

Brigham Young University BYU ScholarsArchive

Theses and Dissertations

2004-03-19

Body Image and Beliefs About Appearance: Maternal Influences and Resulting Constraints on Leisure of College-Age Women

Toni Liechty Brigham Young University - Provo

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Recreation Business Commons

BYU ScholarsArchive Citation

Liechty, Toni, "Body Image and Beliefs About Appearance: Maternal Influences and Resulting Constraints on Leisure of College-Age Women" (2004). *Theses and Dissertations*. 1130. https://scholarsarchive.byu.edu/etd/1130

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

BODY IMAGE AND BELIEFS ABOUT APPEARANCE: MATERNAL INFLUENCES AND RESULTING CONSTRAINTS ON LEISURE OF COLLEGE-AGE WOMEN

by

Toni Liechty

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Master of Science

Department of Recreation Management and Youth Leadership

Brigham Young University

April 2004

Copyright © 2004 Toni Liechty

All Rights Reserved

BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

of a thesis submitted by

Toni Liechty

This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

Date

Patti A. Freeman, Chair

Date

Ramon B. Zabriskie

Date

Steven R. Hawks

BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the thesis of Toni Liechty in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

Date

Patti A. Freeman Chair, Graduate Committee

Accepted for the Department

Brian J. Hill Chair, Department of Recreation Management and Youth Leadership

Accepted for the College

Robert K. Conlee Dean, College of Health and Human Performance

ABSTRACT

BODY IMAGE AND BELIEFS ABOUT APPEARANCE: MATERNAL INFLUENCES AND RESULTING CONSTRAINTS ON LEISURE OF COLLEGE-AGE WOMEN

Toni Liechty

Department of Recreation Management and Youth Leadership Master of Science

The purpose of this study was to examine the relationship between body image, attitudes about appearance, and levels of constrained leisure for college-age women and their mothers. It also examined how the body image concerns of young women are influenced by their mothers'. Thompson and Gray's Body-Image Assessment Scale (BIAS) was used to assess body image while Spangler's Beliefs About Appearance Scale (BAAS) was used to assess the participants' beliefs about appearance. Raymore's hierarchical leisure constraints scale was used to measure levels of leisure constraints. The sample was taken from female students at a private western American university and consisted of 116 daughters and 76 mothers. The data supported the hypotheses that body image and beliefs about appearance pose significant leisure constraints for college-age as well as middle-aged women. The data also indicated some maternal influence on appearance-related concerns of daughters.

ACKNOWLEDGEMENTS

I would like to thank several people for their contributions to this project. First, I would like to thank Patti Freeman for all her time and advice and for never letting me settle for mediocrity. I would also like to thank Ramon Zabriskie and Steve Hawks for the many suggestions and comments that made this a much better study and paper. I am very grateful to Sarah Coyne for her love and support. You always believed in me and you taught me to aim for the stars. Thanks to my wonderful graduate student cohort as well as the faculty and staff from the RMYL department for making the last two years of my life a positive and enjoyable experience and for introducing me to the wonder that is Strongbad. I want to express my appreciation to Alexis Palmer, Sarah Taylor, and Kelly Gagalis-Hoffman for their unconditional love and support. You helped me to see life and myself in a new light and gave me examples of the kind of person I want to be. I will forever be thankful to my wonderful family for their never-ending love and encouragement. Finally, I would like to thank my Lord and Savior, Jesus Christ for giving me the strength and courage to live life to the fullest, for filling my life with peace and purpose, and for allowing me to cross paths with so many extraordinary people.

List of Tablesviii			
Body Image and Beliefs About Appearance: Maternal Influences and Resulting			
Constraints on Leisure of College-Aged Women			
Abstract2			
Introduction			
Review of Literature4			
Methods17			
Results23			
Discussion27			
References			
Appendix A Prospectus			
Introduction48			
Review of Literature56			
Methods75			
References81			
Appendix A-1aInformed consent			
Appendix A-1bLeisure constraints questionnaire			
Appendix A-1cBody Image Assessment Scale102			
Appendix A-1dBeliefs About Appearance104			
Appendix A-1e Activity and Demographic Data106			

Table of Contents

List of Tables

Table		
1	Regression Model Summary of Daughters' Appearance-Related	
	Constraints	44
2	Regression Model Summary of Mothers' Appearance-Related Constraints	45
3	Pearson Correlations Among Mothers and Daughters	46

Running head: BODY IMAGE AND BELIEFS ABOUT APPEARANCE

Body Image and Beliefs About Appearance: Maternal Influences and

Resulting Constraints on Leisure of College-Age Women

Toni Liechty, M.S.

