impactful the media and large corporations can have on society.

Susan stated,

I want to tell Nike that they did a awesome job on the pants. Seriously, they are amazing and I really love them. I think that the top will always be a struggle for plus size industry because people are shaped so differently and they carry their weight so different, so I really hope that they clue in and realize that one fit is not enough and for a society that is failing right now in exercise and, they have a huge amount of power and say in the athletic community to be able to open doors for people that don’t have a place to go right now.

Susan also had an insightful response to the question, What are your thoughts about the Nike brand?

Susan stated,

Umm Nike is very well known for being athletic and really gearing their things towards athletic people or events they are known as the best in that field for workout clothes and stuff. Actually, it has been a conversation in my household that it is frustrating that we didn’t feel like we had an option to be a
part of that and I haven’t actually been able to buy any Nike things except for shoes since I was like in 6th grade and that is pretty much true for my family because we outgrew everything we had. I think it is really awesome that they are taking on the plus size industry. I think there is a really huge room for growth there and I hope that they will talk to the plus size people. I think there is an error in plus size industry because I don’t think they talk to the consumer because the clothes are not flattering for younger people or made out of material that is comfortable or cut the way it could be. I think it is brave of them to do it, it is a normal expectation that athletic people are going to be good looking people or easy on the eyes to photograph (pause) than majority of people are a lot smaller than me which is totally understandable so uhhhhhh it might be a task for them to keep that image and still be able to justify serving the plus size population. It will be interesting to see how that works out.

It is clear that advertising that includes the plus size product and person is important. Brittany brought up a relevant point when I asked her, *What would make athletic apparel more appealing to you?* Brittany stated, “How can it appeal to me if I don’t even know where it is? Nike should advertise on daytime TV.” She also mentioned that she wants to see the Nike brand clothing in the stores, touch the fabric, try on the clothing and confirm the quality of the garment before purchasing. However, these feelings of isolation are not the last unanticipated findings.

Another unanticipated finding was the dehumanizing terms participants used to describe their body parts. Instead of using anatomical terms to refer to a body parts, eleven of the women used terms such as chub roll, spare-tire, pooch belly, muffin top, saddle bags, side handles, chicken body (skinny legs and large torso), front ass, back shelf, apron rolls and cottage cheese to refer to certain body parts.

Susan stated,

Especially with the shirt, I was more self-conscious than I remember being because it fit so tightly and was not flattering to my front *chub rolls* and so umm that was a little frustrating but I have worn the pants without the shirt since and just feel really relieved that they look really nice and like normal
workout clothes not like, I don’t look any different than other people working out. It is not so much that I fit in but I didn’t stand out.

Cynthia stated,

I think rise is difficult when you are larger, I carry my weight in the front and I call it my front ass, (laughter), so I have a lot of that weight there….

This is often the same way that media stereotypes fat people and this makes a connection to popular terms that are stigma promoting. The terms used are comparable to langue used to ridicule women and to make them feel badly about their bodies, which may be an example of internalizing. “Internalization is the process of acceptance of a set of norms established by people or groups, which are influential to the individual. Internalization of cultural ideals is the extent to which individuals endorse cultural standards of attractiveness as personal beliefs” (Thompson, 2001, p. 183). This type of language is connected to stereotyping that continues to promote internalization towards larger women.

The last unanticipated finding was the use of the word ‘normal’ to describe 1) women that wear size XS-L and 2) retailers that cater to sizes XS-L. Heather and I were discussing where she would like to shop and purchase workout clothing.

Heather stated,

Umm I would like to see it in every good sporting goods store in the market place whether it is Pivot Sports, or Sports Authority any place they normally sell clothing, the plus size should be able to get it there also.

Here is Heather’s response to the next question, Can you speak to the importance of better understanding clothing as a means of understanding the physical activity patterns of women?
Heather stated,  
I think, because in the past, there has not been workout clothing comparable to the normal size or the small woman in the retail marketplace. I think that (clothing) has the ability to give so much more motivation. Umm, specifically more to me. That gave me so much more motivation than anything has in the past, if that makes sense.

This next quote was previously used to describe another situation. Melissa gives us an example of how the word normal is used to refer to a retailer that sells sizes XS-XL. Here is her response to the question, *What has been your experience with outfitting yourself with athletic clothes?*

Melissa stated,  
Well, let’s see, I don’t buy it very often because what I buy lasts quite a while. Let’s see, like before the stuff you sent it has been a while since I bought anything. I mean it is not hard to find, I guess I can shop in the normal stores. Ummm. I only wear a 1X so I don’t have a hard time finding things. I got my last pants at Kohl’s.

One of the participants, Michelle, shared her frustration in finding specific horseback riding athletic pants.

Michelle stated,  
I would have to go searching for them, they are out there somewhere and I would have to pay a premium. My friends who are normal size can wear blue and plaid and striped and fun colors but when you get into the plus size it is either black or tan.

Here is another example where Susan experiences issues shopping and uses the term normal. Here is her response to the question; *Do you think you encounter any issues when shopping for athletic clothes that are unique to women of your size?*

Susan stated,  
…. there is not a lot of options, like you can go into Target and the workout clothes for regular normal sized people is like a huge area and plus size women have 1 rack, and half of it is clearance and there is just not a lot of
options. Not a lot of colors. They aren’t cut to be flattering, like someone who is very thin is not going to have an issue. Like my middle skin roll is bigger than my bottom skin roll and to have something that is stretchy all around is going to make that middle tire look massive and if I didn’t have it, I wouldn’t have to worry about it, but it’s not cut to be flattering.

Lastly, Jennifer shares what her ideal shopping experience would be like. Here is another example of how the term normal is used in response to the question, In general, what makes for a positive experience when buying clothes?

Jennifer stated,

Perfect for me would be that I could find jeans, you know just everyday clothes and work clothes, all in the same place that has enough of a variety that you could build a nice wardrobe out of it, that is reasonable priced. I wear a size 24, umm and, so it is really on the brink of (pause) your able to find your size in a Fred Meyer, or a regular (laughter) or normal sized people shop, but on the plus size, if I were to go into a Lane Bryant’s, Catherine’s or Avenue, I am on the smaller scale. So, there is less. You are on the brink there’s really less in the regular stores and then there are even less in the plus size because it is geared for larger women than me and it is an unfortunate place to be.

Using the word normal or regular to describe smaller body sizes and retailers that cater to smaller sizes is perhaps another form of internalization. The women use the term causally and without hesitation. I see the term used as a way to inadvertently call ones-self abnormal and therefore odd.
CHAPTER 5. DISCUSSION

Before I begin discussing my findings, I feel it necessary to briefly reflect on the use of the word ‘fat’. Throughout my time writing my dissertation and developing as an academic I have found comfort in using the word ‘fat’. Initially, I was very cognizant about using words that were politically correct, such as overweight and plus-size. Perhaps my caution initially hindered my personal expression throughout my writing. My current point of view is that ‘fat’ is simply another descriptive term and I will use it synonymously with the terms ‘plus size’ and ‘large’ throughout the rest of the discussion and conclusion. There is literature suggesting that large people actually prefer the term fat because not using it reinforces it is a negative word for them and others (Wann, 2009). It is my intention to normalize and neutralize the word. (For further explanation see Appendix L Reflexivity, Entry- June 13, 2012).

Discussion of the Results

The tremendous amount of data in this study has left several areas open for theoretical discussion. This section will first discuss demographic findings. I will then discuss each of the objectives. This section will also compare the relationship of current findings to previous research. These objectives should not be viewed as mutually exclusive; there is considerable overlap among them but I separate them for logical convenience.
Objective #1

The first objective was to determine large adult women’s experiences with athletic clothing. In order to determine the vast experiences one can have with athletic clothing, this section is divided into five categories based on the interview questions. The categories are: 1- Experiences shopping for clothing; 2- Experiences dressing oneself; 3- Experiences wearing and exercising in athletic clothing; 4- Self comparison; and 5- Exercise motivation.

1- Experiences shopping for athletic clothing.

The findings of my study suggests that shopping for clothing can be a frustrating experience for a plus size consumer. My sample reported feeling frustrated in finding stores, sizes, styles, fit, color and comparable prices of clothing. Studies demonstrate that frustration experienced during shopping is a common experience for plus size consumers (Moin, 2011; Colls, 2006; Chowdhary & Beale, 1988; McReaddy, 1988; Cooper, 1989). Although Lane Bryant was mentioned as a reliable store, they only offer a professional style and not all plus size women want to dress in that type of style. Second, contrary to popular belief, the shopping process must take place in a brick and mortar store as opposed to on-line. Due to the unique shape and variety in body figures, plus size women prefer to actually try the clothing on before buying it. The Internet was initially thought to act as a time saver for working adults (Vandeventer, 1993). However, my sample contradicts this because they find it takes more time to order on-line, try it on at home then return the item because of poor
clothing fit. Fit is defined as how well a garment conforms to a three-dimensional human body. However, Ashdown and Delong (1995) suggest that the fit of a garment is a perception of the wearer.

Although online shopping was developed for convenience, it appears to have a negative convenience impact on plus size female consumers. My sample expressed shopping as ‘an exercise in frustration’. They shared similar feelings that there are not enough stores that offer their sizes. My sample understands there are more options online but they prefer to try the clothing on before purchasing. The women I interviewed were often told in a store they didn’t have their size; however they could order their ‘special’ size online. So, when they go to a store and are told that they don’t have their size available in the store but they can order them online. I feel there is a hidden discriminatory message behind that saying, ‘we want your money, and we just don’t want you in the store.’ Aside from being able to find clothing in the correct size, finding items that fit well was also identified as a major source of frustration.

The dissatisfaction of fit is an indication that the present sample is not satisfied with the way standardized clothing conforms to their body.

The frustration of clothing fit for plus size women has been found in previous literature. A study by Chowdhary and Beale (1988) reported that plus size women were dissatisfied with apparel sizing and fit. In addition, other types of frustration for large-sized women have existed in the form of “limited selection of styles, virtually no contemporary styles, and apparel retailers' and manufacturers' reluctance to be
affiliated with large sizes” (McReaddy, 1988, p. 20).

Other areas of shopping frustration were the cost of clothing items and the lack of color variety. The overpriced plus size clothing has been previously documented through a personal narrative (Cooper, 1998). Cooper’s narrative discusses how she feels clothing designers try to disguise and hide plus-size bodies. She shares her frustration in not being able to find fashionable clothing at reasonable prices. She feels the lack of clothing available for plus size women is form of fat hatred. Also, limited color options for plus size athletic apparel has not yet been reported in literature.

The major deficiencies identified in this study were a need for more brick and mortar retailers, better styles, more fit options, more color options and comparable prices to smaller sized items. In short, fat consumers want the same options and choices of other consumers. It would seem that as a good business practice, retailers should offer equal products at comparable prices for all body sizes and provide products that would meet the needs of a significant customer segment. Due to the limited sizes and style options available for plus size women at the moment, there appears to be a severe amount of anxiety surrounding the actual act of ‘trying on clothing.’ The anxiety stems from having difficulty finding a garment that fits, looks good, feels good, and is functionally

2- Experiences trying on clothing.

The second part of the first objective was to explore the experiences of people
trying on clothing. I found that there is an emotional process that occurs for plus size women when they are trying on clothing. The type of clothing was irrelevant and this process occurred for trying on athletic clothing as well as everyday apparel. Once the wearer has found an item in the apparent size, color and style they like, this process began. The process started with anticipatory feelings of how the clothing will actually fit. This occurs before the wearer even tried the item(s) on and this included asking such internal questions, ‘Is it going to fit?’, ‘How is it going to look?’, ‘It looks great on the mannequin but how will it fit on me?’, and ‘Should I have gotten a different size?’ The emotions described were nervousness, anxiousness, excitement and feeling hopeful that the item might fit correctly.

