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Vanity sizing, body image, and purchase behavior: A closer look at the effects of inaccurate garment labeling

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Vanity Sizing, Body Image, and Purchase Behavior: A Closer Look at the Effects of
Inaccurate Garment Labeling

by

Nicole Lynn Weidner

Thesis

Submitted to the College of Technology

Eastern Michigan University

in partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

in

Apparel, Textiles, and Merchandising

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This thesis is dedicated in loving memory of my mom, Connie M. Champnella, for inspiring me to learn about apparel and sewing, as well as teaching me to always follow my heart...

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Abstract

The purpose of this study was to investigate satisfaction of current ready-to-wear garment sizing and fit, consumer knowledge of vanity sizing, and how these variables affect body image and/or purchase behavior at retail. Survey Monkey distributed the questionnaire to 485 registered female students attending a Midwestern regional state university. Seventy-eight participants began the survey, with 63 students completing the entire questionnaire. Results indicated that consumers are mostly satisfied with garment sizing and fit. They are aware of vanity sizing usage within the apparel industry; however, this does not affect their purchase behavior at retail. Since consumers are aware vanity sizing is being used, this knowledge can be factored in when shopping. Results also indicated that the garment label sometimes affected personal body image perception. Body cathexis was measured with the use of the Body Area Satisfaction Scale (BASS) and indicated that participants on average are satisfied with their bodies.

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Chapter 1

Introduction

Currently, United States apparel manufacturers are not using a standard system to size ready-to-wear clothing. Research presents evidence that current sizing systems within the apparel industry are inconsistent in more than one area (Ashdown, 1998; DesMarteau, 2000; Ennis, 2007; Kinley, 2003; Newcomb & Istook, 2004; Sieben & Chen-Yu, 1992; Simmons, Istook & Devarajan, 2004; Strait, 1992; Tamburrino, 1992a, 1992b, 1992c; Whitford, 2005) and that fit is a leading factor for consumers when purchasing clothing (Ashdown & O'Connell, 2006; Alexander, Connell & Presley, 2005; LaBat, 1998; Schoefield & LaBat, 2005). Some of the reasons for the discrepancies within the current ready-to-wear sizing systems are that the sizing systems are based on anthropometric data that is over six decades old, and this promotes the lack of full range variation for the various sizes and body shapes which now exist among the American population (Simmons, Istook & Devarajan, 2004; Tamburrino, 1992; U.S Department of Commerce, 1971; Workman, 1991). When fit models are used, there are no set specifications that must be applied (Tamburrino, 1992; Workman, 1991); therefore, each company or brand has a product line with a different set of measurements that are used to size their entire assortment from season to season. This lack of consistency has led to an outbreak of vanity sizing being used more widespread among design houses (Ennis, 2007; Whitford, 2005), as well as size labeling information on garments being inaccurate across brands and styles (Sieben & Chen-Yu, 1992; Strait, 1992). Research studies in this area over the years have identified several discrepancies within the U.S. apparel market (Ashdown, 1998; DesMarteau, 2000; Tamburrino, 1992; Workman &

Lentz, 2000). The American consumer is still facing inconsistencies within the ready-to-wear apparel industry. This continues even after researchers have found that the size/fit criterion was rated the most important among participants in two separate groups surveyed when measuring the importance of twelve different clothing evaluative criteria for purchase (Burns & Hsu, 2002). The process of finding apparel to fit, as well as understanding what size one falls into across a wide variety of brands, is still a challenging aspect of shopping that many female consumers face (LaBat, 1987). In addition to the aforementioned, past research also points to a link between garment size label manipulation and a negative effect on female body image (Strait, 1992). The following research will examine how these variables are related in the current apparel market and if there is a relationship with consumer purchase behavior.

The link connecting an individual's body image, self-image, and clothing is a topic that dates back to the mid-20th century. Research has shown that clothing has had a profound influence on the reflection of the personal self-image (Jung, 2006; LaBat & DeLong, 1990; Sontag & Schlater, 1982), as well as lifestyle (Cassill & Drake, 1987). Body image itself is defined in many ways. The basic idea refers to the mental element of the physical self, both socially and psychologically, that is held by the individual and the individual's emotional response to it (Fisher, 1986; Strait, 1992). When manufacturers use their own individual methods to size their lines (i.e., various size fit models, outdated national voluntary standards, vanity sizing), the consumer deals with an inaccurate garment size label to determine the proper size category for his or her individual weight and figure type. This unintentionally puts the consumer into a situation where he or she is faced with two options.

One consumer may believe the product to be marked incorrectly (Whitford, 2005), while another consumer will perceive her body to be the problem (LaBat, 1990).

Purpose of the Study

The purpose of this study was to examine consumer knowledge of vanity sizing and satisfaction with garment size and fit. It measured the effect, if any, these variables may have on purchase behavior at retail. Body cathexis was also investigated to measure the samples overall body satisfaction. The following research questions were addressed:

- Q1: Are female consumers satisfied with how ready-to-wear apparel is sized?
- Q2: Are female consumers satisfied with how ready-to-wear apparel fits?
- Q3: Are female consumers aware that garments are sized inconsistently within the ready-to-wear apparel industry?
- Q4: Does the size on a garment label have an effect on whether or not the consumer purchases the garment?
- Q5: Are female consumers aware that vanity sizing is used in the sizing of ready-to-wear garments?
- Q6: Do female consumers have a negative or positive affiliation with vanity sizing?
- Q7: What relationship is there, if any, between vanity sizing, or inconsistent sizing, of ready-to-wear apparel and body image?
- Q8: Does vanity sizing affect consumer purchase behavior at retail?

This research sought to answer these questions as well as look at what future research may contribute to a solution to this challenge within the apparel industry.

Strait (1992) reveals that body image can be affected in a positive manner when vanity sizing is present and the consumer must go down a size or two. However, she also notes that body image is negatively affected when the consumer must increase the label size

when trying to achieve the proper fit of pants. Her finding extends consequences much further than just to the consumer, but to the manufacturer and retailer as well. She says, "...garments that are small in relation to their size label are likely to result in a negative response from the customers which will then ultimately affect their purchasing behavior" (Strait, 1992, p. 2). If manufacturers know that size manipulation can directly affect a consumer's purchase behavior in a negative manner, then why are they so inclined to manipulate the size on the garment label? It would seem that the positive effect of vanity sizing on one consumer outweighs the negative effect on the next. By identifying the relationship between these variables and body image among female consumers, manufacturers and retailers will become more aware of the adverse effects these discrepancies are having on their female demographic and can work to remedy the problem across the apparel industry by taking into account the various shapes and sizes of American women (Simmons, Istook & Devarajan, 2004, United States Department of Agriculture, 1941).

Justification and Significance of the Study

Investigation into consumer knowledge of vanity sizing, satisfaction with current apparel sizing methods, apparel fit and the effect it has on female body image are significant and necessary steps down the right path to a more conclusive grasp of the opinion women form of themselves from their clothing and their bodies. This study gives future researchers more information on how female body image is affected by garment label manipulation when the size runs either too small or too large and is inevitably inconsistent from brand to brand across the market. It also establishes that this topic is one that apparel manufacturers and

retailers should take special interest in. This is especially true since this may affect consumer buying behavior and overall purchase experience in a negative manner and may ultimately have an adverse affect on sales and growth potential within apparel organizations.

Hypotheses

The following hypotheses illustrate the relationships that are being examined through this study:

- H1: Female consumers are *satisfied* with how ready-to-wear apparel is sized.
- H2: Female consumers are *satisfied* with the fit of ready-to-wear apparel.
- H3: Female consumers are *aware* that companies use different methods to size garments within the ready-to-wear industry.
- H4: The garment size label has a *negative* effect on consumer purchase behavior.
- H5: Female consumers are *aware* that vanity sizing is being used in the sizing of ready-to-wear garments.
- H6: Female consumers who are aware of vanity sizing have *negative* feelings with the use of it within the apparel industry.
- H7: The use of vanity sizing in ready-to-wear apparel has a *negative* affect on female body image.
- H8: The use of vanity sizing in ready-to-wear apparel has a *negative* influence on consumer purchase behavior at retail.

Theoretical Framework

Festinger's Cognitive Dissonance Theory provides a background for understanding the potential negative response women have towards their bodies when faced with inconsistent information regarding garment size throughout the ready-to-wear apparel industry (Strait, 1992). Festinger (1957) states that when people are faced with contradictory cognitions (i.e. beliefs, opinions, attitudes), they will generally choose the avenue that will

lead to the least amount of conflict, thus explaining the basics of his theory of cognitive dissonance. He explains cognitions as an attitude or belief that an individual holds to be true within themselves or within society, and he notes three key ways individuals will try to alleviate discrepancy within their cognitions. As we look deeper at Festinger's (1957) theory, we can identify three ways people will begin to alleviate dissonance as it occurs within a given situation.