Brigham Young University

Patti A. Freeman, Ph.D

Brigham Young University

Abstract

The purpose of this study was to examine the relationship between body image, attitudes about appearance, and levels of constrained leisure for college-age women and their mothers. It also examined how the body image concerns of young women are influenced by their mothers'. Thompson and Gray's Body-Image Assessment Scale (BIAS) was used to assess body image while Spangler's Beliefs About Appearance Scale (BAAS) was used to assess the participants' beliefs about appearance. Raymore's hierarchical leisure constraints scale was used to measure levels of leisure constraints. The sample was taken from female students at a private western American university and consisted of 116 daughters and 76 mothers. The data supported the hypotheses that body image and beliefs about appearance pose significant leisure constraints for college-age as well as middle-aged women. The data also indicated some maternal influence on appearance-related concerns of daughters.

Key Words: appearance, body image, leisure constraints, women

Introduction

Poor body image is a problem that is plaguing women around the world, especially in the United States. Of adult women in the United States, 63% are dissatisfied with their current weight, and 49% report being preoccupied with their body weight (Cash & Henry, 1995). The damaging effects of poor body image can be seen in the forms of eating pathology, lowered self-esteem and decreased enjoyment in every-day activities (Cooley & Toray, 2001; Stephens, Schumaker & Sibiya, 1999; Tiggemann & Lynch, 2001). Such statistics have sparked a surge of research regarding the effects of poor body image and the potential causes thereof. (Cash & Henry, 1995; Connor-Greene, 1988; Tiggemann & Lynch, 2001). As part of this surge, researchers have explored the effects of body image on leisure, and suggested that body image may be a constraint to leisure for women (Frederick & Shaw, 1995; James, 2000). Researchers have also recently begun to suggest that the body image of girls is shaped by the family unit in which they are raised (Benedikt, Wertheim, & Love, 1998; Cook, 2002). As these issues are beginning to emerge, additional research is needed to more fully explore contributing factors and negative impacts of poor body image. Therefore, the first purpose of this study was to learn more about how leisure is constrained for young women and their mothers as a result of poor body image and beliefs about appearance. The second purpose of this study was to provide insights into the degree to which maternal body image and beliefs about appearance are related to those of their daughters.

Review of Literature

Leisure Constraints

The concept of leisure constraints has been studied and examined in people of different ages and during different life stages (Jackson & Rucks, 1995; Mannell & Zuzanek, 1991; Witt & Goodale, 1981; Wood, 1971). Researchers have also examined the influence of ethnicity, socioeconomic status, educational levels and other variables on leisure constraints (Philipp, 1994). Most of this research focuses on the central idea that constraints "inhibit peoples' ability to participate in leisure activities, to spend more time doing so, to take advantage of leisure services, or to achieve a desired level of satisfaction" (Jackson, 1988, p. 203). Considerable research in this area has been devoted to identifying some of the more commonly reported types of constraints such as time constraints, financial constraints, and absence of facilities or opportunities. Constraints literature has also noted that women are particularly susceptible to experience many of these reported constraints (Shaw, 1994).

Development of constraints research. Identifying barriers to leisure has been an area of interest since the 1950s (Reeder & Linkowski, 1976; Thomas, 1956; Witt & Goodale, 1981; Wood, 1971). Most early literature consisted of empirical research focused on what were later termed structural constraints. These barriers were generally physical and readily identifiable. Such constraints included financial issues, geographic locations, and physical disabilities. This research identified some common constraints, but was incomplete in the range of constraints studied and lacked unification through theory.

In 1987, Crawford and Godbey introduced a model of leisure constraints in an effort to link existing constraints research and lay a foundation for future research. It suggested that the prevailing conceptualization of leisure barriers at the time addressed only one of the ways in which barriers might be associated with preferences and participation. Their model proposed that barriers fall into three categories: (a) structural, (b) interpersonal, and (c) intrapersonal. Structural barriers come between leisure preferences or choices and actual participation. Examples include geographical location, financial resources, and available time. Interpersonal barriers involve the relationships and interactions between individuals, such as the inability to locate a suitable partner for participation. Intrapersonal barriers reflect individual attributes and psychological states such as fear, stress, or depression that steer people away from or into specific activities. These categories aided identification of the major types of constraints that impact leisure. This and other theoretical advancements provided a means whereby empirical constraint research could be interconnected and laid a foundation for expansions in the conceptual understanding of leisure constraints.