After trying the clothing on, the participants felt either relief or disappointment depending on how the clothing fit on them. Disappointment led to discouragement to shop further while feeling relief led to encouragement and optimism about clothing. If a participant felt disappointed in the fit, it was frequently attributed to their body’s incorrect shape as well as dissatisfaction with what the market was offering. If the participant was pleased with the fit, they attributed it to the designer of the clothing item.

Labatt and DeLong (1990) hypothesized that, when clothing does not fit, the consumer might perceive the cause as related to the body and not the clothing. According to my findings, Labatt and DeLong’s (1990) hypothesis is true. (Colls, 2006) has also found similar results to the present study. Colls (2006) conducted in-depth interviews with plus size women about their ‘bodily bigness’ and the emotional
experience when shopping for clothing. She found similar findings of dissatisfaction with their bodies when a clothing item did not fit.

My findings suggest one feels the body is lacking and unsuitable when the clothing does not fit, not the other way around. Another study compared petite women, average height women and tall/large women for shopping confidence and body cathexis. Shim & Kotsiopulos (1990) found that tall and large-size women reported the lowest self-confidence in choosing the right clothes for themselves. This can be interpreted that when an item does not fit, the women attributes this problem to her lack of mental capacity to select the right clothing. There are similar themes of inadequacy in either mental capacity or physical suitability. The feeling of inadequacy was can be found in my study as well as Shim & Kotsiopulos (1990) and Colls (2006). I feel plus size women have been evaluating their bodies in relation to the clothing that is available. If more clothing options were available to large women, perhaps evaluations of their bodies would be different.

Categories 3, 4 & 5.

The remaining categories of the first objective are: 3- wearing and exercising in clothing; 4- self-comparison; and 5- exercise motivation. These will be discussed together since in a very real sense they are inextricably intertwined and closely related.

Wearing and exercising in clothing is a very personal experience. Throughout the interviews the word comfort was used to describe both psychological
and physical aspects of experiences in clothing. Psychological comfort revealed feelings of inclusion and relaxation. Physical and physiological comfort of clothing revealed feelings of relaxation. The Nike brand clothing was described as a factor to increase exercise duration and impact exercise motivation. Wearing athletic clothing in public naturally leads to social comparison behaviors while clothing contributed to influence exercise motivation through trying a new public activity.

Psychological comfort revealed feelings of inclusion while in a group setting. According to social comparison theory developed by Festinger (1954), people judge themselves based on others they think are similar to them. Comparing clothing with other active people was consistency heard throughout the interviews. In response to various questions my sample shared how they felt ‘comfortable’ or ‘uncomfortable’ wearing certain clothing in public. Some shared how they would be comfortable wearing Nike brand clothing to the ‘grocery store’, to the ‘ball park’ and out ‘running errands’ whereas they would not do these activities in their personal athletic clothing. Instead, after exercising in their personal athletic clothing they chose to go home and change clothing. The reason being, they felt discomfort in their personal athletic clothing in comparison to other people. In the Nike brand clothing, they felt like they ‘fit-in’ and were more similar compared to other people. This type of behavior has been found in previous literature that is discussed in Festingers (1954) theory of social comparison. They also said that the Nike brand clothing dried quicker and was not ‘weighing them down’. Therefore, running errands in athletic clothing was not emotionally or physically uncomfortable.
Physical comfort of clothing was said to be an important factor to increase exercise duration and impact exercise motivation. Defining the experience of physical comfort is complex. One part of that complexity is the fabric or material that touches the skin. My sample consistently talked about the differences between wearing cotton clothing and Nike Dri-fit™. In this way, fabric has the ability to enhance physical activity or greatly restrict it. There were three examples of women in my study who felt they could exercise longer because the fabric supported them physically. The following quotes express the benefits of a moisture wicking material, or Dri-fit™ fabric, and how that contributes to increased exercise duration. In response to the question, *What do you see as the function of athletic apparel in relation to your physical activity experience?*

Cynthia stated,

…. as far as workout clothes keeping the sweat off you is a big function that will make you work out longer and harder because the sweat is not there bothering you. Anything that helps you do the right thing is always good.

In response to the question, *What are the circumstances when athletic apparel is doing its job and working for you?*

Heather stated,

It makes me want to walk longer and work harder. Because I am not tugging at it I am not (pause) it’s not being weighted down with perspiration, umm, I can concentrate on what I am doing as opposed to worrying about my clothes.

Lastly, in response to the question, *How do your clothing play a role in your motivation to exercise?*
Melissa stated,

It helps if you clothing are comfortable and you FEEL comfortable in them and like wearing them, it makes, it helps you be motivated once you are there, you feel like staying a little bit longer because your clothing aren’t bothering you.

Women said the clothing should keep the body dry and that will help the wearer exercise longer. The participants said when the clothing is dry; it is easier to concentrate because the clothing is not ‘weighing you down’. Melissa talks about the overall comfort of clothing and how you need to emotionally feel comfortable in them. Body temperature and skin sensation is found to contribute to the complex definition of human comfort (Bartels, 2005). Previous research supports the finding that using a moisture wicking synthetic fabric such as Dri-Fit™ is preferable for physical activity (Cotton Inc., 2002). Wick-ability is the fabric’s ability to move liquid or sweat from the skin and penetrate through the fabric by capillary action (Slater, 1985 pp.189). Capillary action is the force of a liquid being pulled up and through a tube. This is why I chose to use a synthetic, breathable and moisture wicking fabric for the study.

Second, breathability of the fabric is essential for prolonged exercise. Wearing a fabric that is not breathable during physical exercise will increase heart rate and rectal temperatures much faster than fabrics that are breathable (Umbach, 2001, 2002). When fabrics are more breathable, the skin has more access to air therefore staying cooler and the athlete was able to withstand longer periods of activity. Therefore, having a breathable fabric is critical and my sample clearly agrees. The physical
comfort contributed to emotional comfort when wearing exercise clothing in public and it is evident those comforts are intertwined with one another.

There were several examples of social-comparison behavior in regards to clothing, physical ability and a desire to know other participants responses. Social-comparison theory (Festinger, 1954) helps supports each of these in my study. Social-comparison theory states that self-evaluation can only be accomplished by comparison with other persons. The desire for self-evaluation is a natural act that stems from belonging to groups and associating with others. The subjective evaluations of one’s abilities in regards to important tasks are some of the satisfactions that people attain when comparing to others (Festinger, 1954).

When examining self-comparison behaviors in the realms of physical activity it is evident through the interviews that some of the women compare their physical abilities to that of others. Amy states, “they can’t touch me on those planks!” In this comment she recognizes that, aside from the belief that fat women are not strong or athletic, she is stronger than another. This is another confirmation that it is possible for a human to be fit and fat. The concept of ‘fit and fat’ have been documented through Dr. Linda Bacon’s (2010) Health at Every Size Initiative. The linkage in our minds between weight and health is so strong that it shapes how we perceive each other. Amy gives us an example of how she is subjected to feeling judged as unhealthy. She knows she is strong but feels her strength is not a measure of health our society uses. I think it is unfair to base an individual’s health by their body shape. I understand that
body image issues and physical ability comparison is a complex issue but I think clothing can help in a positive way.

Another area that I noticed social comparison behaviors was, when the participant asked me how other participants were responding to the interview questions. At the end of interviews, a total of seven women expressed curiosity. Perhaps participants wanted to hear what others were saying in order to confirm or deny their own experiences. If other participants agreed with their experiences then it would confirm that their opinion is correct and validated. I look forward to sharing my findings with the participants and am anxious to hear their reactions. I predict they will find comfort and reassurance in knowing they share similar experiences with athletic clothing.

In another example, clothing was found to influence exercise motivation. A theory and concept that explores exercise motivation and evaluation is Self-efficacy (Bandura, 1997). According to self-efficacy, people select specific situations and environments to participate in based on the belief of their abilities (Bandura, 1997). Bandura (1997) discusses how people avoid activities they believe are beyond their abilities and choose activities that they feel capable of succeeding. Here is an example of how clothing contributed to a participant joining a yoga studio. During our first interview, in response to the question, Prior to receiving the Nike (brand) clothing, what would you normally wear for working out?

Brittany stated,
Now a days, I wear t-shirts and capris. I think some of the yoga studios, you know, I wouldn’t want to go in there with my regular attire but I think given where I choose to work out, the others think that (the Nike brand clothing) would be super cool even if I am not small, I mean I am still not tinny but (pause) I’d be OK.

During our second interview, Brittany shared that she had joined a new yoga studio and had been going three times a week. She decided to join in part because she knew the clothing would not expose her mid-section and it helped her feel comfortable.

Brittany stated,

It made me look and say, ‘OK I feel good about these, I can take these to a yoga class’. It made me more motivated. Well, it’s like having nice pair of clothes to dress up in for dinner you feel better about yourself.

She said the clothing wasn’t the only reason she joined the studio but it helped her try something new. In her opinion, and according to self-efficacy, a failure would be exposing your body in an unfamiliar situation. Knowing that the clothing would not hold her back physically and would be socially acceptable, she participated in an activity that previously was felt to be beyond her abilities. Perhaps the perceptions of her abilities were restricted by clothing, because she was able to experience different clothing, her perception changed. Feeling equal and emotionally safe in clothing is a way to empower women of larger sizes who traditionally feel emotionally insecure in athletic settings.

Laura withheld her exercise efforts because she felt the clothing was physically restricting her body’s ability. This is an example of Attributional Theory, which
allows people to place the blame of poor performance on outside factors in order to protect self-esteem (Miller & Ross, 1975). In this case the clothing is the outside factor that was holding the wearer back from performing in Zumba. However, Laura was so excited about the Nike brand clothing she attended a Zumba class that first week of having the Nike brand items. Laura shared how she used to attribute her low leg kicks to the sweats ‘bothering’ or ‘sticking’ to her. She felt she never knew her physical potential because her clothing held her back. Once she had the opportunity to experience a different type of athletic item, she was able to understand her physical ability. Laura felt ‘part of the group’ and capable of determining her physical abilities because of the clothing she was wearing. Laura no longer has to attribute her possible lack of physical ability to restrictive clothing. She honestly knows how high she can kick.

I see a connection between clothing and self-efficacy in regards to physical activity for large women. The clothing created physical and emotional comfort and provided an opportunity to try new exercises. The clothing was able to assist in gauging actual physical activity levels. The clothing created an opportunity for women to feel included and comfortable. The feelings of inclusion had a positive impact. The positive impacts resulted in women feeling comfortable in public while wearing athletic clothing. Social comparison also resulted in a confirmation that it is possible for a human to be fit and fat. Again, the linkage in our minds between weight and health is so strong that it shapes how we perceive each other. Amy gives us an example of how she is subjected to feeling judged as unhealthy because of her size.
Body image, social comparison issues and physical ability comparison are complex issues but I think clothing can help empower large women in a positive way. This leads us to objective #2 that determines the styles of athletic clothing large women prefer to wear.

**Objective #2**

The second objective was to determine the preferred styles in athletic apparel for large women. My sample preferred to wear a t-shirt or tank top with capris for physical activity. It is important to note that two women who ordered tank tops said they would never wear them in public unless they had a jacket on over to conceal their arms. The current study has similar findings that were also reported by Brewer et al., (2004). Brewer et al., (2004) indicates a positive relationship between social physique anxiety and the preferred style of clothing for physical activity. As social physique anxiety increased so did the preference to wear concealing fitness clothing (Brewer et al., 2004). Similar conclusions are also made in my study. This sample of women experienced moderate to severe social physique anxiety and strongly preferred modest and concealing athletic apparel. However there are differences between the samples of Brewer et al., (2004) and mine. They used participants from a college gym while my sample consisted of women aged 30-59. Perhaps women who experience high levels of social physique anxiety, regardless of age, prefer to wear concealing fitness clothing.