The first way that people will try to reduce dissonance when faced with contradictory cognitions is by reducing the importance of the dissonant beliefs. If they believe it to not be an important belief, then it makes it easier to disregard the cognition. Second, they may add more consonant beliefs that outweigh the dissonant beliefs. The individual may weigh the pros and cons; by adding more cons, the original thought may no longer seem discrepant. Finally, the individual may change the dissonant belief so that they are no longer inconsistent within his or her current cognitions. If they completely change their attitude, then it is no longer dissonant in the current situation. Festinger (1957) also makes a point to note that individual personalities make every effort toward consistency within and that attitudes and feelings tend to live in groups that are internally consistent; therefore, when faced with a feeling of discrepancy, or dissonant cognitions, the individual will take any step to alleviate or reduce the feeling of an inharmonious balance.

In regard to how this theory of cognitive dissonance relates to apparel and the research at hand, we begin by looking to the garment label, consumer knowledge of vanity sizing within the industry, and what type of effect these factors will have on a consumer's body image, particularly female consumers. When a shopper is faced with a circumstance of contradiction between two garment sizes, the size the consumer believes she wears and the

size that actually fits her, cognitive dissonance theory applies. Strait (1992) writes that dissonance of cognitions creates psychological strain which can threaten the overall self-image. Could dissonance of cognitions be causing a negative effect on body image? Strait (1992) supports this by noting, “A garment size label is one way in which women can compare their body size to the societal ideal, and the distance in between them” (p. 1). LaBat (1987) found in her research that the relationship of body cathexis and satisfaction with the fit of ready-to-wear clothing showed a weak but positive relationship. Body cathexis, being first defined by Secourd and Jourard (1953), is known as a component of body image that describes an individual’s satisfaction/dissatisfaction towards her own body.

Definitions of Terms

For the purpose of this study, the operational definitions for the specific terms below are as follows:

Body Image – The mental element of the physical self, both socially and psychologically, that is held by the individual, and the individual’s emotional response to it. In other words, positive or negative feelings/emotions and perceptions an individual associates with his or her own body (Fisher, 1986; Strait, 1992).

Body Cathexis – A component of body-image that describes a person’s level of satisfaction or dissatisfaction towards his or her own body (Secord & Jourard, 1953).

Self-Image – The overall idea a person has of who he or she is both psychologically and physically (Fisher, 1986; Strait, 1992).

Vanity Sizing – The practice of apparel companies who manipulate the garment label by identifying the nominal dimensions of a size 10 and then associate those

specifications as a size 6 for their organization or brand (DesMarteau, 2000; Ennis, 2007; Whitford, 2005).

Size – The number associated with the garment label or tag.

Chapter 2

Review of Literature

Outdated Anthropometric Data

Certain studies on the topic of inconsistent sizing blame the decades-old anthropometric data that are used to create the voluntary standards by which design houses base the patterns for their specific brand (Newcomb & Istook, 2004). Even if every organization were to use this particular outdated information, it does not take into account the varied body shapes of today's U.S. population, as compared to the shapes of the population back in the 1940s (Simmons, Istook & Devarajan, 2004, United States Department of Agriculture, 1941). Currently, a variety of methods are used in the United States to create sizing systems for the ready-to-wear apparel industry. Ashdown (1998) believes that of all the different methods used throughout the United States, none of them specifically addresses the challenges of trying to fit a population having such a great variety of sizes and shapes; however, she does believe it is possible to create a system that will focus on achieving a solution to this type of variability. However, today's practices still remain inconsistent.

Due to the use of outdated anthropometric data in development of the United States Department of Commerce voluntary sizing systems (1971) of ready-to-wear apparel (which was ultimately withdrawn from use), American consumers face another challenge when shopping in the marketplace. The challenge arises when an apparel company creates its own specifications for its particular brand by using a fit model (where they choose the size and specification of the model and grade up and down from a middle size) and does not utilize the voluntary standards that were at one time available to the industry. In this case, the

manufacturers use a variety of fit models that define their own measurement specifications for their particular target demographic.

Fit Models

Ashdown (2007) explains that the degree to which the quality of fit is obtained is influenced by every stage of the apparel product development, production, and consumption processes, and companies are now looking for ways in which accuracy and reliability of fit may be maintained by scanning their own professional fit models for all sizes in a collection and deriving dress forms from those scans. A fit model can be in the shape of a dress form, the human fit model, or the virtual fit model (Ashdown, 2007). For purposes of this research, we will discuss the use of the human fit model. The fit model is intended to represent a target demographic by both specified measurements and form (Ashdown, 2007, Workman, 1991). Some companies may coordinate their fit models in conjunction with voluntary standards set forth by the American Society for Testing and Materials (ASTM); at one time this was done by the government voluntary product standards set forth for sizing women's apparel (United States Department of Commerce, 1971), but this has been withdrawn from use. In any case, rarely is the same size dimension used for fit models across individual brands, much less the entire apparel industry (Workman, 1991). Workman found that measurement specifications for fit models at sizes 8 and 10 did not relate at all to the PS 42-70 voluntary standards set forth as of 1971 by the U.S. Department of Agriculture (1991, pp. 31-33). Another researcher tested consistency between dimensions and size designations of apparel made by several popular manufacturers (Tamburrino, 1992). Fifty women's apparel manufacturers which regularly stock various retailers nationwide were asked to provide measurements of the prototype that their size 8 misses was to fit. The study concluded that

of the 16 out of 50 companies that responded to the survey, there was a significant difference in the median measurements of the bust, waist, and hips as compared with the voluntary standards set forth in the 1970s by the PS 42-70 (Tamburrino 1992c p. 68; United States Department of Commerce, 1971), as well as many differences among each individual brand. Upon the completion of this phase of the study, Tamburrino (1992) took an assortment of the size 8 garments (from all fifty manufacturers first surveyed) and tried them on a range of Wolf dress forms in order to achieve the best fit possible for each garment. Of the fifty garments tested, only ten actually fit the size 8 Wolf dress form, while all but one achieved the best fit on a larger form than the size 8 test standard. Statistically, Tamburrino (1992c) found that it is 80% probable that a garment will not fit the consumer, as well as 78% probable that the garment will be, at minimum, one size larger than what the consumer perceives it will be (p. 69). To add to it, the problems with sizing practices are not for the consumer to endure alone. Retailers and manufacturers also feel the crunch in terms of returned merchandise, markdowns (McVey, 1984), decreases in catalog sales (Tamburrino, 1992a), and brand dissatisfaction (DesMarteau, 2000).

Garment Size Label Manipulation: Vanity Sizing

Garment size label manipulation is yet another element which supports the testimony that ready-to-wear apparel sizing systems are inaccurate and inconsistent. Vanity sizing is when an apparel company takes the dimensions that would normally be classified as an average size 10 throughout the industry and then makes that the size 6 specifications for their organization or brand (DesMarteau, 2000; Ennis, 2007; Whitford, 2005). For example, an informal survey concluded that a female who buys jeans with a 34-inch waist is meant to be a

size 10 if she chooses the designer label Calvin Klein; however, that size would drop dramatically to as small as a size 6 if she chose to shop at the Gap for their “modern fit” style jean. Whitford (2005) says the study also revealed the same goes for the Ann Klein shopper with a 30-inch waist who wears a size 6, but can wear a size 4 if she chooses to shop the Nine West brand (p. 1). Vanity sizing opens a new door in the inaccuracy problem of our ready-to-wear apparel sizing systems. It not only strengthens the argument that garment labels are guilty of inaccuracy when it comes to garment number size compared to actual measurements, but it may also be causing unnecessary confusion and dissatisfaction among female consumers.

Another negative association is that retailers and manufacturers are generally confidential in regard to vanity sizing because they want consumer’s to believe they are wearing a smaller size, not that the label has just changed (Whitford, 2005). It is believed that vanity sizing will help to increase the consumers’ overall body image and create a more positive self-image. Strait (1992) found this idea to be true in her research, but also found that the opposite scenario can have a negative effect. For example, she found that there was a positive correlation with body image when the proper fit was achieved with pants in one or more size numbers smaller than what the participants expected to wear; however, there was a negative correlation with body-image when the proper fit was achieved by going up one or more size numbers than what participants expected to wear. She links this finding with Festinger’s (1957) Theory of Cognitive Dissonance. She adds in her conclusion, “A negative influence on both the affective and discriminative elements of a woman’s body-image results from the dissonance caused by inconsistent size number when the size expected to fit is too small and the larger size is needed to achieve fit. It is possible that women may have

attributed the need for a larger size to an increase in their body-size rather than inaccurate manufactures' sizing systems" (Strait, 1992, p.41).