Conceptual expansions. Researchers then began to look at constraints theory from a new perspective by challenging the assumption that leisure constraints necessarily restrict participation (Kay & Jackson, 1991; Shaw, Bonen, & McCabe, 1991). Studies began to suggest that some barriers to participation might be overcome and that through negotiation, constraints actively shape our leisure expression by interacting with preferences and patterns of behaviors (Jackson, Crawford, & Godbey, 1993; Jackson &

Rucks, 1995). This research began a movement toward a broader conceptualization of leisure constraints and a shift in the focus of constraints research.

While leisure constraints research was originally seen as a mechanism for better understanding barriers to leisure participation, more recent literature has proposed that studying leisure constraints can help us understand broader factors and influences that shape everyday leisure behavior (Samdahl & Jekubovich, 1997). Several models and theories regarding leisure constraints have been presented and expanded upon in recent literature (Hawkins, Peng, Hsieh, & Eklund, 1999; Henderson, 1997; Hultsman, 1995; Jackson, 1991; Jackson, 1993). These studies have provided theoretical critiques, explored alternative analyses, and introduced new concepts relating to leisure constraints.

One of the most significant expansions has been regarding the definition of constraint. Most of the early research worked under the supposition that "leisure constraints either prevented participation or did not" (Frederick & Shaw, 1995, p. 59). More recent research, however, has shown that reported constraints do not always correlate with reduced leisure participation (Kay & Jackson, 1991; Shaw et al., 1991). Shaw et al. (1991) suggest that leisure constraints may result in decreased enjoyment or even increased participation in certain activities. Their study and other related literature has been instrumental in developing a new paradigm that "incorporated a broader conceptualization of leisure constraints" (Frederick & Shaw, 1995, p. 59).

The first area examined within the broader perspective of leisure constraints identified by Frederick and Shaw (1995) explored reasons for the lack of correlation between leisure constraints and reduced participation. Researchers began to investigate the ways that some people negotiate leisure constraints. It was discovered that in many instances, people are able to overcome experienced constraints when they highly prioritize leisure (Henderson, 2002; Jackson et al., 1993).

The next area to be studied was the idea that "participation in leisure activities themselves may be 'constraining'" (Frederick & Shaw, 1995, p. 59). Oftentimes for women, pressures result from traditional gender stereotypes, such as the types of activities stereotypically seen as feminine and the pressure for bodily attractiveness (Shaw, 1994). These pressures often result in women feeling constrained into certain leisure activities, such as those activities which society deems appropriate for women or those that would improve their physical appearance. In these cases, women still participate in leisure activities; however, societal pressures result in constraint by restricting people from choosing leisure activities from which they may derive more enjoyment or other personal benefits.

A third area of development that broadened the conceptualization of leisure constraint theory was the idea that even when leisure participation is not reduced, leisure activities are often constrained in the area of enjoyment (Frederick & Shaw, 1995; Witt & Goodale, 1981). One of the factors found to influence recreational enjoyment has been self-consciousness, which in women may be partially caused by poor body image (James, 2001). In a study by James (2000), many girls reported that embarrassment affected both the frequency and quality of their participation in swimming. To reduce selfconsciousness some had developed strategies to make themselves less visible including covering up their bodies, staying in groups, swimming at remote venues, and avoiding

pools altogether. This type of research increased understanding of the variety of ways in which leisure is constrained.

As the conceptualization of constraints has expanded, researchers have also begun to broaden their scope in identifying specific constraints. Although, research initially focused on leisure constraints such as lack of time, lack of resources, and lack of sense of entitlement, less apparent constraints like body image have begun to be recognized as significant. Nezlek (1999) found that self-perceptions of body attractiveness and social attractiveness were positively related to women's confidence in social interaction and their perceived influence over the interaction. Because many of a woman's typical leisure activities are socially oriented (Kirkcaldy & Athanasou, 1995), the implications of research like Nezlek's must be acknowledged when considering the leisure constraints of women.

Body Image

Research has consistently established that women in North America are pressured to "attain and maintain a thin body" (Frederick & Shaw, 1995, p. 58). This drive for thinness is hitting women from all sides through the media and through the attitudes adopted by men and women (Low et al., 2003). Morry and Staska (2001) found that women reading beauty magazines internalized societal ideals, and this internalization predicted body shape dissatisfaction. Similar studies have shown that females of all ages experience internalization of the "thin ideal" from viewing television and other forms of media (Hargreaves & Tiggemann, 2003; Hofschire & Greenberg, 2002; Stice, Spangler & Agras, 2001). Consequently, in a society bombarded with media influences, most women are dissatisfied with their body shape or weight for one reason or another, and those who aren't have become the exception rather than the rule. In contemporary society, weight has been described as a "normative discontent," (Rodin, 1993, p. 66) and body size dissatisfaction has become simply part of life for the average woman.