Another study confirms my finding that women, who were dissatisfied with their body or with certain parts of their body, have used clothing to conceal, minimize,
or de-emphasize those body parts (Ogle, 1999). Participants often used loose or oversized clothing to conceal those body parts perceived to be too large (i.e., long shirts to hide stomach, hips, and/or buttocks). Participants in Olge’s (1999) study used colors, fabrics, and styles to minimize certain areas of the body, such as wearing black to appear thinner. This was also found in my study where women preferred to wear black or grey on the bottom. Participants in my study also had varying fit preferences. However, the majority preferred a snug bottom with a loose top to camouflage the stomach.

The Nike brand pants were intended to be a snug fit and literature suggests that in wearing snug athletic clothing, it will separate the skin and create a protective barrier with fabric. Using smooth polyester will create less friction between the upper thighs. Baslet, Mingker & Garcia (2004) recommends athletes with larger thighs to wear apparel that “is made of elasticized fabric or made of low resistance polyester fabric” (p. 21). Perhaps, larger women prefer a snug pant because they help secure and separate the thighs.

Kwon and Parham’s 1994 study indicate that, when individuals perceived themselves as fat, they were most interested in the camouflage function of clothing. Consistent with Ogle’s (1999) findings, women in Kwon and Parham’s study tended to use clothing to camouflage areas of the body with which they were dissatisfied, thereby increasing body satisfaction.
My sample prefers subdued colors to avoid drawing attention. This technique of camouflaging was found in Olge’s (1999) and Kwon (1994) studies. The overall fit of clothing is subjective and a variety of pant styles and loose tops should be provided to large women. The pants should be of black or grey color while the tops should be a wider variety of colors. Subtle colors or neutrals were preferred with a small detail or accent color for the top of the body. Overall, large women want athletic clothing that is modest and concealing. Modest and concealing athletic apparel includes full-length pants, capris or shorts to the knee. Tops that are modest include t-shirts with cap sleeves, elbow, ¾ sleeves or full-length sleeve. The neckline should be a V for breathability however the V should be shallow as to not reveal the chest when bending over. I suggest a raglan style; elbow length sleeve would provide coverage while allowing for range of motion. The shirt should be loose and of a subdued or neutral color. The top should have a small accent color or detail. The preferred pants should be capri or knee length, black or grey in color and have a snug fit.

My sample prefers subdued colors as to not draw any extra attention. The overall fit should be snug on the bottom and looser on the top. Subtle colors or neutrals were preferred with a small detail or accent color. This has not yet been determined in any other studies. Previous studies have not explored the desired styles in athletic apparel for plus size women.
**Objective #3**

The third objective was to determine if clothing for physical activity among overweight adult women is a factor to engaging in physical activity. As found in this study, there are countless factors that contribute to exercise. The factors mentioned were time, weather, finances, social support, motivation, location, transportation, equipment and mood. Some of these have been found in previous literature.

An article by Chen and Millar (2001) examined the factors associated with starting or sustaining physical activity. Many predictors of starting or sustaining activity were the same: sex, age, educational attainment, smoking, and sense of mastery. However, some factors were significant for one sex only. For instance, being overweight and the presence of children were deterrents for women, but not for men.

More recent studies suggest factors such as the presence of young children, being married; having social support, financial resources, education level and motivation are contributing factors of exercise behavior for women (Sternfeld, Ainsworth & Quesenberry, 1999). Each of these factors was mentioned in the current study with the exception of education levels. I should note that I did not ask levels of education and that could be a reason why it was not talked about.

Two questions were asked to help understand the factors involved to engage in physical activity. First, I asked them to list the factors in the guided journal. This gave them time to think about their individual factors. The factors discussed, that are
involved in the decision making process, were time, weather, finances, social support, motivation, location, transportation, equipment and mood.

The factors are mostly of social nature. Social factors include time, money, energy, social support, facilities and climate. Other social factors that were mentioned include physical discomfort in certain facilities and mood. Here are some examples of these social factors that were discussed during the interviews.

Some expressed how having a comfortable location is very important. Susan is willing to pay more for a location that she feels safe, because feeling safe is more important than money and other social factors. Here is her response to, *How important do you see clothing in relation to other factors that influence whether you are physically active?*

Susan stated,

…… I need a place where I have access to anything that I need, so that whatever I need to work on that day, I can do that and I don’t want to feel judged when I go, I am the harshest judge on myself anyways so being able to going to a place and feeling comfortable when you are there is really extraordinary important. The gym that we are going to right now is twice as much as two others that we could have chosen because of the comfort and the location. Clothing is part of that too, I have to wear clothes that are going to be comfortable and not stand out and not be uncomfortable for someone else to look at me wearing it is already a challenge and you kind of get a surprise like OOH you know. It is not, the gym that we chose is never, has never been a look of disgust but the gym we used to go was turning into that. So we decide don’t to go there anymore.

Melissa shared a similar feeling about location.

Melissa shared,
I think it probably is you know how the clothing fits and if you are comfortable in to be in public if you know that is where you work out I think it is important for women. You don’t want to be so uncomfortable that you are adjusting your clothes all the time or think that people are looking at them so how they look in their clothing.

Aside from feeling safe, setting a time was also an important factor to exercise.

In response to the same question, here are some ways women feel time is important.

Karen shared how money is not a factor but setting the time is.

Karen stated,
   Um, I would say it is a huge factor other than how I feel health wise it is probably the hardest factor. Other factors might be finding time, or paying for a membership…I guess I am kind of biased because I get a gym membership free, like the cost of it isn’t a factor for me right now, later it might be but it would be low, because it would be worth it. I guess time is up there, with work and taking my time and everything, for me working out- I feel better after I am done, so I usually try and make time for it.

In another example, Lauren stated that time was most important and she ‘saved’ time to exercise. After she experienced the Nike brand clothing, her response to the question, How important do you see clothing in relation to other factors that influence whether you are physically active? shows the impact of clothing and her discovery of its importance for her.

Lauren stated,
   I didn’t think it was important until now. I have never felt so good before! I mean I had, I have already been doing the workouts and saving the time to do them but I had no idea clothes could make me feel so good.

Others stated that setting a routine, having a schedule and motivational factors were more important than the clothing. An interesting response from Michelle shows the importance of enjoying an exercise. Michelle shared how much she enjoys
horseback riding. Due to her enjoyment of the exercise she is willing to wear what is available. This is evident by her response to the question, *How important do you see clothing in relation to other factors that influence whether you are physically active?*

Michelle shared,

> I think it is ….. it is funny because I have this riding and other exercise, riding. I am very motivated no matter what I force myself to wear whatever I have because I have to do it besides of comfort or tightness. I just gotta go so I wear…, in that case I wish the clothing were… I like them but I’ll just do it anyways. As for other exercise, I have the gear I am just not that motivated to go out and use them for physical activity.

This is a perfect example of how important enjoying exercise is. This activity is so enjoyable for her that other factors such as clothing and environment carry less weight. I heard a realization in her voice that confirms how important her riding is. She says it is ‘funny’, because she has the equipment for both horseback riding and other physical activity, but she chooses to horseback ride because she enjoys it. The concept of exercise enjoyment is widely documented as a factor to sustaining exercise involvement (Huberty et al., 2008; Halberg et al., 2009). I should note that only one participant said ‘fun’ is a factor to engaging in physical activity. It appears that clothing is not a factor to engaging in physical activity but clothing contributes to the overall experience.

Second, it is interesting that no one mentioned clothing as a factor when asked during the guided journaling. However, when asked if clothing was an issue to engaging in exercise, there was a variety of responses. I asked during the interview was, *To what extent is clothing an issue in whether or not you engage in physical activity?* I view the issue as something that a person must deal with. Therefore,
clothing is an issue that you must handle once the decision is already made. Similar findings regarding the issue of clothing were found. Here are some of the responses to that question.

Jennifer stated, “It’s a huge issue if you are not comfortable in the clothes you are wearing then you don’t feel like going to try something new or engage in something without feeling self-conscious or judged by the people around you.” Jennifer shares that feeling comfortable in public, and in your clothing is an issue when exercising and considering new activities. In another example, Heather and Karen both feel that clothing is an issue. They clearly feel that clothing impacts exercise behavior. Heather said, “I think it is a big issue I think if you have clothing readily available to you, if I have the clothes available for myself I would work out more.” Karen stated, “Well, it’s an issue. If I didn’t have workout clothes available I wouldn’t work out in just anything. I wouldn’t work out in a top for just everyday- not because of the fit but because it would be uncomfortable, and yeah…. I mean if I am not comfortable in my clothes I am not going to work out.” Susan shares how she feels exercise is a moral obligation. Susan stated, “It’s a non-issue because I HAVE to work out but I can definitely see where is people don’t have more options, it could be an issue. I have to do it, so I push clothing aside.”

Clothing is a personal experience and I think personality and interest in fashion impacts the importance of clothing. Clothing is an issue that contributes to engaging in physical activity. I think the important findings are that clothing is not a factor to exercise but contributes to the experience of comfort. Comfort of location and feeling
safe was mentioned throughout the interviews. I think clothing can increase comfort. This study confirms that enjoyment of exercise is important to a person continuing physical activity.

**Objective #4**

The next, and fourth, objective was to describe how overweight women view the purpose of athletic apparel in relation to physical activity. My sample described stated that the purpose of athletic clothing is threefold. (1) to set the tone/ get the mind set for physical activity, (2) to avoid attention from other gym goers and/or people and, (3) to support the body during physical activity. I think clothing that contributes to mental preparation, decreases attention avoidance, and is physically supporting creates the ideal situation for engaging in physical activity.

Cynthia stated, “If you look good, you feel good and that is one less excuse.” I believe this suggests that if you look good and feel good (both physically and emotionally) then you really do perform better and for some exercise even longer. Melissa stated she felt as if she could “go longer” when her clothing wasn’t physically distracting her. According to my sample, there are several opportunities for distraction. Distraction occurs through emotional discomfort, social physique anxiety and physical distractions through clothing discomfort.

Other researchers have explored similar phenomenon such as en-clothed cognition (Adams, 2012), and the symbolic use of clothing for self-completion in a role (Fiore, 1986). En-clothed cognition is the influence that clothes have on the
wearer's psychological processes or is the basis of, “I look the part, and play the part” (Adams, 2012, p. 47). The symbolic use of clothing for self-completion in a role can be seen in amateur athletes who buy the best equipment in order to compensate for lack of acquired skills (Fiore, 1986). I think this is another form of en-clothed cognition where a specific demographic needs emotional comfort and physical comfort in order to play the part. The clothing can be a key factor to assisting overweight women in feeling comfortable for engaging in physical activity.

In other words, several aspects must be in order. First, the clothing needs to be a subdued color and made of performance fabric. The clothing must not distract movement. If it pulls pinches or rides in any way, the wearer becomes conscious and the focus immediately shifts to adjusting the clothing. When the focus shifts, the wearer is not thinking about the exercise anymore, they are thinking about the clothing. Susan gives a perfect summary of the purpose of athletic apparel.

Susan stated,

It should cover me up, and I don’t want to feel like I am being watched because, I am having to pull my pants up every two seconds or if I am moving fast on the treadmill and my clothes fit right. I am not worrying about if my fat rolls are giggling too much, and it is going to make a noise on the machine or getting someone’s attention. I am not worried about what other people are thinking. I can focus on not falling off the machine and being able to pay attention to the way my body feels and the way my muscles move, and if I need to adjust if something doesn’t feel right. I am not distracted. I can pay attention to what I am doing.

Susan emphasizes the importance of safety during exercise. It is critical that her clothing support her in order focus on the way her body feels. Keeping in touch, or listening to one’s body is recommended by the American Council on Exercise.
Listening to your body during exercise is key a way to prevent injuries (Porcari, 2007). My sample recognizes this importance and feels it is the clothing’s responsibility to stay in place.