The purpose of the garment label is to give the consumer information needed to assess size/fit compatibility with the customer's shape and size (Sieben & Chen-Yu, 1992; Strait, 1992). However, research has shown this information is not always accurate. Now it becomes increasingly difficult for the consumer to efficiently find garments that are best for them to purchase based on their individual size/figure type, and this can lead to a negative interpretation of their own body image, as well as a negative body cathexis. In another study, when researchers measured 240 pairs of men's jeans, they found a significant difference between the actual dimensions of the clothing and what was listed on the label of the garment (Sieben & Chen-Yu, 1992), therefore supporting the idea that representation of the garment size by the label can be inaccurate and misleading for some brands. This study supports the indications that there is a significant need for consumers to try on several pairs of jeans in order to verify proper fit before purchase. This may also be true in regard to other garments like blouses, skirts, and outerwear. It also supports the idea that consumers cannot always trust the garment label to give them the necessary information they seek in order to make a knowledgeable purchase that best fits their body shape and size (Strait, 1992). These types of issues may in turn make the shopping experience an unpleasant and frustrating situation which can ultimately lead to overall consumer dissatisfaction with the shopping experience as a whole.

Body Image

Clothing is used to express our individual identity to the world around us. Sontag and Schlater (1992) found that “substantially more women than men express a relationship between clothing and body cathexis” (p. 6). Secourd and Jourard (1953) define body cathexis as “...the degree of feeling satisfaction or dissatisfaction with the various parts or processes of the body” (p. 343).

Several studies have focused on the topic of body image (Rudd & Lennon, 1994; Jung & Lennon, 2003; Lennon, 2007; Rudd & Lennon, 2001; Kim & Lennon, 2007; Chattaraman & Rudd, 2006; Rudd & Lennon, 2000), and social comparison theory (Festinger, 1954; Martin & Gentry, 1997; Martin & Kennedy, 1993; Richins, 1991) as related to clothing, body satisfaction, and self-esteem. Other studies look at body image, garment size manipulation, and its relationship with the theory of cognitive dissonance (Strait, 1992; Festinger, 1953). Research defines body image as a mixture of actions, cognitions, and emotions one believes to be true of his or her physical body (Fisher, 1986; Secourd & Jourard, 1953; Strait, 1992) and has determined it to be a main element in the overall growth of self-image or self-esteem (Fisher, 1986; Strait, 1992).

Festinger (1954) explains social comparison theory as the action of people comparing themselves to others in order to evaluate their individual self. Lennon (2007) found a positive association between overall appearance dissatisfaction among college-age females and a high level of exposure to fashion or beauty magazines which supports the theory of social comparison. She says “...exposure to images portrayed in fashion or beauty magazines may change college women’s comparison standards and result in dissatisfaction of their

overall appearance” (p. 15). However, other research has not shown that exposure to media images increase concern about weight, body image, or self-image.

Rudd and Lennon (2001) explain, “Like other personal characteristics related to dress (e.g. clothing interest, fashion opinion leadership, fashion innovativeness), body image is a personal characteristic that affects how we interact with dress and how that dressed appearance is presented publicly” (p. 120).

In Richins’ (1991) research, female college students demonstrated less satisfaction with their own physical beauty when they were exposed to media containing idealized images of the female form. Therefore, if the media in the U.S. depicts the “idealized” female form to be thin and beautiful with association to ultra thin supermodels and Hollywood actresses, where does the average female consumer fit in? Although sociocultural communications about women’s bodies on average glamorize an unrealistically slim body, only some women are unfavorably affected by those messages, while some women are satisfied with their bodies even when they stray from the ideal (Jung & Lennon 2003). In dealing with body-image and self-image constructs, some argue the relevance is only within those with eating disorders. However, Strait (1992) explains: “...research has shown that women’s body-images not only play an important developmental role in their self-images, but also body-image disturbances such a shape distortion size overestimation are not characteristics specific to only those women with eating disorders (p. 12).”

Chapter 3

Methodology

Research examining the relationship between consumer satisfaction, and body image, self-consciousness, and perceived body satisfaction has used several types of quantitative methods of data collection including the use of questionnaires (Kim & Lennon, 2007; Chattaraman & Rudd, 2006; Blowers, L.C., Loxton, N.J., Grady-Flessner, M., Occipital, S., & Dawe, S., 2003; Rudd & Lennon, 1994; Lee & Burns, 1993). Although the most widely used methods include questionnaires, researchers also use body measurements as a means of data collection (Strait, 1992). Some researchers believe that qualitative methods are best to use due to the difficult nature of capturing such measures via quantitative research and the need for “lived experiences” (Rudd & Lennon, 2000). This study will consist of quantitative methods, in the form of a questionnaire, to explore these important variables including (1) how knowledgeable are consumers with vanity sizing, (2) are women satisfied with garment sizing and garment fit of ready-to-wear apparel, and (3) what affect, if any, does garment size manipulation have on consumer purchase behavior? The survey includes specific questions developed to assess if the individual is familiar with vanity sizing, as well as her overall satisfaction with the use of garment sizing within the United States. The remainder of the questions will target the overall body cathexis of the individual participants in addition to questions measuring fit satisfaction. The questionnaire was developed (in part) from the questionnaire used by Karen L. LaBat (1987) in her doctoral dissertation conducting her research on the satisfaction/dissatisfaction of the fit of ready-to-wear clothing. It included a 5-point Likert assessment scale to both categories of apparel size manipulation weighted at

one end with almost always (satisfied) and the other end with almost never (satisfied) for some questions, and body cathexis being weighted at one end with strongly agree and at the other end with strongly disagree. This questionnaire was the primary form of data collection to answer the research questions. Questions in Part I of the survey were grouped together and measured in four separate categories including Satisfaction with Garment Sizing and Fit, Satisfaction with Body Cathexis, Knowledge of Vanity Sizing, and Purchase Behavior. Responses were coded in Part I as A=5, B=4, C=3, D=2, E=1 when calculating statistical data. Part II of the questionnaire was taken from the work of Cash & Pruzinsky (1990) and was also used by Strait (1992) in her thesis on the effects of garment size manipulation on body image. It is the Body Area Satisfaction Scale (BASS). This scale helped identify the consumer's perception of her own body and self-image by using a 5-point Likert scale with responses ranging from (A) Very Dissatisfied at one end to (E) Very Satisfied at the opposite end. Questions for the BASS were coded as A=1, B=2, C=3, D=4, E=5 when calculating statistical data. These methods were chosen for the obvious advantages in ease of distribution and collection of data.

Sample Population

With the assistance of Survey Monkey, a web-based survey design collection analysis tool, the research questionnaire was distributed to 485 registered female students attending the same college at a midwestern regional state university. A list of academic majors included in the study is listed in Appendix E. The questionnaire link was emailed to the registered female students asking for their participation strictly on a voluntary basis. A reminder email was sent to the sample population one week later to remind them of their

requested participation in the study. One final reminder was sent prior to the close of the study to all subjects who had not yet responded to the initial request. Participants surveyed were asked to disclose their age range, education level, major, employment status, annual income, ethnicity, marital status, and number of children in order to get a better understanding of the population demographic participating. All participants were at least 18 years of age and were required to sign off on a consent form prior to their involvement in the study. A total duration of fourteen days was given to participants to complete the research questionnaire. A copy of the informed consent letter is listed in Appendix C.

Instrumentation

A two-part questionnaire was developed for this study (Appendix A). This questionnaire was built with questions taken from two separate studies, as well as questions that were developed specifically to measure the other variables in the study. Combined, this two-part questionnaire assisted in assessing our study objectives outlined previously.

The first study involved looking at the satisfaction/dissatisfaction of the fit of ready-to-wear clothing (LaBat, 1987) through the use of the Global Fit Satisfaction Scale (GFSS) by using a 5-point Likert scale with varied responses dependant upon the question being posed. This study used questions comprising the GFSS to determine satisfaction with how garments are sized at retail and ease of finding fashionable garments in one's size. It also aided in measuring consumer satisfaction with garment fit. One open-ended question was included in Part I of the survey in order to get the respondents' candid thoughts and opinions on the research matter. These responses are documented in Appendix B. The remaining

questions in Part I were developed to measure body cathexis, consumer knowledge of vanity sizing, and how these variables may in turn affect the consumer's purchase behavior at retail.

The second part of the study investigated the effect of garment size label manipulation on female body image (Strait, 1992) with the use of the Body Area Satisfaction Scale (BASS). This scale represents the affective element of body image (Cash & Pruzinsky, 1990). This nine-item subscale of the Multidimensional Body-Self Relations Questionnaire assisted in assessing participants' satisfaction of particular body areas including the upper, mid, and lower torso, facial features, hair, height, weight, muscle tone, and overall appearance. Participants were asked to rate their degree of satisfaction of each of the listed body areas on a 5-point Likert scale ranging from (A) very dissatisfied to (E) very satisfied. As outlined per Cash's directions, the BASS score was reached by calculating the average, or mean, of the first eight items on the scale. A BASS score was calculated for the entire sample population as a whole to determine overall body cathexis.

Data Analysis

Using correlation design, the collected data were analyzed utilizing descriptive statistics such as Mean, Median, and Mode as parameters of analysis. These descriptive statistics were used to summarize and explain the demographic and frequency data for each grouping of variables. Mean scores will be represented for each category in graph form with corresponding tables including the mean values, standard deviation, and degrees of freedom.

Limitations

Limitations included a very small sample population taken from a midwestern regional state university. Of the 485 female students comprising the sample, 78 chose to voluntarily participate in the study, with 63 students completing the entire survey.