**Objective #5**

The fifth objective was to determine what coping behaviors overweight women engage in associated with social comparison of self to the cultural beauty ideal. The coping behaviors were determined using (Figure 2) the Model of Effects of Social Comparison on the Constructional and Evaluation of Appearance by Rudd and Lennon (1994). This portion of questions was the most challenging for participants to answer. There were several ‘pauses’, ‘sighs’, and ‘deep breaths’ taken during the responses. Responses slightly varied, nevertheless distinct themes emerged. When my participants were asked to describe the beauty stands of society, they listed thin, pretty, small waist, youthful, fashionable, perfect hair, shapely butt, confident, big breasts, tall, flat stomach, sexy, and, graceful. My findings were similar to studies that have used other female age cohorts. For example, when college women were interviewed, they described the ideal female body as a Victoria’s Secret model or a fitness model (Guinn, Semper, Jorgensen & Skaggs, 1997). Other samples, such as adolescent girls have described the ideal female as 5’7”, 100 pounds and a size 5, indicating a borderline anorexic frame (Nichter & Nichter, 1991).

The next question asked to my participants was, *do you feel you meet that standard?* In response, all fourteen women said “no”. According to the model, if someone felt they did not meet the standard they would engage in coping behaviors.
The coping behaviors engaged in were to accept the standard and to continue to try and meet that standard. To accept the standard but give up trying to meet standard. Another behavior was to not accept the standard and create their individual definition of beauty. Lastly, one could not accept the standard and participate in activism to change the standard. Several of my participants stated that they accept the standards of beauty, and do not agree with it but still want to achieve it. I categorize this as feeling ambivalent about what constitutes beauty. There is a pattern of ambivalence towards wanting to accept their bodies and wanting to meet the socially constructed definition of beauty. I felt the women were saying, ‘There is nothing I can do to change the ideal of beauty. I accept them, but do not agree with them.’

To accept the standard of beauty and to strive to meet it while still saying that you do not agree with it is a form of oppression. The reason being, if you accept the societal norm of beauty and attractiveness, you cannot accept plus-size people. Hearing their opinions and contradictories reminded me of similar celebrities with conflicting opinions and actions. “Celebrities such as Ricki Lake, Carnie Wilson and Oprah Winfrey have at one point or another exploited their size to appeal to fat women to then reduce their size and contradict their initial positive impact” (Bernstein & John, 2009, p. 268). Each one of these women has stated they accept themselves for who they are and they promote self-acceptance but on the other hand are also publicly attempting to lose weight. There is the acceptance of the standard, the internal disagreement with it but still the action towards weight loss. Instead of using stardom to normalize fat, they continue to promote the stigma and self – disgust among large
American women. I see this as a form of oppression that occurs from the normalized images in the media that reflect what people should be. Below are some quotes from the interviews that express this point of view in their own words. Michelle stated, “I accept them and haven’t given up I just don’t agree with them.” Again, Jennifer shared how she desires to be viewed as pretty in response to the question, *Do you accept the standard?*

Jennifer stated,

I wouldn’t seem pretty to others if I didn’t, and I don’t accept that it is right but if that is what society finds pretty and since I want to make you think I am pretty, I would willingly *do that* to myself.

In response, I asked, “Do what to yourself?” Jennifer stated, “Try to meet the standard”. (authors emphasis- italics on *do that*)

When I heard her say this, there was a tone of angst and sadness in her voice. I feel this is a form of oppression. She feels obligated to be on a strict diet and exercise regimen. If she does not *do that* to meet the standard then she will never be beautiful. What she further explained is that she struggles to maintain her weight loss and feels as if she battles herself daily.

Another participant expressed how exercise is a moral obligation and the ‘right thing to do’. In response to the question, *What do you see as the function of athletic apparel in relation to your physical activity experience?*

Cynthia stated,

…. as far as workout clothes keeping the sweat off you is a big function that will make you work out longer and harder because the sweat is not there
bothering you. Anything that helps you do the *right thing* is always good. (author's emphasis - italics).

Other samples have reported similar feelings such as, college students who were preoccupied with the possibility of being overweight were more inclined to have an increased fear of fatness (Cash, Wood, Phelps, & Boyd, 1991).

If the perceived purpose of exercise was not weight loss, I wonder if the perspective of exercise and one’s body would be different. Perhaps a cultural shift on what it means to be fat or plus size would reduce the pressure to be thin. Further, distinguishing the difference between health and weight might reduce the pressure to be thin. Just as other forms of oppression have been overcome, fat bias (or sizeism) may be the next obstacle.

Another interesting finding about the desire to meet the ideal standards is reflected through the racial identity of my participants. The majority (12) of my sample identified race as Caucasian and ethnicity as White. One identified race as African American and ethnicity as other. One identified race as Asian and ethnicity as Multicultural. Another identified race as Hispanic/Mexican and ethnicity as Hispanic. Without revealing specific quotes, I find it important to relate previous literature to the current findings. Studies show that African-American women and Asian American women appear to be more satisfied with their body and appearance than Caucasian women (Akan & Grilo, 1995; Cash & Henry, 1995; Lennon, Rudd, Sloan, Kim, 1999). This research is consistent with my findings. A number of Caucasian women in my sample accepted the ideal beauty standard and strived to meet it. Two women of the
diverse backgrounds (African American, Hispanic, and Asian American) refuted the standard and felt no desire to achieve it while every Caucasian participant did. A possible cause of this could be that the majority of the images of the ‘ideal figure’ used by the media are of Caucasian women. Another possible cause of this finding is that women of non-Caucasian backgrounds have a more flexible cultural standard of attractiveness and a wider range of acceptable weights (Schwartz & Brownell, 2004; Celio et al., 2002).

**Unanticipated findings.**

The major unanticipated areas discussed are symbolic annihilation, dehumanizing terms, and normalcy and feelings towards the Nike brand and Nike Inc. I draw connections between previous research and my findings while bringing in theory when necessary. Several of these areas warrant further research.

**Symbolic annihilation.**

My sample reported they felt greatly underrepresented in advertising. They wanted to see more advertising targeting plus size consumers with models that are similar in size. Only one participant knew that Nike brand clothing was offered in plus size. The remaining 13 said they had no idea and were surprised that Nike brand clothing was made in 1X-3X for women. Some of them knew Nike brand clothing was offered in men’s 1X-4X but not for women. The group requested that Nike Inc. advertise directly to their market and ‘make the line known’. The recognition of negligible representation and the desire to be a part of media is commonly found in literature that discusses symbolic annihilation.
Symbolic annihilation occurs when a major group of people are underrepresented in the media. “Generally applied to women and racial and sexual minorities, symbolic annihilation points to the ways in which poor media treatment can contribute to social disempowerment and in which symbolic absence in the media can erase groups and individuals from public consciousness” (Donsbach, 2008, p. 5290). There have been several studies about the media’s limited yet consistent negative portrayal of fat women (Blair, 2001). The symbolic annihilation of fat women on television and the prevalent stigma towards fat women in our society shows the medias ability to pass judgment, reinforce stigma and pressure people to conform to the ideal (Goffman, 1963; Goode, 1996). Purposefully or unconsciously excluding groups of people from the media helps to reinforce the stigmatized group (Damhorst, Michelman & Miller, 2005).

In order to shift our current views of fat women as lazy and un-athletic, I feel it is critical to incorporate advertisements with larger women. Showing them in physically active situations might have an impact on their own internalization and self-loathing thoughts. A clinical report states that people who view more positive images of obese people have more positive thoughts about them compared to those who view obese people in negative images (McClure, Puhl & Heuer, 2011). This study shows that media content contributes to negative attitudes towards fat people. Better yet, on the other hand, it shows that attitudes may shift if the images are more positive. I suggest that advertising companies begin to incorporate fat women into their advertising and media outlets as a way to reduce internalization and stigma towards fat
women. “Internalization is the process of acceptance of a set of norms established by people or groups, which are influential to the individual. Internalization of cultural ideals is the extent to which individuals endorse cultural standards of attractiveness as personal beliefs” (Thompson, 2001, p.182).

**Dehumanizing terms.**

Another unanticipated finding was the dehumanizing terms participants used to describe their body parts. Instead of using anatomical terms to refer to a body parts, eleven women used terms such as chub roll, spare-tire, pooch belly, muffin top, saddle bags, side handles, chicken body (skinny legs and large torso), front ass, back shelf, apron rolls and cottage cheese to refer to certain body parts. This is often the same way that media stereotypes fat people and there is a connection to popular terms that are stigma promoting. I think using these types of words to describe oneself is a form of self-loathing and internalization. This has also been found in other studies about fat/plus-size/overweight women. Goode (1996) found that fat women who develop a sense of self-loathing are a reaction from social pressure to participate in creating the ideal female body. In another study, Bordo (2003) found that the image of the ideal female is so “ingrained in the socialization process, which women become, to themselves, their own jailer” (p.63). Women who do not try to meet this standard of thinness are running the risk of being rejected by others. This makes sense as to why some of my sample takes pleasure in wearing Nike brand clothing. Nike Inc. has is a popular clothing brand that is associated with fitness and health, both of what is considered ‘normal’ characteristics to aspire for in our culture. The next unanticipated
finding was the repeated use of the word ‘normal’.

**Normalcy.**

By trying on the Nike brand clothing, it gave the women an alternative way of dressing themselves which has enabled several women to feel differently about their size and their body in athletic clothing. Perhaps, the feelings of normalcy and positive experience with the Nike clothing has lifted a barrier because now Nike and other brands provide clothing in their size, when they previously thought it was not a possibility. When wearing Nike clothing for the first time Laura described her experience as feeling more normal by stating

Laura stated,

…..I feel like I have something that is equal to everybody. I feel normal going into a workout, everybody else is wearing an *OUTFIT* to workout in and Laura doesn’t have to come in with sweats. I am equal to everyone else in the same setting. I don’t feel off to the side. I am in the *click*. (authors emphasis on italics)

It is profound that clothing can make a person feel included or excluded in a group or *click* as Laura calls it. Feeling equal and included is a way to empower women of larger sizes who traditionally feel frustrated finding satisfactory athletic clothing.

**Information to Nike**

Several participants were grateful that Nike was offering a plus size option. Susan had an insightful response to the question, “*What are your thoughts about the Nike brand?*”

Susan,
I think it is really awesome that they are taking on the plus size industry. I think it is brave of them to do it, it is a normal expectation that athletic people are going to be good looking people or easy on the eyes to photograph than majority of people are a lot smaller than me which is totally understandable so umm uhhhhhhhh it might be a task for them to keep that image and still be able to justify serving the plus size population. It will be interesting to see how that works out. (Italicized as authors emphasis)

Susan applauded Nike and referred to them as brave for serving the plus size industry. What Susan is pointing out is that she feels a company runs the risks of ruing its reputation by offering plus size clothing. In selling them, they are being associated with fat consumers. Then, the stereotypes of fat or larger size people become associated with the company, such as laziness, weak willed, dirty, blame-worthy, slow, unintelligent unhealthy, unattractive, and incompetent (Puhl & Brownell, 2001; Robertson & Vohora, 2008).

Only one of the thirteen participants was aware that Nike offered clothing in their size. Several others felt that Nike was risking their reputation and,

Amy states,

I would like them (Nike) umm to know #1 Good job, (laughter) and thank you um for even you know attempting because they didn’t have to. They just could have just been another company that doesn’t offer I take it. So thank you.

It appears to me that some participants felt genuinely concerned for Nikes reputable image. This enforces the stereotype that if you are not concerned with your image you must not fit the ideal of beauty. The antithesis of ideal beauty is that you must be fat. From this perspective, fat women are obviously not athletic and therefore wouldn’t spend money on athletic clothing. Karen also brings up the taboo topic of
large women modeling fashionable plus size athletic clothing. She asked me, “You never see a plus size model actually modeling, are they (Nike) embarrassed to make plus size clothing?”

I awkwardly laughed in response and told her that I did not know the answer to her question. What I do know is that Nike does not advertise for their ‘extended’ or plus-size line (plus size and extended line suggest sizes 1X-3X). It is only offered on-line and in my opinion is difficult to find. I also wonder if Nike is embarrassed or unsure of how to approach a plus size consumer. One of their slogans is, “every-body is an athlete”. Below is part of what I will send to Nike Inc. I will also send design recommendations and reviews of the items worn. My questions to Nike: What is the reason you do not advertise for your extended line? If every-body is considered an athlete why only offer 12 clothing items in plus-size? The average woman wears a size 14 and according to your sizing scale that is a 1X. If twelve items are plus size, out of your 900 on-line options, which accounts for less than 1% of your inventory. I find it interesting that less than 1% of your women’s clothing can fit the average women. While Nike Inc. offers over 2,000 items to men in 1X-4X. Why are the plus size women’s items not offered on-line or in the stores like the plus size men’s? Why are the plus size women’s clothing in a separate on-line category while the men’s are combined? It is not my intention to be disrespectful, I am more curious to see if Nike recognizes this segregation of sizes for women.

This points out that women’s athletic clothing is underrepresented as well as the use of plus sizes models. Karen is pointing out that, “women as represented in the
media have gotten thinner and thinner” (Valdivia, 1997, p.227). I think the plus size female consumer is greatly underrepresented in media and advertising. That is evident through previous research and salient enough for my sample to point out as well.

The unanticipated findings are interesting and warrant further exploration. The major unanticipated areas discussed are symbolic annihilation, dehumanizing terms, normalcy and information for Nike. I draw connections between previous research and my findings. I appreciate the ability of my sample to be comfortable and open in their opinions. Without the comfort and openness these unanticipated findings might not have been.
CHAPTER 7.
IMPLICATIONS, RECOMMENDATIONS AND FUTURE RESEARCH

Scholarly Implications

The Model of effects of social comparison on the constructional and evaluation of appearance (Rudd and Lennon, 1994) is in need of further testing for diverse populations. The findings of this study should be compared to other applications of the model.

The findings presented are the views of women sized 1X-3X, using a wider sample of sizes and women to gain further insight to experiences with athletic clothing.

Contacting athletic apparel companies to inquire about their sizing standards and practices will reveal more information.

Identifying effective interventions to reduce internalization and to decrease self-loathing talk among adult overweight women is suggested.

Grading and pattern techniques are in need of re-evaluation. Including a wider range of sizes and grading techniques in academic books is necessary to prepare future designers. Incorporating design projects into curriculum that requires students to use a larger mannequin.


Recommendations

Methodological.

I found immense value in interviewing twice. Although, daunting and time consuming, asking the same questions twice confirmed for me their experiences. It also helped build a connection with my participants. Including member checks is also valuable and several participants commented that they really enjoyed reading my interpretation. I recommend to other researchers conducting in-depth interviews to send a summary of your findings to each participant. Several of my participants said they were excited to hear what each other were telling me. I think it will help them feel less isolated and they may find comfort in knowing that other people are experiencing the same things.

Advertising recommendations.

Cultural ideals of attractiveness are often portrayed through images in the media, such as television and magazines. Portraying overweight women in physically active situations may be a solution to reducing the internalization. I recommend that Nike and other athletic apparel companies that produce plus size clothing include images of plus size women wearing their clothing. I also recommend they use images of plus size women engaged in physical activity. I fell portraying overweight women in a positive light may help reduce stigma and internalization.

Apparel industry recommendations.

Apparel designers need to find a new way of seeing and understanding its plus size market. I recommend apparel designers and companies publicly define their target
market with body size, shape and measurements. This way a consumer can make an informed decision about the anticipated fit of an item before trying it on. For example, if I had a ‘large stomach and slender legs’ I would not try on items from a store that were defined as ‘large bust and large hips’. I feel retailers should use descriptive terms to describe the body they are targeting. I also strongly feel the term plus-size is degrading and should be eradicated from the industry vocabulary. It should simply be the size and body shape of the item.

**Spreading the word about sizing.**

When it comes to shopping for clothing, I feel it is important for women to know that it is not their bodies that are the problem, it is the standardized way in which clothing are made. Ready-to-wear (RTW) clothing has only been around for over a century. Until that time, people made their clothing at home and fit issues were not a problem. Women need to know how and where the sizing standards came from. It is also important that these standards be re-explored. However, I am uncertain as to whom the responsibility belongs. In the past, it was taken on by the National Institute of Science and Technology. Now, it may be up to academic scholars or independent apparel companies. Regardless of who takes on this task, women have a right to know that the system currently used is outdated and is not a fair or equal representation of our nation’s bodies. Perhaps passing out flyers or pamphlets that explain this process to women will reduce their anxiety around shopping for clothing.
Further Research

The findings of this study highlight several areas of research that warrant attentions in order to better understand athletic apparel for overweight women. Areas from the study that warrant further exploration are (1) to distinguish the difference between size and fit, (2) determining the different body types and/or shapes, (3) further exploring the Rudd and Lennon model, (4) to further examine internalization of weight bias in adult overweight women (5) explore what environmental factors contribute to social physique anxiety for overweight women and (6) exploration of experiences with athletic clothing for plus size women outside the current sample age is suggested.

First, it is important to distinguish the difference between size and fit. Clothing items should be designed to accommodate for the several ways a body changes and carries weight when it expands. Nike currently grades their items from a size Medium. They are not designing for a plus size body. What they are doing is designing on a size 8 and then grading or drafting it up to a size 16-22. For further reading on grading techniques see Mullet, 2000. It is not taken into account that when the body grows in size it changes in shape. Thus the reason why the women say the garment is my size but it does not fit.

Second, a number of the women describe their bodies as having unique characteristics. For example: “I have a large derrière and thin legs”. Therefore, future research should build on current literature of body scanning with special attention to
plus size body shapes. As the body reaches larger sizes, the female body develops into different shapes. Clothing should be designed for each unique shape.

Third, the model of effects of social comparison on the constructional and evaluation of appearance (Rudd & Lennon, 1994) is in need of further testing for diverse populations. It appears there is a cyclical pattern of engaging in coping behaviors because the sample felt they did not meet the beauty standard. Further studies to interrupt the cycle should be explored and examined.

Fourth, studies are needed to further examine internalization of weight bias and to what degree internalization impacts other factors surrounding clothing, exercise and body image.

Fifth, to further explore social comparison, social physique anxiety and locations that contribute to increased social physique anxiety for overweight women is needed.

Lastly, incorporating a wider age range and size range to the developed model of emotional experiences trying on clothing.

This study has unlocked several areas that warrant further exploration. I look forward to future studies that examine (1) the difference between size and fit, (2) the different body types and/or shapes, (3) exploring the Rudd and Lennon model (1994), (4) examine internalization of weight bias in adult overweight women, (5) the factors that contribute to social physique anxiety for overweight women and (6) applying a wider age and size range to the developed model of emotional experiences during trying on clothing for plus-size women.
Bibliography


*Psychological Sciences*;10(5):181-183.


http://dx.doi.org/10.1016/j.bbr.2011.03.031


Depression and anxiety among US adults: associated with body mass index.

*International Journal of Obesity, 33,2.*


*Journal of ASTM International, 1, 10 1-10.*
APPENDICIES
Women wanted for research study!

- Age: 30 – 65
- Size: Women's 16-26
  (Waist between 38.5” to 51.5”)
- Internet and Skype access
- Willingness to take survey and participate in interviews

Principal Investigator: Leslie Davis Burns
Student Researcher: Debbie Christel
220 Milam Hall – Oregon State University

Study Title: Overweight Women's Experience with Athletic Clothing
Contact: Christel@onid.orst.edu

You don't need to have desire for change and will not be eliminated if you do. Are you interested? Please: email Debbie at Deborah.christel@oregonstate.edu We are looking for women all over the US!!

Nike clothing will be provided for participation during the study
And may be kept once the study is complete.
Women wanted for research study! **Study Title:** Overweight Women’s Experience with Athletic Clothing.

Nike clothing will be provided for participation during the study and may be kept once the study is complete.

**Looking for:**

**Age:** 30 – 65  
**Size:** Women’s 16-26 (Waist between 38.5” to 51.5”)

Internet and Skype access

- Willingness to take survey and participate in interviews

Are you interested? Please: email Debbie at Deborah.christel@oregonstate.edu
APPENDIX C

CONSENT FORM

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Women’s Experience with Athletic Clothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Investigator:</td>
<td>Dr. Leslie Davis Burns</td>
</tr>
<tr>
<td>Student Researcher:</td>
<td>Debbie Christel, M.S.</td>
</tr>
<tr>
<td>Sponsor:</td>
<td>Nike</td>
</tr>
<tr>
<td>Version Date:</td>
<td>1/20/12</td>
</tr>
</tbody>
</table>

1. **WHY AM I BEING INVITED TO TAKE PART IN THIS STUDY?** You are being invited to take part in this study for a research project. Your participation will provide data to aid in the understanding the experiences women have with athletic clothing.

2. The student researcher, Debbie Christel, is responsible for the study under the supervision of the Primary Investigator, Leslie Davis Burns.

3. **WHAT IS THE PURPOSE OF THIS STUDY?** Results from this project will be used to determine the experiences and purpose of athletic apparel to you. Results will be submitted to peer-reviewed academic journals for publication and for completion of a dissertation.

4. **WHAT WILL HAPPEN DURING THIS STUDY AND HOW LONG WILL IT TAKE?** Participation will include your completion of one survey and one to three semi-structured interviews. If you agree to take part in this study, your involvement will last for duration of four to five weeks. The surveys take less than ten minutes. The semi-structured interviews will last anywhere between 30 minutes to a maximum of one hour. The interviews will be video recorded and transcribed. Total length of the study will last approximately four to five weeks and you will be asked to journal any feelings or thoughts that come up regarding this study.
5. **WHAT ARE THE RISKS OF THIS STUDY?** The security and confidentiality of information sent by email or collected online cannot be guaranteed. Information sent by email or online can be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The researchers are using a University approved survey system, Business Solutions Group at OSU College of Business, which requires an OSU Active Directory account and password. Results from surveys are only accessible to the account holder via the Internet. Along with the survey system, the researchers will use university email accounts. The student researcher has also downloaded Symantec Endpoint Protection (SEP) and Symantec AntiVirus (SAV) software. This software is licensed for use by current OSU employees and students on personally owned computers. Using this extra protection system will help minimize risks associated with communication via Internet. The study will also require that you address topics relating to your body and physical appearance. This may make you address some issues that are uncomfortable.

6. **DO I HAVE A CHOICE TO PARTICIPATE IN THE STUDY?** If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. You are free to skip any question in the questionnaire that you would prefer not to answer. If you choose to withdraw from this project before it ends, the researchers may keep information collected about you and this information may be included in study reports.

7. **HOW IS THE STUDY FUNDED?** Nike is providing the clothing at a significantly discounted rate. The student researcher will order the garments that you have selected and mail them to you.

8. **WHAT IF I HAVE QUESTIONS?** Debbie Christel is the student researcher for this study and Dr. Leslie Burns is the Principle Investigator overseeing the project. If you have any questions about this research project, please contact: Leslie Davis Burns, 541-737-3796, Leslie.Burns@oregonstate.edu or Debbie Christel, 541-737-0956, chirsted@onid.orst.edu If you have questions about your rights as a participant, please contact the Oregon State University Institutional Review Board (IRB) Human Protections Administrator, at (541) 737-8008 or by email at IRB@oregonstate.edu.
To pick the size you want, blue, grey, and white. Use the chart and T-shirt is available in black. Tank top comes in white or black. Select 1 top.
Use the bottom chart to pick the size you want.