Chapter 4

Presentation and Analysis of Data

Results

Of the 485 female students who were asked to take part in this research study, 78 participated in the study, with 63 students completing the entire research questionnaire. Of these participants, the average age was 30 years old with students ranging in age from 20-66. The median age is 26, with the modal age being between 22 and 23 years old. Students majoring in Apparel, Textiles, and Merchandising (ATM) made up 19.4% of the total sample population. Interior Design (IDE) majors were 43.1% of study participants, with Hotel Restaurant Management (HRM) majors at 12.5% of study participants. Finally, 25% of the students chose “other” as their major. In terms of education level, 62.5% of participants are at the undergraduate level with 37.5% being graduate students. In regard to employment status, 77.8% of participants are employed, with 22.2% currently not employed. Average annual income is \$23,277.78, with the median income of participants coming in at \$15,000.00. Modal income of sample population is at \$12,000.00. Ethnicity among population is primarily White non-Hispanic at 74.2%, with Black non-Hispanic coming in next with 15.2%, Asian or Pacific Islander and Hispanic each comprising 4.5% of the population, and Non-Resident Aliens at 1.5% of the population. In addition to the above, 63.4% of respondents are not married, with 36.6% currently being married.

Figure 1 represents the mean values graphed for questions comprising the size and fit satisfaction measure. Questions are measured using responses coded as (5) almost always – very few exceptions, (4) usually – majority of the time, (3) sometimes, (2) seldom – not very

often, and (1) almost never – very few exceptions. In LaBat’s (1987) research, she used the three questions in Figure 1 to comprise the Global Fit Satisfaction Scale (GFSS).

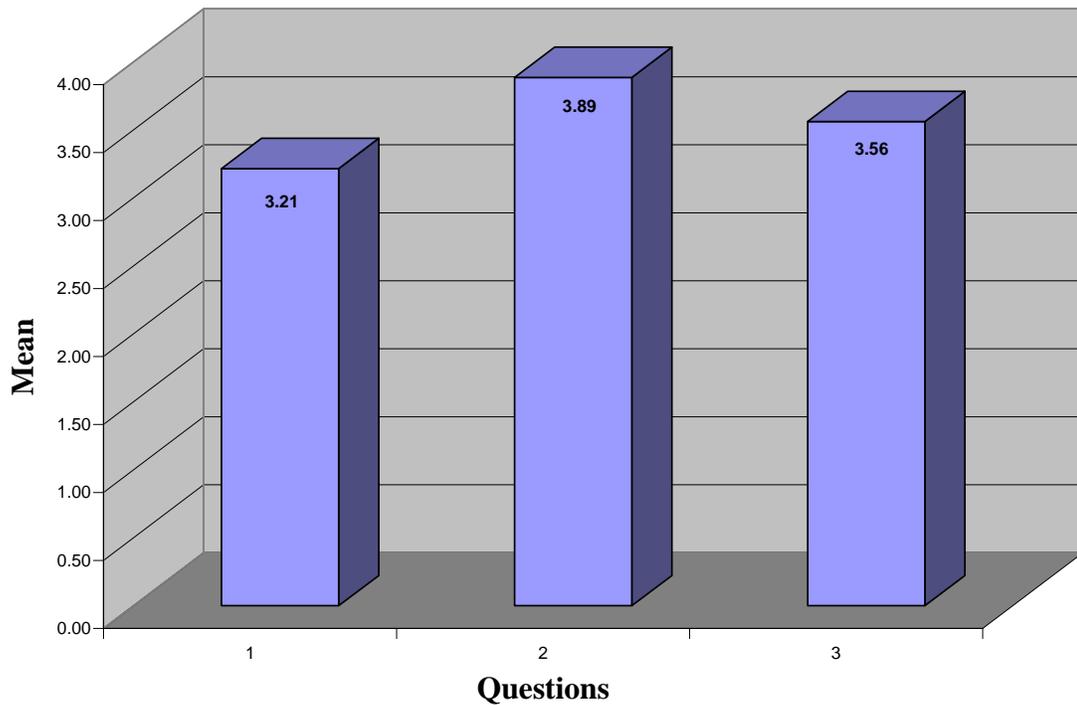


Figure 1. Measuring Satisfaction with Apparel Sizing and Fit

- Q1: I have problems purchasing clothing that fits well.
- Q2: I am satisfied with the way most of my clothing fits.
- Q3: The latest fashions are available in my size.

Questions 1 and 3 are relevant in regard to the purchasing of clothing that fits, with question 3 being specifically related to garment sizing. Question 1 demonstrated any dissatisfaction with regard to finding garments that fit. With the greater part of the population falling into the “sometimes” having problems purchasing clothing that fits well, responses would fall into a normal distribution. Question 2 measured how satisfied the sample is with the way their clothing fits. Results showed that the majority of participants are “usually – most often” satisfied with the fit of their clothing. Question 3 investigated the success in finding

adequately fitting clothing in one’s size. Mean scores indicated the sample population responses fall most into the “usually – most often” category as far as satisfaction with the availability of fashionable apparel in their size.

Table 1

Frequencies Measuring Satisfaction with Apparel Sizing and Fit

	Q1	Q2	Q3
Mean	3.21	3.89	3.56
St. deviation	0.92	0.99	0.84
Degrees of freedom	69	69	65

- Q1: Subject's satisfaction with purchasing ready-to-wear clothing that fits
- Q2: Subject's satisfaction with the fit of ready-to-wear clothing
- Q3: Subject's satisfaction with the availability of fashionable clothing in her size (GFSS questions, LaBat, 1987)

H1: Female consumers are satisfied with how ready-to-wear apparel is sized.

H2: Female consumers are satisfied with the fit of ready-to-wear apparel.

Analyzing the hypotheses on size and fit satisfaction, H1 is supported with regard to question 3 mean responses approaching the “usually” or “majority of the time” range that subjects are satisfied with the availability of apparel in their size. However, H2 reflected that female consumers sometimes had problems finding clothing that fits well. However, mean values for question 2 are approaching “usually – majority of the time” that respondents are satisfied with the fit of ready-to-wear clothing, thus validating H2.

Figure 2 represents mean values for questions comprising the knowledge of vanity sizing measure with 5 representing “strongly agree” to 1 representing “strongly disagree.” Question 1 investigated whether or not participants were aware of inconsistent size practices from brand to brand. Results showed responses approach higher disagreement when asked if

garments are sized the same throughout the ready-to-wear apparel industry. Question 2 directly measured the respondent's knowledge of vanity sizing. Mean scores for this question reflected values approaching higher agreement when asked if apparel brands manipulated the garment size label purposely.

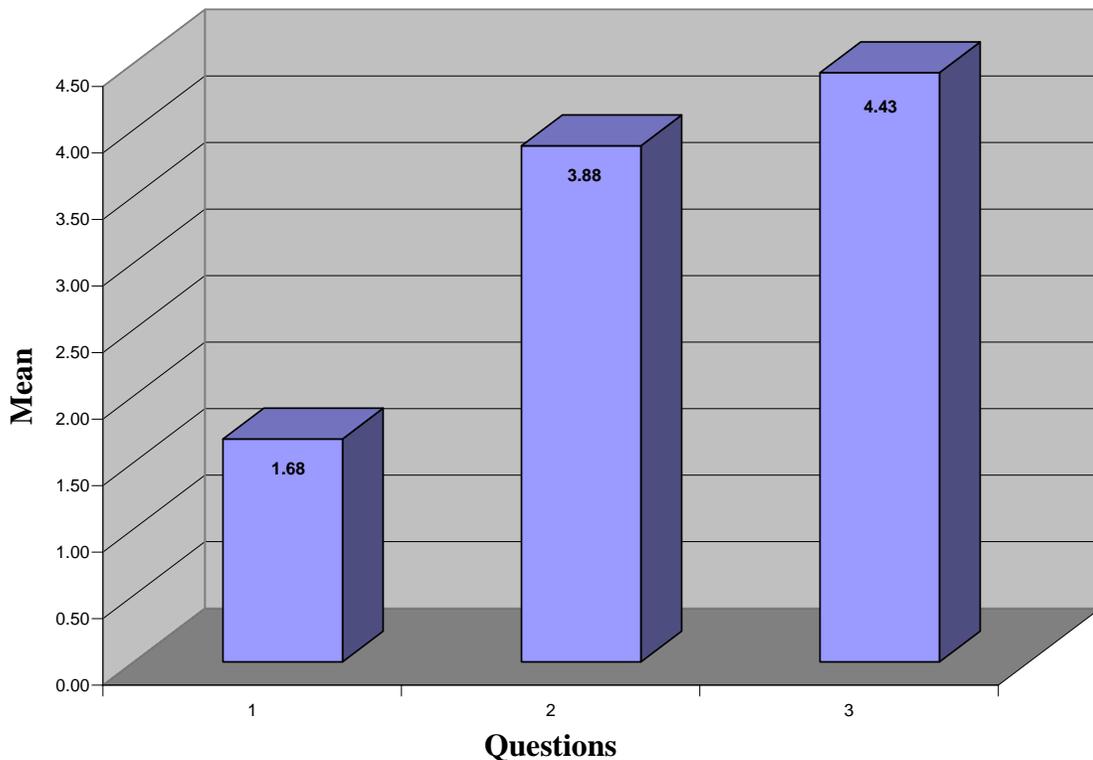


Figure 2. Measuring Knowledge of Vanity Sizing

- Q1: Garment sizes are the same across all brands of ready-to-wear apparel.
- Q2: Some apparel brands manipulate the garment size label purposely.
- Q3: Garment sizes are NOT the same across all brands of ready-to-wear apparel

Question 3 was included to check if responses would be consistent when asked an opposite version of the same question. Subjects responded with high agreement that garment sizes are not the same across all brands of ready-to-wear apparel remaining consistent with responses in Question 1.