Select 1 bottom - Caps are only available in black.

Shorts come in blue or black and
Guided Journal Responses Journal questions and responses were combined into the interview document and were placed under the same question in the interview for example. The third prompt stated, what has been your experience shopping? The response to that was placed under the shopping experiences of the participant in the interview questions.

First prompt: Do you consider yourself a physically active person? What are factors to being physically active?
Second prompt: SPA- How do you feel people view you when you are in public?
Third prompt: What has your experience been when shopping for athletic clothing? Where did you shop? Did you find what you were looking for? How do you feel when you shop?
Fourth prompt: Why did you select the outfit? For example: why the shorts and t-shirt as opposed to the capris and tank top? What do you like and dislike about the athletic apparel you selected?

Interview outline

Introduction:
Hi, how are you? Thank you for taking the time to schedule an interview with me today. (pause) So, your package arrived and it looks like you had a chance to write about the first prompt.

Group #1: Exercise
Let’s start with that: The first prompt question was: Do you consider yourself a physically active person? What are some factors that influence whether you engage in physical activity? Your response was (insert response) (Q1) can you tell me more about that?
(Q2) What has been your typical exercise routine in the past month?
(Q3) Has it been at home or in public?
(Q4) When you exercise, under what circumstances, if any, do you worry about the way you look?
(Q5) If you don’t do any physical activity, why is that and what might prompt you to engage in physical activity?

Group #2 Nike Clothing Selected:
(Q1) Can you tell me about what you did when the package arrived?
(Q2) Did you try the clothing on?
(Q3) What did you think of the fit?
(Q4) Did you know Nike made clothing in your size?
(Q5) What do you think of the sizing? Is it accurate?
(Q5) What do you think about the price of the items?
(Q6) How did the clothing make you feel?
(Q7) Did you feel any emotions when trying the outfit on or wearing the outfit?
(Q8) How many days this past week did you wear them?
(Q9) What did you do in them?

(Q10) What would you normally wear for working out?
(Q11) Do you wear those items for other activities?
(Q12) Do those apparel items make you feel a certain way?
(Q13) Do the Nike clothing make you feel any different than your other clothing? If yes, how?

**Group #3: General Clothing**
Now, let’s move on to talk about clothing in general and then athletic clothing in particular.

(Q1) In general, what has been your experience with outfitting yourself with clothes?
(Q2) In general, what makes for a positive experience when buying clothes?
(Q3) Do you think you encounter any issues when shopping for clothes that are unique to women of your size?

**Group #4: Athletic Clothing**
(Q1) What has been your experience with outfitting yourself with athletic clothes?
(Q2) What makes for a positive experience when buying athletic clothes?
(Q3) Do you think you encounter any issues when shopping for athletic clothes that are unique to women of your size?

**Group #5: Fit and Style Preference:**
I am interested in the style of clothes you prefer in general and in athletic apparel in particular.

(Q1) How would you describe the style of clothing that in general you prefer to wear in terms of
(a) coverage (revealing or modest) of various body parts
(b) sizing (loose fitting or tight fitting) for various body parts
(c) color (subdued or bright)
(d) trends (fashionable or unfashionable)
(e) impact (attention getting or attention avoiding).
(Q2) Are there any additional characteristics that distinguish your preferred style of clothing in general?
(Q3) How are these preferences for clothing styles you have described similar or different for your athletic apparel?

**Group #6: Clothing and Exercise**
(Q1) To what extent is clothing a factor in whether you engage in physical activity?
(Q2) Can you describe the role of clothing in whether you are active?
(Q3) How prominent do you see clothing in relation to other factors that influence whether you are physically active?
(Q4) Speak to the importance of better understanding clothing as a means of understanding the physical activity patterns of women.
(Q5) What do you see as the purpose of athletic apparel in relation to your physical activity experience?
(Q6) What are the circumstances when athletic apparel is doing its job and working for you?
(Q7) What would make athletic apparel more appealing?

**Group #7 Coping Behaviors:**
I now want to move on to talk about some coping behaviors associated with clothing and body appearance. (Q1) What would you say are the beauty standards of our society? (Q2) Do you feel you meet the beauty standards of our society?
(Q3) How did you react to that? Do you keep trying to meet those standards?
(Q4) Would you say you accept the standards but have given up trying to meet them?
(Q5) Would you say you do not accept the standards and have internally redefined what is beautiful to you?
(Q6) Or, you do not accept the standards and you participate in activism to change the cultural beauty standards?

Probing questions: (asked if there clarification is needed)
Anything else?
Any other reason?
How do you mean?
Could you tell me more about your thinking on that?
Would you tell me what you have in mind?
What do you mean?
Why do you feel that way?
Which would be closer to the way you feel?

Here is what I said at the closing of the interview:
Thank you very much for your time and effort. Is there anything you would like to add to the interview? (pause) I will be sending you a prompt each week, for the next four weeks, and then we will have our second interview. Can we schedule a time for our second interview now? (pause) Do you have any further questions? (pause) Thank you again. Talk to you soon. Goodbye.
## APPENDIX F

Sample of Coding Method

Chart of responses to coping behaviors of social comparison: self to the cultural beauty ideal

<table>
<thead>
<tr>
<th>Participant</th>
<th>Accept and try harder</th>
<th>Accept and give up</th>
<th>Do not accept redefine beauty</th>
<th>Do not accept Modify activism</th>
<th>Other notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Accept- do not agree but try to reach</td>
<td></td>
</tr>
<tr>
<td>Tammy</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Accept standard</td>
<td></td>
</tr>
<tr>
<td>Jennifer</td>
<td>Absolutely</td>
<td>No</td>
<td>No</td>
<td>Accept standard</td>
<td></td>
</tr>
<tr>
<td>Melissa</td>
<td>No</td>
<td>Yes-Accept and given up</td>
<td>Redefined beauty</td>
<td>Accepts her body and try’s to reach her own beauty</td>
<td></td>
</tr>
<tr>
<td>Heather</td>
<td>Yes</td>
<td>No</td>
<td>Redefine</td>
<td>Waivers</td>
<td></td>
</tr>
<tr>
<td>Laura</td>
<td>Strive daily to meet standard!</td>
<td>No</td>
<td>Kind of-sometimes</td>
<td>Waivers</td>
<td></td>
</tr>
<tr>
<td>Michelle</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Does not agree, does not accept but strives to meet</td>
<td></td>
</tr>
<tr>
<td>Karen</td>
<td>YES</td>
<td>No</td>
<td>Yes, Own beauty</td>
<td>Waivers back and forth</td>
<td></td>
</tr>
<tr>
<td>Lisa</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>I have to accept at this point</td>
<td></td>
</tr>
<tr>
<td>Julie</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Accept standard but does not agree</td>
<td></td>
</tr>
<tr>
<td>Brittany</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>I accept them but don’t agree- own standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Accept but does not agree</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Cynthia</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Accept but does not agree</td>
<td></td>
</tr>
<tr>
<td>Amy</td>
<td>No</td>
<td>No</td>
<td>YES</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Donna</td>
<td>Yes</td>
<td>No</td>
<td>Sometimes</td>
<td>Waiver</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>10 Yes</td>
<td>4 No</td>
<td>12- do not accept and have not given up 2- accept standard but have quit trying to meet</td>
<td>10- Own definition of beauty 2- Waiver 2- No, believe standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1- Refute standard 6-Accept, don’t agree but try to reach standard 2-Firmly accept standard 4- Waiver 1-Self acceptance</td>
</tr>
</tbody>
</table>
APPENDIX G

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors andSeniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

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

Social Physique Anxiety Scale

(Hart, Leary, & Rejeski, 1989)

The following questionnaire contains statements concerning your body physique or figure. By physique or figure we mean your body’s form and structure; specifically, body fat, muscular tone, and general body proportions.

Instructions: Read each item carefully and indicate how characteristic it is of you according to the following scale.

1 = Not at all characteristic of me
2 = Slightly characteristic of me
3 = Moderately characteristic of me
4 = Very characteristic of me
5 = Extremely characteristic of me

1. I am comfortable with the appearance of my physique or figure.

2. I would never worry about wearing clothes that might make me look too thin or overweight.

3. I wish I wasn’t so uptight about my physique or figure.

4. There are times when I am bothered by thoughts that other people are evaluating my weight or muscular development negatively.

5. When I look in the mirror I feel good about my physique or figure.

6. Unattractive features of my physique or figure make me nervous in certain social settings.

7. In the presence of others, I feel apprehensive about my physique or figure.

8. I am comfortable with how fit my body appears to others.

9. It would make me uncomfortable to know others were evaluating my physique or figure.

10. When it comes to displaying my physique or figure to others, I am a shy person.
11. I usually feel relaxed when it's obvious that others are looking at my physique or figure.

12. When in a bathing suit, I often feel nervous about how well proportioned my body is.
APPENDIX I

Member checking

Here is an example of member checking that contains a correction for my interpretation. The member check is an example where a portion of my interpretation was incorrect and my participant explained to me what she meant.

Here is the member check that I used during my second interview with Lisa. I read each statement to her and waited for her verbal confirmation.

Member Check Lisa April 23, 2012 9:41PM
Walking is your main source of exercise. Around your neighborhood and throughout the day at your 27 acre worksite. Lisa stated, “Yep.”

When it comes to exercising in public you don’t put a lot of emphasis on what other people think about you. You were a dancer for 25 years and when you are in motion you don’t really care about the people around you. You put your focus into what you are doing. Lisa stated, “That’s right.”

When you do get a chance to go to the Y, you get on the elliptical, put on the I-pod and start your workout. You try not to think about what other people are thinking, but you hope people are thinking ‘oh hey look at her! way to go!’ The only other time you worry is if you have to bend over and there is the possibility of exposing your rear
end. Lisa stated, “Well, I don’t risk that because I wear the oversized t-shirts and I don’t worry about exposing my rear.”

The biggest challenge for you as a larger woman is the longer recovery time. You find yourself needing to take more breaks from knee aches. You use machines that have low impact. Some of the bicycles have small seats that are uncomfortable and you wish they were wider. Lisa stated, “yeah.”

For working out you usually wear Capri sweats and a cotton t-shirt. Shopping for workout clothing is frustrating because the sizing is never right. The tag may say a 2X but be a size 10. It also seems that the styles and fit are not the same for the plus size clothing as the other sizes. It seems like once a woman reaches a certain size, the retail companies think she doesn’t care what she looks like and that is not true. You would like to walk into a store, have several options, try a few on, have them fit and purchase them. Then, go to that store later in need of the same item, pick it up without having to try on because you know it will fit. Lisa stated, “That’s right.”

Clothing is not a huge factor into exercising, you wear it because it covers you up. However, it does feel good to put on fancy workout clothing that make you look good. Lisa stated, “Yeah.”
When trying on the Nike clothes for the first time you felt a little nervous and a little anxious because you thought to yourself: “Well, these say a 3X but they might not fit”. Once they slipped on past your hips you were excited, relieved and the felt good on. The pants are great but the shirt shows too much of your ‘pooch’ and you prefer more coverage. In response Lisa stated, “That’s right, yep.”

Initially you were shocked at how much the clothing was but once your husband told you that that is the right cost for the high-tech Nike brand. You would still buy them at the price if you have found them at a store and tried them on. Lisa stated, “Yep.”

Your workout clothing needs to cover you, especially when you are bending over. That is when you feel most self-conscious about exposing your chest and that is why you prefer the crew neck over the v-neck. In response to the member check Lisa stated, “This is all accurate except for the bending over part. I don’t want to flash my chest at people and that’s why I prefer to wear crew-neck shirts vs. v-neck shirt” When your workout clothes are doing their job they are not bothering you or interrupting your workout. Lisa stated, “Yeah, that’s right.”