Table 2

Frequencies Measuring Knowledge of Vanity Sizing

	Q1	Q2	Q3
Mean	1.68	3.88	4.43
St. deviation	0.82	0.89	0.64
Degrees of freedom	67	66	64

H3: Female consumers are aware that companies use different methods to size garments within the ready-to-wear industry.

Findings for Questions 1, 2, and 3 demonstrated that consumers were aware of inconsistent garment sizing throughout apparel brands in the industry, thus leading to support H3. As a check and balance to these data measures, Question 1 and Question 3 were direct opposites included purposely to see if participants would consistently answer when asked the same question but in an alternate manner. Responses were consistent for both questions.

Consumers were aware that not all garments are sized the same from brand-to-brand.

H5: Female consumers are aware that vanity sizing is being used on the sizing of ready to wear garments.

H6: Female consumers who are aware of vanity sizing have negative feelings about the use of it within the apparel industry.

Questions related to vanity sizing were measured by (5) strongly agree, (4) agree, (3) neutral, (2) disagree, and (1) strongly disagree. Question 2 in this group measuring knowledge of vanity sizing indicated whether participants agree or disagree that apparel brands manipulate the garment size labels purposely. As noted previously, vanity sizing is defined by the practices of apparel companies who manipulate the garment label by

identifying a nominal dimension of a size 10 and then associate those measurement specifications to a size 6 dimension for their brand (DesMarteau, 2000; Ennis, 2007; Whitford, 2005). Findings demonstrated that the average response by participants approached agreement that apparel brands are manipulating the garment size label purposely, thus proving that the sample is aware of vanity sizing within the industry. In regard to H6, this hypothesis was inconclusive based on the results of this study. More information would need to be obtained in order to clearly evaluate this hypothesis.

Figure 3 demonstrates the mean values graphed for questions intended to measure purchase behavior of the respondents where values represented as (5) almost always – very few exceptions, (4) usually – majority of the time, (3) sometimes, (2) seldom – not very often, to (1) almost never – very few exceptions. Questions 1 and 2 measured the respondents' willingness to purchase clothing where they may believe the garment label to be incorrect based on their own cognitions. The opposite of Question 2 was asked in a different section within the questionnaire to see if answers would remain consistent. This will be discussed later. Results indicated that the sample's average response to Questions 1 and 2 was that they would usually purchase a garment even if they believed the garment size label to have been manipulated or vanity sized.

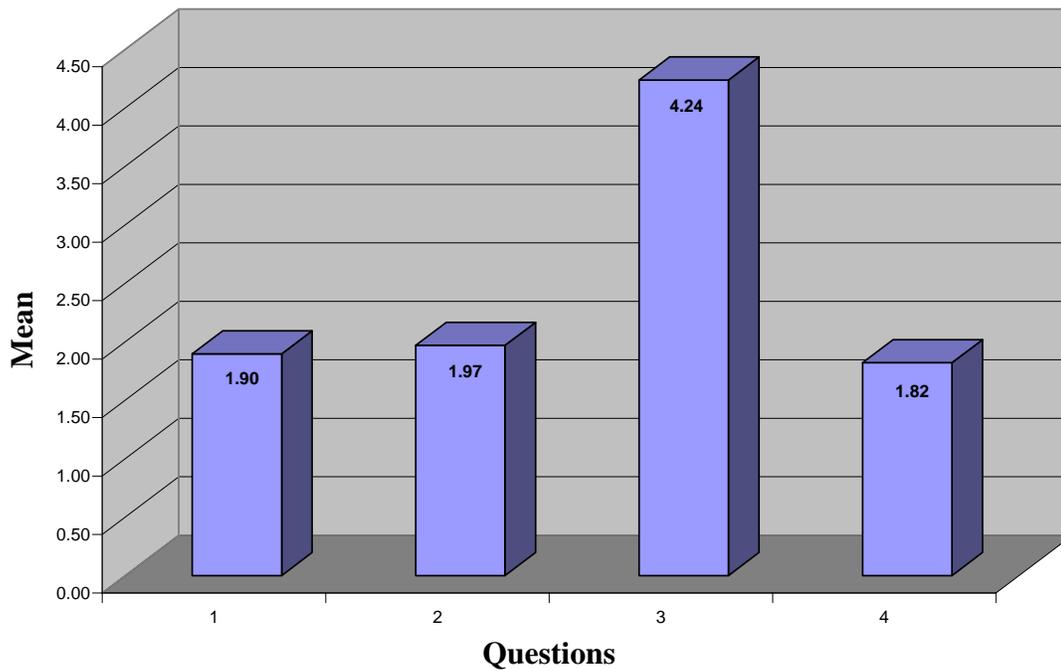


Figure 3. Measuring Purchase Behavior

- Q1: The garment size label affects my purchase behavior for example, if I need to go up a size, I will NOT purchase the garment.
- Q2: I will NOT purchase a size larger in clothing than what I normally wear if it fits my body better than the next smaller size.
- Q3: I will purchase a size larger in clothing than what I normally wear if it fits my body better than the next smaller size.
- Q4: The main reason I purchase a specific brand is that I know I wear a smaller size from this brand than with other brands in the market.

Since it has been proven that this sample population is mostly satisfied with the fit of ready-to-wear garments, as well as being knowledgeable of vanity sizing, they may have already adjusted their purchase behaviors to fit with this set of beliefs or cognitions. Further research may investigate if there is a relationship between consumers who are not aware of the use of vanity sizing and what kind of link there may be with purchase behavior when asked a similar question. As for the consistency between opposite questions, Question 3 average responses are reflected within the "usually – majority of the time" approaching "almost

always” categories when asked if they would purchase a size larger in clothing than what they normally wear if it fit their body better than the next smaller size. Question 4 measured whether or not these consumers actually seek out the brands that are known to utilize vanity sizing for their brands. Results indicated that this sample almost never to seldom will seek to purchase a specific brand because they know it to be true that they wear a smaller size in that brand.

Table 3

Frequencies Measuring Purchase Behavior

	Q1	Q2	Q3	Q4
Mean	1.90	1.97	4.24	1.82
St. deviation	1.02	1.01	0.85	1.00
Degrees of Freedom	66	65	66	66

H4: The garment size label has a negative effect on consumer purchase behavior.

Findings in Figure 3 are associated with consumer purchase behavior and show that there is no effect on purchase behavior in conjunction with size on the garment label for this sample population, therefore disproving H4. H3 concluded that consumers are aware of the inconsistencies with garment sizing; however, findings for H4 reported that the number on the garment size label does not necessarily dictate whether or not a purchase is made by the consumer even if she is aware that vanity sizing is being used on that garment.

H8: The use of vanity sizing in ready-to-wear apparel has a negative influence on consumer purchase behavior at retail.

It has been concluded to this point that the average number of consumers within the sample are aware of the industry’s use of vanity sizing and that garment labels do not affect their purchase behavior in a positive or negative manner. These two statements assist in disproving H8, with the use of vanity sizing having neither a positive or negative influence

on consumer purchase behavior at retail. Findings indicated that female consumers are aware of vanity sizing but do not allow the garment size label to affect their purchase decisions when shopping.

Figure 4 represents mean values for questions comprising the body cathexis measure. These questions were measured using (5) almost always – very few exceptions, (4) usually – majority of the time, (3) sometimes, (2) seldom – not very often, to (1) almost never – very few exceptions.

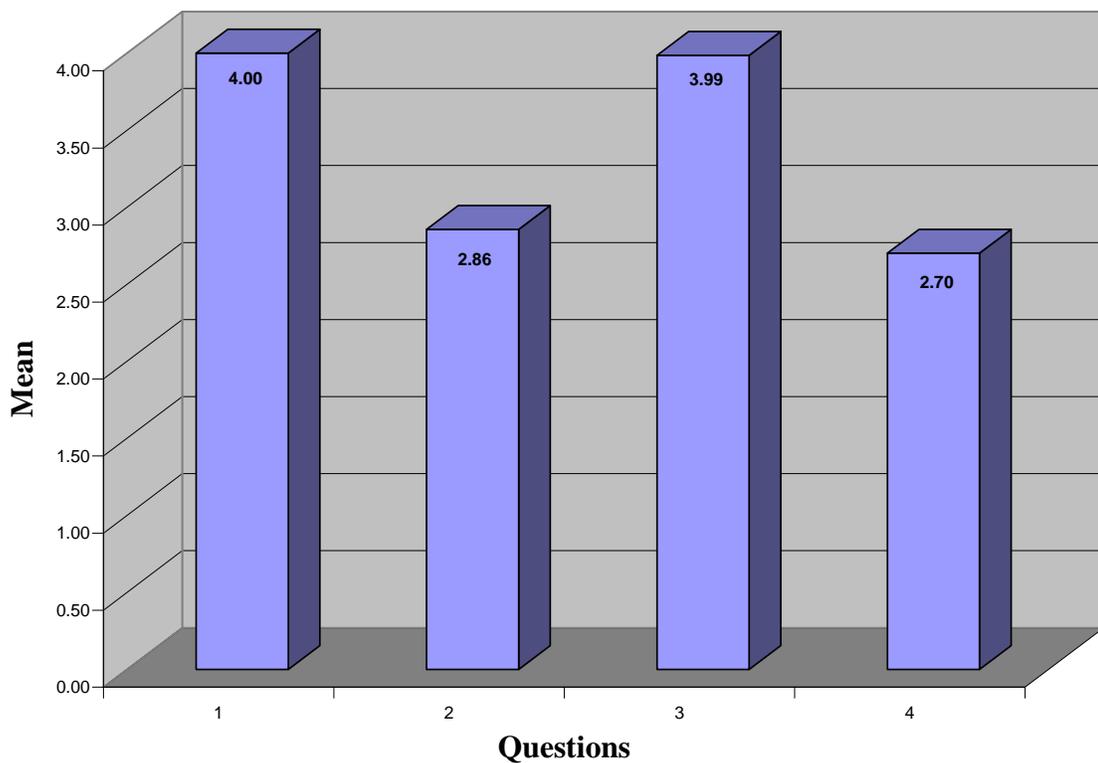


Figure 4. Measuring Body Cathexis

- Q1: I enjoy shopping for myself.
- Q2: I wear clothes that attract attention to my body.
- Q3: I think my clothes help optimize my appearance.
- Q4: The size on the garment label directly affects my feelings about my body.

Question 1 measured the level of enjoyment the consumer feels when shopping for apparel. Question 2 investigated whether or not the purpose of clothing is to purposely attract attention to their body, while Question 3 measured whether the consumers feel that apparel helps to optimize their overall appearance. Finally, Question 4 directly asked whether or not the garment label had an effect on the feelings they have about their own body. Mean values for Question 1 showed that this sample “usually – most often” enjoys the shopping experience. Table 4 represents statistical figures for the questions measuring body cathexis. It is observed from the data that in regard to Question 1, consumers “usually-majority of the time” enjoyed the shopping experience. Mean values for Question 2 reflected that participants “seldom to sometimes” wear apparel that attracts attentions to their body whereas Question 3 told us that this population “usually-majority of the time” thinks that apparel helps to optimize their physical appearance. However, when looking at mean values for Question 4, we see that the garment label does sometimes affect the feelings people have about their bodies.

Table 4

Frequencies Measuring Body Cathexis

	Q1	Q2	Q3	Q4
Mean	4.00	2.86	3.99	2.70
St. deviation	1.10	0.83	0.81	1.26
Degrees of Freedom	69	68	68	66

H7: The use of vanity sizing in ready-to-wear apparel has a negative affect on female body image.

In terms of this research population, findings for questions in Figure 4 signify that the average response from participants approached that they sometimes feel the size on the

garment label directly affects the feelings they have about their body. Further research would be needed in order to investigate whether the feelings were positive or negative in nature. In terms of this research, H7 is deemed inconclusive.

Figure 5 illustrates the mean scores of the Body Area Satisfaction Scale (BASS), (Cash & Pruzinsky, 1990; Strait, 1992) which measured participants' satisfaction with their own body images. Items are measured by (5) highly satisfied, (4) satisfied, (3) neither satisfied nor dissatisfied, (2) dissatisfied, and (1) highly dissatisfied.

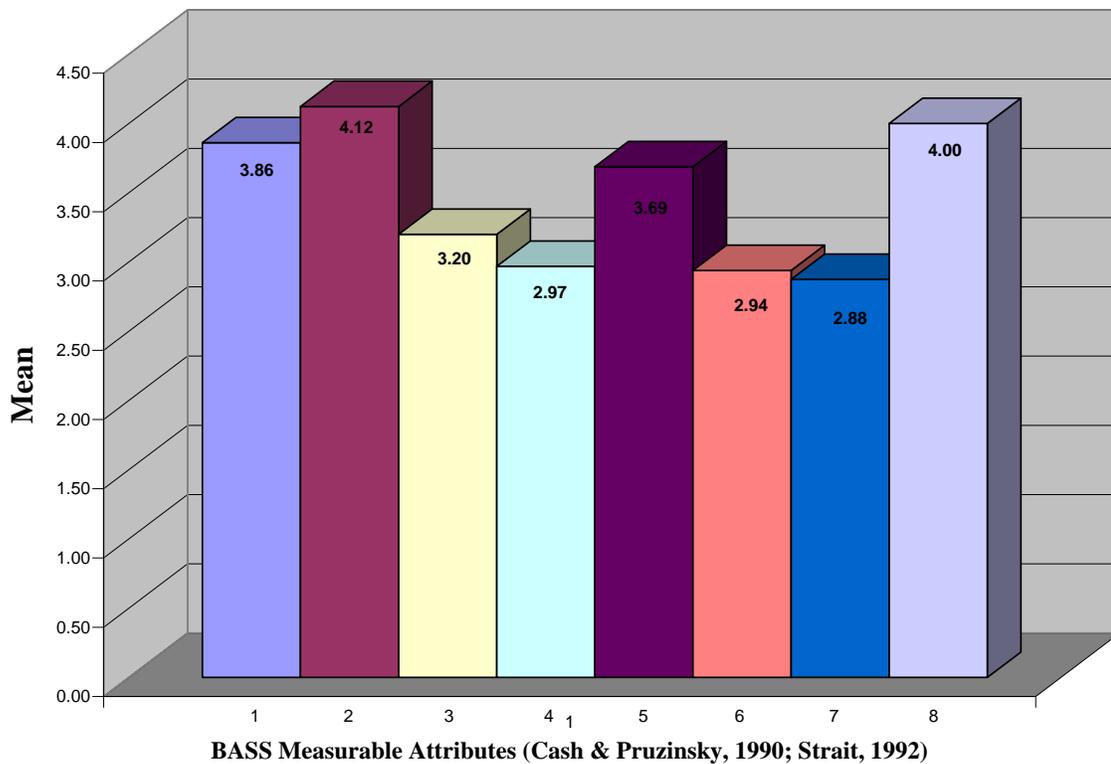


Figure 5. Measuring Body Area Satisfaction Scale (BASS)

1. Face (facial features, complexion)
2. Hair (color, thickness, texture)
3. Lower Torso (buttocks, hips, thighs, legs)
4. Mid Torso (waist, stomach)
5. Upper Torso (chest or breasts, shoulders, arms)
6. Muscle Tone
7. Weight
8. Height

Table 5

*Frequencies Measuring the Body Area Satisfaction Scale (BASS)
(Cash & Pruzinsky, 1990; Strait, 1992)*

	1	2	3	4	5	6	7	8
Mean	3.86	4.12	3.20	2.97	3.69	2.94	2.88	4.00
St. dev	0.98	0.86	1.09	1.26	0.96	0.96	1.20	0.75
DF	64	64	64	63	63	63	63	63

Statistical data in conjunction with the BASS shown in Table 5 revealed that hair and height are the top two areas of satisfaction among participants both scoring a mean value of 4.00 or higher. This mean value showed that participants overall are satisfied with these two areas of the body. Areas that participants were less satisfied with included mid-torso, muscle tone, and weight, with all mean scores coming in at less than a 3.00 or being associated with neither “satisfied or dissatisfied” to “dissatisfied.” Total BASS score for this population was 3.95, which signified that the sample population overall was mostly satisfied with their own perceived body image.

One optional question was included in the survey. This open-ended question was included in order for respondents to give their candid thoughts and opinions on garment sizing. Participants were asked, “What comments, if any, would you make in regards to the current sizing of ready-to-wear garments in today’s marketplace?” A total of 31 responses were collected and are included in Appendix B. Answers to this question indicated that there was dissatisfaction from some of this sample population in regard to the use of vanity sizing of apparel:

1. A lot of the clothing garments are sized to make women feel smaller. That shouldn't be the case. I think it's only right to have a specific sizing system for all stores. It's hard enough trying to buy clothes that look good on you in one store, but then when you have to go to another store you have to start the hunt over again for trying to figure out what size you are.

17. It seems that more expensive apparel has a better fit, but also that the more expensive apparel is sized smaller or offers a lesser amount of sizes than the usual 0-14.

Other responses point toward the desire of standardization or consistency among sizing, alluding to the way that men's apparel is sized.