Lisa agreed to each statement except for the reason as to why she prefers the crew neck over the v-neck.
I misunderstood and thought that when bending over, she was worried about exposing her back or rear. For her, the main concern was exposing her chest not her back.
APPENDIX J

NOTIFICATION OF APPROVAL
March 11, 2012

Principal Investigator: Dr. Leslie Burns
Department: Design and Human Environment

Study Team Members:
Student Researcher: Debbie Chastel

Study Number: 5193
Study Title: Overweight women: experiences with athletic clothing
Funding Source: None
Funding Proposal #: None
PI on Grant Contract: None
Submission Type: Initial Application received 01/23/2012
Review Category: Expedited
Category Number: 6.7
Waiver(s): Waiver of documentation of Informed Consent
Number of Participants: Do not exceed without prior IRB approval
Risk level for children: N/A

The above referenced study was reviewed and approved by the OSU Institutional Review Board (IRB).

Approval Date: 03/08/2012
Expiration Date: 03/07/2013

Annual continuing review applications are due at least 30 days prior to expiration date

Documents included in this review:
- Protocol
- Consent forms
- Assent forms
- Grant contract
- Recruiting tools
- Test instruments
- Attachment A: Radiation
- Attachment B: Human materials
- Letter of support
- Translated documents
- Project revision(s)

Comments:
Principal Investigator responsibilities for fulfilling the requirements of approval:
- All study team members should be kept informed of the status of the research.
- Any changes to the research must be submitted to the IRB for review and approval prior to the activation of the changes. This includes, but is not limited to, increasing the number of subjects to be enrolled.
- Reports of unanticipated problems involving risks to participants or others must be submitted to the IRB within three calendar days.
- Only consent forms with a valid approval stamp may be presented to participants.
- Submit a continuing review application or final report to the IRB for review at least four weeks prior to the expiration date. Failure to submit a continuing review application prior to the expiration date will result in termination of the research, discontinue of enrolled participants, and the submission of a new application to the IRB.

If you have any questions, please contact the IRB Office at IRB@oregonstate.edu or by phone at (541) 737-8068.

1 Where parental permission is to be obtained, the IRB may find that the permission of one parent is sufficient for research to be conducted under §46.404 or 46.405. Where research is covered by §46.405 and permission is to be obtained from parents, both parents must give their permission unless one parent is deceased, unknown, incompetent, or not reasonably available, or when only one parent has legal responsibility for the care and custody of the child.

IRB Form v/8/2012
## APPENDIX K

Emotional Chart of Experiences in Athletic Clothing

<table>
<thead>
<tr>
<th>Participant</th>
<th>Personal Athletic clothing</th>
<th>Feelings in personal</th>
<th>Exercising in personal</th>
<th>Nike brand</th>
<th>Nike brand Feeling</th>
<th>Exercise in Nike Brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan</td>
<td>Danskin pants, Capri sweatpants, cut off Old t-shirts</td>
<td>“It’s not a fashion statement by any means and I don’t buy clothes because I like the way they look. It is just about the function of the clothes so I can get to the gym and do what I need to do and be safe and not have any chub-rub problems.”</td>
<td>I have to be really careful because my skin is sensitive—only cotton and I can’t sweat too much because if I do I get the chub rub. Sometimes the clothes twist and rub and that’s when I get the chub rub.</td>
<td>Tank top and Capri</td>
<td>Feel really relieved that they look really nice and like normal workout clothes and not like I don’t look any different than other people working out. It is no so much that I fit in but I don’t stand out.</td>
<td>Move with me. I am less of a sight to look at, less of a I don’t know freak show, it is not to blend in it is just not to stick out. It helps deal with going to do what you need to do and leave.</td>
</tr>
<tr>
<td>Brittany</td>
<td>2 sports bras, black yoga pants and a t-shirt-</td>
<td>It’s like anything when I take the time to think about it and pick out the right clothes, I feel better when I pay attention.</td>
<td>Capri and tank</td>
<td></td>
<td>I knew I could take these to my yoga class and it made me feel more motivated.</td>
<td>I felt good, it is new, pretty and I like it.</td>
</tr>
<tr>
<td>Tammy</td>
<td>T-shirt and sweat</td>
<td>Comfortable</td>
<td>Shorts and t-</td>
<td>Relaxed and</td>
<td></td>
<td>Cooler to workout in</td>
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<td></td>
<td>pants</td>
<td>shirt</td>
<td>comfortable</td>
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<tr>
<td>Amy</td>
<td>Capri knit, t-shirts, cargo shorts</td>
<td>Uncomfortable, baggy like pajamas, redundant like</td>
<td>Heavy, wet</td>
<td>Black tank and capri</td>
<td>Normal, like a Portlander, fit in, comfortable</td>
<td>Dry, I didn’t feel like I had been sweating, I didn’t even know that was going to happen, I had never heard of Dri-fit. I had to research that.</td>
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<td></td>
<td>men’s 4x t-shirts and shorts</td>
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<tr>
<td>Jennifer</td>
<td>Wal-Mart capri and a cotton tank or t that is longer and larger so there is no cling, men’s 2x t-shirts usually you have to give to get-mends dri-fit</td>
<td>Frumpy, not very put together, not active looking, it doesn’t look like gym attire</td>
<td>Comfort level is already there because they are not brand new.</td>
<td>Black tank and capri</td>
<td>Pants fit good, I don’t like the new feeling of the items I want something a little softer and worn in.</td>
<td>It didn’t make me feel any worse about myself but I am not sure they made me feel any better about my working out either.</td>
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<tr>
<td>Melissa</td>
<td>Fun-run t-shirt and capri</td>
<td>Fine comfortable.</td>
<td></td>
<td>Blue shirt and capri</td>
<td>Good, felt like staying longer because my clothes weren’t bothering me.</td>
<td>The top breathes better, it feels good on and there is nothing scratchy.</td>
</tr>
<tr>
<td>Name</td>
<td>Outfit Details</td>
<td>Fit and Feel</td>
<td>Outfit Details</td>
<td>Fit and Feel</td>
<td>Comments</td>
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<tr>
<td>Heather</td>
<td>Sweatpants or cut off sweats, 2 sports bras and basketball shorts and t-shirt</td>
<td>Fat and dumpy, did not make me feel put together but it fit the need at the time.</td>
<td>White shirt and capri</td>
<td>They made me feel good and not embarrassed, I felt hopeful, it felt good to put on something nice</td>
<td>The felt sturdy like they would last. I liked the breathiness.</td>
<td></td>
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<tr>
<td>Laura</td>
<td>Sweats, or pajama sweats that are black with a t-shirt</td>
<td>Huge and fatter than I already was. They were depressing, sometimes I would go to the workout and find that I was not keeping up the pace because I felt like it (clothes) was weighing me down and I felt like I was overheating and now I know it’s the clothes, not me.</td>
<td>Heavy and wet so it’s like uhhh.</td>
<td>Tank and capri</td>
<td>Like, wow, I actually have Nike. I felt like a new me. I felt sexy when I was wearing them. I felt like wow you really do look good even for being a heavy girl. When I was working out I like an equal in the exercise world I guess. I felt like I was in. Not restricted.</td>
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<tr>
<td>Julie</td>
<td>Cotton t-shirt, loose fitting stuff, sweatpants or stretch</td>
<td>I would never wear that out in life, like if I am going to the mall or store.</td>
<td>Tank white and shorts</td>
<td>Feel good, NICE, it wasn’t just plain ol’ blah blah, I felt happy.</td>
<td>Cool-temperatur e stayed down, you don’t seem to get as sweaty</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Outfit Description</td>
<td>Feelings Description</td>
<td>Clothes Description</td>
<td>Feelings About Outfits</td>
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<tr>
<td>Michelle</td>
<td>Men’s 2x shorts and t-shirts</td>
<td>Comfortable, I don’t look in the mirror, I don’t have to worry about busting out of them. I can be confident. Casual and relaxed.</td>
<td>White t-shirt and black shorts</td>
<td>Awkward, not sure why I ordered the shorts, my thighs are quite large.</td>
<td></td>
<td></td>
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<tr>
<td>Cynthia</td>
<td>Shorts basketball style, 2 bras and tank tops or t-shirt</td>
<td>Just like I am going to workout, it is not like ohhh I feel pretty, I never feel like that, if I cover everything up and I am not too hot then I am happy with it.</td>
<td>White tank capris</td>
<td>Feel fine, as long as I am not too hot. White tank capris</td>
<td>I feel a lot more comfortable in the Nike than in my jeans, I felt more physically comfortable than emotional. Whatever that stuff is that pulls the sweat off you that is kinda cool.</td>
<td></td>
</tr>
<tr>
<td>Donna</td>
<td>Similar Nike capris and a big t-shirt</td>
<td>I can’t make my workout clothes fashionable because of me, they don’t hide anything. They don’t really give me a feeling indifferent.</td>
<td>t-shirt and capri</td>
<td>The clothes are just clothes to me.</td>
<td>Disappointed in the shirt riding up and I was a little ‘oh well that’s me, you can’t hide you just have to deal with it.</td>
<td></td>
</tr>
<tr>
<td>Lauren</td>
<td>Yoga pants and I am self-conscious</td>
<td>Sweatshirt keeps me</td>
<td>T-shirt and</td>
<td>I felt great in the pants</td>
<td>I like how I look in</td>
<td></td>
</tr>
<tr>
<td>Lisa</td>
<td>capri sweats and a t-shirt</td>
<td>comfortable happy and good</td>
<td>Get the job done</td>
<td>T-shirt capri</td>
<td>Made me feel like I wanted to go to the gym and test.</td>
<td>I felt good, I liked the way the look on me.</td>
</tr>
</tbody>
</table>
Appendix L- Reflexivity

This reflexivity includes my thoughts, feelings, emotions, reasoning’s and notes about my research process. Conducting and orchestrating a dissertation is hard work. For me, I found reflecting helped to relieve emotions and encouraged me to continue working. This topic is near and dear to my heart and I did not withhold my feelings in this reflexivity. It is my intention to give further understanding about my perspective and experiences as a graduate student researcher working on a dissertation.

March 13, 2012

I am feeling upset about the clothing orders. Nike is running out of the size and colors that I need. This is something that needs to be addressed as part of limitations and possibly part of the experience as women go to order the clothing. As the purchaser I now understand some of the frustration that this group of women experience, of the 14 orders I made, five of them were not available in the size and color the women wanted. Because of this scenario, I had to email the ladies and tell them what items were available to them in their size. It is unfortunate that women have to compromise their wants because it is not available.

March 18, 2012

Again, I am ordering clothes but I have to call and ask what other color they wanted because Nike was out of grey- so she ordered the white- the options available went from pink, purple, blue white and black, to blue white black and grey and now to
just black and white- I feel anxious when going to place an order because I don’t know if the color or size will be in stock and I was SOOOO relieved when- Michelle ordered the white and it was the LAST one they have is in her size, wow, I feel stressed out.

Well, now the shorts are available in blue, purple and black and no longer in grey- I wonder if she would like purple or blue in stead of the black?

When I ask what their dream shopping experience is, it sounds like what I experience every time I go shopping- another form of thin privilege- They want to be able to walk into a store (not shop online) however, that is where the majority of options are (another form of thin privilege- a way of saying we (society) don’t want to see you), they say that not only does the size matter- the fit is very important because the way a body deposits fat is different for everyone and therefore clothing lays on the body differently.

I keep hearing environment come up; it obviously plays a large part in physical activity this one woman who lived in a walking community- would never go walking because she didn’t feel that she fit in with the morning walkers and joggers- the very next day at 5 am she said she got up and joined them because she was so excited and happy to wear Nike brand clothing.
Side bar and arbitrary thought: Campaigning- TV and magazines- everyone except 1 woman said she would want to see Larger women in the Nike ads for the line- Jennifer described fat people as gross and unattractive- she said she try’s very hard to meet the beauty standards and accepts them- she is also the youngest member of the group.