12. Men seem to have an easier time shopping than women, especially when it comes to pants. Why can't women's clothing be in waist size and length like men's (32 X 34)?

15. Men's clothing seems to be more "standard"; it would be nice if women's clothing could be also.

22. I seem to have more problems with pants than with tops. I wish that women's pant sizes were universal the way that men's pants are sized.

Given the opportunity to share their opinions on garment sizing, participants expressed concern over garment label inaccuracies, length of pants, length of sleeves, and overall garment fit. Other comments included lack of availability of fashionable plus size and petite size apparel. Data included within this research may not be representative of the feelings of all female consumers due to the very limited demographic that participated in the study. A larger sample population would help to determine a more common, widespread feeling in regard to the variables measured in this study.

Chapter 5

Summary and Conclusions

The main purpose of this study was to examine satisfaction with garment sizing and fit, as well as consumer knowledge of vanity sizing. Also measured was the affect the aforementioned variables have on consumer purchase behavior and body cathexis. A two-part questionnaire (Appendix A) was used to collect data from a sample population of 485 registered female students within a college of a midwestern regional state university. The 78 females who participated in this study range in age from 28-66, with over half being undergraduate students. Descriptive statistics were calculated and analyzed to measure the level of satisfaction or agreement for each variable described above.

Findings of the Study

The following statements characterize the main results of this study:

1. Female consumers are mostly satisfied with current garment sizing and fit.
2. Female consumers are aware that inaccurate garment labeling, or vanity sizing, is used within the apparel industry.
3. Most female consumers who are aware that vanity sizing is used do not let it affect their purchase behavior in a negative manner.
4. Female consumers are mostly satisfied with their own perceived body image.

Conclusions and Recommendations

Results of this study indicated that participants within this sample population were mostly satisfied with garment fit and sizing. They also indicated that consumers were aware of the use of inconsistent sizing, or vanity sizing, of garments, but this knowledge did not affect their purchase behavior in a negative manner. Strait (1992) concluded in her research on garment size manipulation that a negative influence on both the affective and discriminative elements of a woman's body image resulted from the dissonance induced by inaccurate garment size labels, specifically when there was a need for a larger size to achieve ideal fit. She also noted that when a consumer goes down a size to achieve ideal fit, a positive influence is the result, therefore finding that this type of sizing is effective. With vanity sizing being widely used within the apparel industry, further research to investigate this sizing practice and the effects on the overall shopping experience may be beneficial.

Participants in this study were graduate and undergraduate students at a midwestern state university. Results may have been influenced by this narrow sample population, and results may be different if distribution were expanded. As mentioned earlier, limits to this study also include the low number of student participation, with only 16% of the total 485 students actually completing the survey. In addition, 19.4% of these participants major were in apparel, textiles, and merchandising (ATM). It is possible that these individuals may have a better understanding and/or awareness of garment size manipulation or vanity sizing than those students who are not ATM majors.

Another point to consider is the discussion of fit. Fit is subjective to the individual. Pattern specifications have ease added into the garment measurements in order to allow for a

more comfortable fit. However, what is comfortable to one person may not be to the next. Further research would assist in determining how consumers perceive fit on an individual basis.

Future research investigating satisfaction/dissatisfaction specifically with the use of vanity sizing would assist in explaining what effect, if any, it has on the consumers' overall shopping experience. This study specifically addressed the in-store shopping experience where it would be easy to try on merchandise. In addition to this, looking at an in-store shopping experience as compared to on-line or catalog shopping experience may assist in giving additional insight into this area of research.

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APPENDIX

APPENDIX A: RESEARCH SURVEY

Part I

Age: _____
Education Level: Undergraduate Graduate
Major: _____
Employment: Employed not employed
Annual income: _____
Ethnicity _____
Marital Status _____
Number of children _____

Read the following statements and rate each according to the scale given below.
Check **only one option** unless otherwise noted.

1. I have problems purchasing clothing that fits well.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

2. The latest fashions are available in my size.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

3. I enjoy shopping for myself.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

4. I wear a girdle or shaping device (like spanx, etc.)

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____

Seldom – not very often _____
Almost never – very few exceptions _____

5. Comfort is more important than being “in fashion” when I purchase clothing.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

6. I am dissatisfied with the way most of my clothing fits.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

7. I wear clothes that attract attention to my body.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

8. I feel self-conscious when my clothes make me feel too fat.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

9. I feel self-conscious when my clothes make me feel too thin.

Almost always – very few exceptions _____
Usually – majority of the time _____
Sometimes _____
Seldom – not very often _____
Almost never – very few exceptions _____

10. I select my clothes to camouflage parts of my body.

Almost always – very few exceptions _____
 Usually – majority of the time _____
 Sometimes _____
 Seldom – not very often _____
 Almost never – very few exceptions _____

11. I think my clothes help optimize my appearance.

Almost always – very few exceptions _____
 Usually – majority of the time _____
 Sometimes _____
 Seldom – not very often _____
 Almost never – very few exceptions _____

12. I am more comfortable if clothing is closely fit to the body:

Strongly Agree _____
 Agree _____
 Neutral _____
 Disagree _____
 Strongly Disagree _____

13. I prefer not to expose these body areas (check all that apply):

Breast cleavage _____
 Back _____
 Abdomen _____
 Thighs _____
 Upper arms _____

14. Sizes I usually wear in ready-to-wear apparel (choose from chart):

Juniors	Sizes 1-17	Odd numbers
Misses	Sizes 0-20	Even numbers
Petites	Sizes 0P-20P	Even numbers
Plus	Sizes 16W-28W	Even numbers

Blouse _____
 Skirt _____
 Dress _____
 Pants _____
 Bra Size _____
 Cup Size _____

15. Garment sizes are the same across all brands of ready-to-wear apparel.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

16. I try to camouflage these body parts with clothing (list all that apply):

Breast cleavage _____
Back _____
Abdomen _____
Thighs _____
Upper arms _____
Hips _____
Calves _____
Other _____

17. I will purchase a size larger in clothing if it fits my body better than the next smaller size.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

18. Size is more important than fit when I purchase clothing:

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

19. The size on the garment label directly affects my feelings about my body.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

20. I wear a different size (i.e. shirts – XS-XL) in one brands garment (i.e. Macy’s private label blouse) as compared to another brands similar shirt (Ann Taylor Loft blouse).

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

- 21. The main reason I purchase a specific brand is that I know I wear a smaller size from this brand than with other brands within the market:**

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

- 22. Some apparel brands manipulate the garment size label purposely.**

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

- 23. The garment size label affects my purchase behavior (for example, if I need to go up a size, I will not purchase the garment)**

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

- 24. The size I wear in ready-to-wear has remained the same over the years.**

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

- 25. The size I wear in ready-to-wear has changed over the years.**

Strongly Agree _____

Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

26. I have problems finding clothing that fits well:

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

27. Fit is more important than size when I purchase clothing:

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

28. Being “in fashion” is more important than comfort when I purchase clothing.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

29. I am satisfied with the way most of my clothing fits.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

30. I will NOT purchase a size larger in clothing than what I normally wear if it fits my body better than the next smaller size.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

31. I NEVER have problems purchasing clothing that fits well.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

32. I do NOT enjoy shopping for clothing.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

33. I wear clothes that do NOT attract attention to body.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

34. I select clothes to enhance specific parts of my body.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

35. Garment sizes are NOT the same across all brands of ready-to-wear apparel.

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

36. I prefer to expose these areas of my body (check all that apply):

Breast cleavage _____
Back _____

Abdomen _____
Thighs _____
Upper arms _____

37. I am more comfortable if clothing is loosely fit to the body:

Strongly Agree _____
Agree _____
Neutral _____
Disagree _____
Strongly Disagree _____

38. What comments, if any, would you make in the sizing of ready-to-wear garments in today's marketplace?

Part II

Please choose the response in the below chart to best describe your level of satisfaction above for each body characteristic ranging from (A) very dissatisfied to (E) very satisfied and (C) neither satisfied nor dissatisfied.

	A. Very Dissatisfied	B. Mostly Dissatisfied	C. Neither Satisfied nor Dissatisfied	D. Mostly Satisfied	E. Very Satisfied
Face (facial features, complexion)					
Hair (color, thickness, texture)					
Lower torso (buttocks, hips, thighs, legs)					
Mid torso (waist, stomach)					
Upper torso (chest or breasts, shoulders, arms)					
Muscle tone					
Weight					
Height					
Overall appearance					

Body Area Satisfaction Scale (BASS)

APPENDIX B: RESPONSES TO OPEN-ENDED SURVEY QUESTION

Responses to optional open-ended question:

What comments, if any, would you make in regards to the current sizing of ready-to-wear garments in today's marketplace?

1. A lot of the clothing garments are sized to make women feel smaller. That shouldn't be the case. I think it's only right to have a specific sizing system for all stores. It's hard enough trying to buy clothes that look good on you in one store, but then when you have to go to another store you have to start the hunt over again for trying to figure out what size you are.
2. I find that clothing is no longer made for curvy women. Jeans are especially terrible; if one has a small waist and curvy hips, jean/pants are very hard to fit.
3. It seems to me that many tops are cut so short from under the arm to the waist. I hate that!!
4. I find that ready-to-wear garment sizing available seems to correlate to the store's geography/location. For example, in areas where the population is mostly 'white American', the sizing tends to be for taller, thinner (or bigger, depending on local population body type) people.
5. Women are built too differently to ever have standardized sizing. Standardize sizing in RTW would only cause more fit problems and/or create a million different sizes. I do hate that any jeans I try to buy are at least 4 in. too long. I don't understand why they think someone who is a size 0 should be anywhere near 5'7" +.
6. It has taken me years to detach my self worth from the sizing label! I've recently dropped 2 sizes and find myself having more FUN when clothes shopping. There seem to be more variety in styles & colors available in my current size (12-ish). I do remember buying jeans from New York & Company that were a size 8 & fit me very well! I've NEVER been a size 8! I now have a positive image of NY&C because of this, even though I haven't shopped there in YEARS!
7. Sizing does not match standards from 40 to 60 years ago. I can readily find clothing patterns for size 14 from the 1940-60's but after that that size disappears. Why???
8. Not enough skirts and dresses for short heavy women. Pants do not fit if you have a "large" stomach.
9. There are no cute clothes for big people. Big people are people too and want to feel decent about their bodies. They can't do it in Muumuus. It's as though there are bad clothes for big people to get them to lose weight to get into the cute clothes, but all it does is make them more uncomfortable and more upset that they can't wear them. In a way, it's discrimination.

10. I'm tired of never being able to find clothes that fit properly. Even from the so called "designer" gurus. I feel any more that their idea of fit is a little 16 year old Asian girl, small, petite. I am tall, but the so called "tall" girl clothes are too big so I am left to wear clothes that do not properly fit.
11. Be more consistent. I do not like to purchase cloths on-line because I do not know how it will fit.
12. Men seem to have an easier time shopping than women, especially when it comes to pants. Why can't women's clothing be in waist size and length like men's (32 X 34)?
13. I used to hate shopping because I could never find anything that was flattering. I got healthy and lost weight and now I can find all kinds of things that fit. I have dropped about a size in every type of brand that I purchase.
14. Pants are too low cut
15. Men's clothing seems to be more "standard", it would be nice if women's clothing could be also.
16. Jeans in the U.S needs to be updated with fashion. I mean, I am 27 and I need to buy jeans in the junior section, because misses are too high on waist although they say their not. Also I have semi big butt, and it's hard to find a good jeans or pants that fits on my body. It seems that most "white" Americans have small butt and that most jeans are for them.
17. It seems that more expensive apparel has a better fit, but also that the more expensive apparel is sized smaller or offers a lesser amount of sizes than the usual 0-14.
18. Most ready to wear garments that I have purchased the size because of the length. Being a tall person most of the time get a large or x-large in junior and women a middle or a large.
19. They range quite a bit between brands or even the jeans themselves in the same style
20. It is hard to find jeans that are long enough but not too long. Also shirt sleeves are too short.
21. There are very few clothing brands that fit tall woman appropriately. Even "long" pants are often too short for woman of my height. 5'10"... I have a hard time finding jeans long enough and thing enough in the waist. Also, pants for an athletically curvy figure are hard to find. Thank you.
22. I seem to have more problems with pants than with tops. I wish that women's pants sizes were universal the way that men's pants sizes are.

23. If you have a size 7 waist, it does not mean that you are 5' tall. Also, I am almost 6 ft tall with a smaller waist and I shouldn't have to pay more just to get pants that are long enough. The standard inseam on a tall jean/pant should be at least 35". That's why they are called TALL, this to me should not even cause the slightest issues with designers. They should know they have models that are 00's and 6 foot tall! This should be second nature to them!
24. It just depends on what the clothing piece is and if it looks right on my body. I won't buy it most of the time if its way to tight or doesn't fit correctly. But there are times when I want the garment really bad regardless if it does not fit the way it would in the right size.
25. Pants are usually too short for me. I'm 5"7" and I can rarely find slacks, jeans pants that are long enough. "Longs" usually work but are hard to find.
26. I think that the Intellifit Body Measurement system will help to make more accurate standardized sizes
27. I think they need to standardize women's sizes. Men's clothing is pretty much the same across the board, why not Women's
28. I think that I don't have as many problems with sizing when purchasing clothing as others because I am in a small-medium size range and there is more selection for this range. However, most of the women in my family and many of my friends are in the larger size range and they often have complaints with clothing selection when we go shopping.
29. The only problem I have with clothing is that I am short and it costs a lot more to buy in the petite department for a similar pair of dress pants. My pants are typically too long for me and are torn at the bottom. The petite departments I have looked at, although it has been a while, don't have as "fashionable" clothes either.
30. Most of them fit me okay, but the length is usually too long (arm length, pant length, skirt/dress length. Petites are hard to find for me, so I end up wearing misses because I'm closest to that size.
31. It's all over the place. Sometime I wear a 0 and other times I wear a 9? I usually just try to find stuff that makes me look good regardless of the size. I just make sure I try it on first.

APPENDIX C: INFORMED CONSENT AUTHORIZATION

Research Consent Form

Consumer Knowledge of Vanity Sizing, Satisfaction with Current Industry Apparel Sizing
and the Relationship with Female Body Image

Nicole Weidner

Apparel, Textiles and Merchandising

Phone: 734-487-2490

I am Nicole Weidner, a graduate student in the Apparel, Textiles and Merchandising department at Eastern Michigan University. As part of my master's thesis, I am conducting research under the supervision of Dr. Subhas Ghosh, and I am inviting you to participate in the study. The information gained will benefit the industry as a whole, as well as female consumers. The findings from this research may assist in streamlining the sizing of ready-to-wear apparel in the marketplace, and/or help to make garment sizing easier to understand across brands for the consumer. The study is described below.

The purpose of this study is to examine satisfaction with fit, consumer knowledge of vanity sizing used in the current ready-to-wear apparel market and the effect they may have on female body image.

Part I of the survey consists of thirty-seven questions with use of a five-point Likert scale ranging from "almost always" to "almost never" for some questions, as well as "strongly agree" to "strongly disagree". Some questions will ask you to mark all responses that apply or give your current size information in regards to ready-to-wear apparel, as well as disclose how you prefer your clothing to fit. Part II of the survey using the Body Area Satisfaction Scale (BASS) asks you to rate your level of satisfaction in regards to several body characteristics. You may choose from responses on a five-point Likert scale ranging from "very dissatisfied" to "very satisfied". The survey should take you approximately 45 minutes depending on the duration you spend on each individual question.

There are no potential risks for participation. Your participation is strictly voluntary, anonymous and confidential. Please note that refusal to participate in the study will have no penalty to you. You may discontinue participation at any time. You will at no time be asked to identify yourself by name, thus keeping your participation anonymous.

You may benefit from participation by learning information regarding the sizing of ready-to-wear apparel that you may not have previously known. Upon completion of the research, the thesis will be available for your viewing in the Eastern Michigan University library. All survey documents obtained through this process will be destroyed upon degree completion.

Please note, you will be asked to verify consent for participation. By clicking "yes – I consent and would like to participate" you will continue through to the survey. You will also have the option to click "no – I would not like to participate at this time". If you should have any questions in regards to this study, please contact Nicole Weidner or the committee chair, Dr. Subhas Ghosh, at 734.487.2490.

This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University, College of Technology Human Subjects Review Committee.

APPENDIX D: HUMAN SUBJECTS APPROVAL AUTHORIZATION LETTER



EASTERN MICHIGAN UNIVERSITY

To: Nicole Weidner
From: Paul Majeske, COT HSRC Chairman
Subject: COT Human Subjects Review Committee – Proposal Review Response
Date: August 25, 2009

Dear Nicole,

The Human Subjects Review Committee of the College of Technology has received and reviewed your proposal entitled:
Consumer Knowledge of Vanity Sizing, Satisfaction with Current Industry Apparel Sizing and the Relationship with Female Body Image.

The committee has APPROVED your proposal.
The committee would like to stress that you do not in any way stray from your plan and work hard to ensure anonymity of your participants. This is your official notification letter.
Good luck with your research effort,

[Signature Removed]

Prof. Paul Majeske
COT HSRC Chairman
COT Faculty Council Chairman

APPENDIX E: ACADEMIC MAJORS INCLUDED IN SAMPLE POPLUATION

Academic Majors Included in Sample Population

1. Administrative Management
2. Apparel, Textiles and Merchandising
3. Aviation Flight Tech
4. Communication Technology
5. Computer Aided Engineering
6. Computer Engineering Tech
7. Computer-Aided Design
8. Construction Management
9. Construction
10. Electronic Engineering Technology
11. Engineering Management
12. Hotel Restaurant Management
13. Industrial Technology
14. Interior Design
15. Paralegal
16. Mechanical Engineering Technology
17. Polymer and Coatings Technology
18. Product Design and Development
19. Quality Management