March 18, 2012

Money. A lot of the women have mentioned the clothing being more expensive than they would like to pay- and my thought is- well it is Nike and the quality is outstanding and it is worth the cost- but then I have to remember that I teach group fitness I have a lot of eyes looking at me so- that is a way that I justify buying the more expensive clothing because I know that 20 pairs of eyes are going to be looking at my body and the way it moves and I need to feel comfortable and I cannot be fussing with my clothing and if I do it takes away from my job performance.

Future implications:

Body scanning- all mentioned fit and size being 2 very different things- scanning to look for shape similarities that are the same size different shapes- not sure how to categorize but nice the shapes emerge- take it from there.
Fabric- some liked the thickness of the pants- those who did were 2x or 3x, they said they liked the strength and support they offered. I think designing a total body support garment for larger women would help reducing the bounce back- just like a bra is used to support larger breast movement- similar product for full body bra.

Compare options of xs-l and xl-3x, in color, grading differences, so how the s-l is graded and then the grading

March 26, 1212

Ordering clothes and now there are 0 t-shirts left in a 3X, not only is this participant unable to order a shirt in her size they do not have the color she would like. I am frustrated and not sure what steps to take next, do I order her a tank top and see how she responds? Do I tell her they no longer have any options in her size?

I sent her the options and combinations that were available, if she does not like any of them then I say thank you for your time but at this point you will not be a part of the study, Here is our correspondence a about the second selection. I am feeling discouraged and nervous to shop, I mean of the 15 women I am ordering for I don’t feel that 15 t-shirts and/ or tank tops is a lot........ for 5 colors to go out of stock.

Dear Julie,

It looks like Nike does not have the blue t-shirt in your size any longer. Your option is
the t-shirt in pink or the tank top in black or white. The shorts are still available in blue and black in your size. Based on our limited options here, what combination would you like?

Blue shorts and pink top or tank in white or black
Black shorts and pink top or tank in white or black

**She ordered the blue shorts and white tank** Julie was not upset as if this situation did not surprise her.

April 4, 2012

NOTE: two so far said how they avoid the women’s department for athletic apparel and go straight to the men’s, because they know the shape will be boxy and at least that will work, it might not fit well or looks good but it is something that covers my unique shape. They are completely avoiding the process because of past experience, “I don’t even bother with it”.

April 4, 2012

Body terms- referring to anatomy as non human parts like: spare tire, muffin top, back shelf, interesting way of dehumanizing oneself, apron rolls-

Susan stated,

“chub rub (a rash when your skin rubs too harshly with itself or the fabric of your clothing), and it keeps me cooler. I also liked the design of the tank better then
the shirt. I picked black instead of white because I'm a total slob and I always stain white, and also because darker colors are more flattering to a chubby chick.”

Deep breath- feeling sad today.

Added another question to the interview but am only able to have a few responses because some have already completed:

do you think you need to change, or the clothing needs to change?

So far everyone has said they need to, some think there should be effort made on both ends, designers should have better options but my sample says they need to work also. From a designer’s perspective we need to be able to create for the shape, regardless of the dimensions, that is our challenge and there is this demographic that had avoided adorning themselves because they feel invisible and since there are limited clothing available for them they feel they need to change in order to fit into the clothing.

April 5, 2012

Feel like I want to cry, these women have so much to say and feel valued and their opinion matters, interviews are taking twice as long as I anticipated. I can’t imagine going to a store and not being able to find my size-

They want to go to a store and not have to go to a different section-
Being petite is OK nothing WRONG with being petite but there is something wrong with being plus size- we put you in the back corner of the store so no one sees you.

April 9, 2012

Nike pairing up with Layne Bryant to offer a quality garment, that’s high quality and designed well but is not designed to last a long time because you are going to loose the weight and eventually need the smaller sizes anyways……interesting

April 10, 2012

It is fun to hear people reactions to the member checks, they have said “oh well yes! I guess that is me.” I think people like reading what others conclude about them. I am smiling; this is fun and a good way for me to summarize each individual’s experience. Gives me a little extra confidence too.

April 17, 2012

Another thing popped up for me when listening to the ideal shopping experience: a store that consistently has an item in my size, a lot of stores are not consistent with the plus size section and it seems that the regular sizes are always stocked.- regular….. small through large is ‘regular’ but also by say that is regular- what am I saying about plus size- irregular? That doesn’t seem right.
April 21, 2012

Willing to compromise color for items that fit- everyone said color impacts mood- compromising their moods- slightly depressing for me to listen to the story of how women are compromising and feeling that they deserve to wear uncomfortable unfashionable clothing and only until they are thinner will they deserve to wear comfortable stylish clothing. When I retire I can focus on loosing weight

May 1, 2012

women say they stay dry for a lot longer but have not heard of the dri-fit technology. I wonder if this is true for most women in this demographic?

May 3, 2012:

Working out/ exercise: walking and stretching but these women don’t think that walking throughout a 27 acre worksite for 5 hours a day is exercise. Hmmm, so they are being active but they don’t think it is enough or it is not organized so it doesn’t count. Not sure about that.

May 9, 2012- it is interesting to listen through the interviews- I can definitely tell the ones that I did early in the process and the ones that I completed later, I can hear the confidence in my voice and hear myself probing more. It is good to note that I developed more skills but I wonder if that hindered the potential depth of responses of my earlier interviews?
Emotions experienced with clothing:

Excitement

Hopeful

nervous then

disappointment |ˌdɪsəˈpɔɪntmənt|

noun

the feeling of sadness or displeasure caused by the non-fulfillment of one's hopes or expectations: to her disappointment, there was no chance to talk privately with Luke.

• a person, event, or thing that causes such a feeling: the job proved a disappointment | I was a big disappointment to her.

May 14th, 2012

Member checking- I have gotten a few responses where women have said no- “what I really meant was……………..” also good confirmation for me.

June 2, 2012

I am writing up my results section and feeling some personal change. I now feel I have a much deeper understanding of clothing for plus size women. Everyone really has unique stories and situations when it comes to shopping. I feel more compassion and more urgency to spread the word on how to design for the plus size body. My next step is to write a design book on how to design and illustrate for the plus size figure. First, I need to determine what those figures are- I am so so so excited to start my new position and share that I have found here.
June 3, 2012

have to remind myself that there will not always be similar responses.

Sometimes there is nothing to be determined. That is OK too, finding nothing is still finding something.

June, 6-2012

Last night I actually dreamed about my research. Is that normal? What is normal…….. I have 10 days until my results, discussion and conclusions- oh and abstract need to be finished and I know that is what I singed up for but I am feeling a little insane dreaming about my study. Yikes- ok, well, I feel like I need to give myself a pep talk and I have no idea if this is applicable to my study or what. But it is a part of how I am feeling. So, I was reading through my literature review and I can see how my perspective had changed about fitness and exercise from when I started the study and how I feel now. I was focusing a lot on body image and self-esteem but what I feel is more important is doing what I know. And I know design and fit of clothing. Clearly, fit and style of apparel for large women is not sufficient- ok- good relief for me- back to writing discussion.

June 11, 2012:

I am reading more about self comparison and remembering that several participants asked me what other participants were saying. There is a high amount of interest in others opinions. Hmmm, I wonder if that is because of the sensitivity of the topic or it is a natural habit to compare- I wonder if there is more or less self comparison behaviors for plus size women than that of other women. Does body size
factor into that, perhaps age or another variable? I think, I will briefly mention this in my discussion because I did not expect participants to ask about others during the interviews. It will be interesting to see how they respond when they read my results and summary. I hypothesize it will be a comfort to hear other women have some of the same experience.

June 12, 2012

I keep biting my nails and this may not be the appropriate place but I am typing on a computer and they are right there in front of me and I keep seeing them and they look so gnarly. Well, perfect. Now I completely forgot what I wanted to reflect on…. Common Deb. Oh yes!!! Now I remember. OK, so I am writing and I have consistently used the term plus size bit now that I think about it and I have learned so much I really don’t like that term. You don’t ever see a men’s plus size section, well it is the big and tall store but let me tell you there is nothing wrong with being a big and tall man. So then the women get a section called plus size. I almost feel more comfortable using the term fat women or larger women. At least fat is a descriptive term and plus size feels like a sugar coat or something demeaning. I am trying to work this out in my mind as to what is the most appropriate term to describe women who are larger than……. Other women. Hmmmm, They are only large because of comparison.

In writing my discussion I am talking about self-efficacy and attributional theory and I am feeling insecure. Hahahaha Bandura (1997) talks about how people do
not participate in activities they feel they may fail in and here I am questioning my ability to write about theory. Wow, But then again I wouldn’t put myself here if I thought I would fail.

In reading through my discussion and results I notice that I quote Amy frequently. Amy and I talked the longest, each interview just shy of 2 hours. She and I really connected and I feel she was able to share with me more than others. Hmmm, perhaps I should go through and consciously add more quotes and responses from other women- without removing Amy’s experiences I think I will simply add more supporting evidence to areas where Amy is found a lot.

June 13th 2012

I am still working on my discussion- haha go figure but I keep coming back to the word overweight and plus size. It doesn’t feel right to use the term plus size- although that is what the apparel industry has used for the past 20 years- I don’t like it. I find it puts a negative view on fatness. In taking Patti Watkins fat studies class I have come to have a different understanding of the word. When I first started writing my dissertation, I was very in the ‘public health’ mode of describing my sample. For example: being overweight is bad and unhealthy and fat is bad. My views have shifted and as a feminist and a designer I feel it is my moral obligation to develop a way to design for all body shapes and in doing that I need to use the term fat as a descriptor.
Just as I use the terms small, short, petite and tall. When I use the term overweight I feel like I am accepting the prejudice towards fat women. That is in-fact the opposite of what I intend to do. Side bar: I am smiling and laughing at the same time because I wonder if other researchers go through a transitioning period where you develop ones point of view. This point of view resonates with me and feels true for me as a designer. It is not my place to use anti-fat terminology so I will do the opposite and embrace the word fat. I actually gave a presentation to Patti’s class this spring and I have gotten so comfortable using the term fat, that I used it frequently throughout the presentation without noticing. A fat class mate came up to me after and thanked me for using the word fat instead of overweight (I must have used the term overweight at least once or twice) but it made me feel so good because I have read in books and articles that fat people prefer that term to describe themselves but I had not yet experienced that first hand. (Honestly, I still questioned the correctness of its use until that day) It was a confirmation to me that I was moving in the right direction. I wish I would have asked my sample how they felt about the word fat….. but wait! That was not part of my objectives- I have to bring it back to the objectives of the study or I would NEVER finish my dissertation hahahah.

June 14, 2012:

I just sent my (well not just- it was last night) but I sent my discussions to a peer to review for me and I am SOOO anxious to get feedback. Is that weird? No, I guess I am looking for that confirmation that what I think makes sense in words on a
paper. Perhaps like my sample wants to know what others think also…… hmmm well I am still working on symbolic annihilation and have my discussion out to three peers who are helping me get out of the pit. By the pit I mean I feel I am sooooo close to my data that I need others to view it from a different lens. Everything makes sense to me and I am waiting on pins and needle to hear what other think. When I read through my discussion I hear myself jumping back and forth between past and present tense- I am not sure what direction to go because that is just the way my mind thinks- when I am reading a quote from a participant, it is weird, I feel like I go back in time and I am back in the interview and I can hear her voice. I guess I need more practice writing and need to focus on the ‘tense’ that I am in; If I am not mindful I will flounder back and forth…. Hmmmmmm.

June 18, 2012

I just finished formatting the majority of my dissertation and will be handing it over to my major professor in 30 minutes. This has been quite anti-climactic and I feel a bit low. This has been one of the most stressful days as a graduate student. I could share more about my personal experiences today but I do not feel they have reflected on my ability to edit or compile this project. What a journey it has been and I look forward to decompressing and processing my experience.