Negative effects of poor body image. For many women, poor body image issues have led to body monitoring, appearance anxiety, disordered eating, and excessive exercise behaviors (Cooley & Toray, 2001; Stephens, Schumaker, & Sibiya, 1999; Tiggemann & Lynch, 2001). Connor-Greene (1988) found that nearly one-third of females reported either self-induced vomiting or use of laxatives as a weight-loss strategy. Furthermore, in a study of 643 non-anorexic, non-obese undergraduate women, only 33% of the subjects reported what could be considered normal eating habits. The degree of disturbed eating was highly correlated with "negative body image, greater tendency to endorse sociocultural beliefs regarding weight and appearance, and interference of weight and appearance concerns with other life domains" (Mintz & Betz, 1988). Dissatisfaction with one's figure has been consistently found to relate to eating pathology (Cooley & Toray, 2001).

Dissatisfaction with her body can also affect a woman's relationships, her social and emotional development, and how she perceives her own worth (Cullari, Rohrer, & Bahm, 1998; Kaplan, Busner, & Pollack, 1988; Tiggemann & Williamson, 2000). Nezlek (1999) found that for college women body image negatively affected day-to-day social interaction. His research also suggested that for college women, self-perceptions of social

attractiveness were positively related to their confidence in social interaction and their perceived influence over interaction.

Harris (1995) suggested that women's social and emotional development may even be retarded by body image disturbances. His study, along with others, suggests that body image has a significant negative relationship with self-esteem, self-concept, and beliefs about appearance (Geller, Johnston, & Madsen, 1997; Rodin, 1993; Spangler, 2002). In one study, high school seniors who perceived themselves to be of normal weight displayed greater self-esteem than those who thought they were underweight or overweight. Interestingly, women in the study specifically tended to display greater selfesteem if they were actually underweight (Kaplan, et al., 1988). These problems have also been observed in young children and have led to problem behaviors (Vander Wal & Thelen, 2000). Furthermore, in nearly every study, these problems have been found more prevalent in females than males.

Gender differences in prevalence of poor body image. Mintz and Kashubeck (1999) found that regardless of race, women reported more body image related problem attitudes and behaviors than did men. Hoyt and Kogan (2001) found that women, especially those under or above average weight, were more dissatisfied with their appearance than were men. In a study by Connor-Greene (1988), results showed that females dieted, and took other weight loss measures more frequently than did males. Despite the fact that most were within ideal weight range, very few were satisfied with maintaining their current weights. In a study by Tiggemann and Williamson (2000), women reported exercising "more for reasons of weight control, tone, and mood

enhancement than men" (p. 119). Most literature has found body image to be poorer among women and the effects more damaging to women than to men.

Body image research in leisure. Until recently, body image related research has been mainly focused on understanding the relationship of body image to self-attitudes and psychological health and has made great contributions to psychology. Much less attention, however, has been given to the impact of body image on other life areas such as leisure (Frederick & Shaw, 1995). Whereas body image has been shown to affect selfesteem, and research has shown positive correlations between active participation in recreation activities and self-esteem, as well as negative correlations between leisure constraints and self-esteem (Dattilo, Dattilo, Samdahl, & Kleiber, 1994; Raymore, Godbey, & Crawford, 1994) it follows, that research should turn attention to the problem of body image in the context of leisure constraint theory.

Recently a few researchers have addressed the issues of body image as it relates to leisure choices and leisure constraints. Frederick and Shaw (1995) found that while body image did not seem to prevent participation in aerobics, body image concerns were shown to constrain the enjoyment of aerobics as a leisure activity. The data indicated that the reduction of enjoyment was related to the clothing worn for aerobics and to competition over appearance and body weight among participants. The study suggested that body image "can constrain leisure in some situations, although it is not a constraint in the traditional sense of preventing participation" (p. 57). Similarly, James (2000) found that for adolescent girls in a swimming pool setting, body image constrained participation as well as enjoyment of leisure time.

Because leisure has been shown to be correlated with life satisfaction (Ragheb & Griffith, 1982; Russell, 1987; Zoerink, 2001) as well as personal development (Kinney & Cole, 1992; Omran, 1999), more research as to how body image influences leisure participation is warranted. The young adult stage of life has been shown as the time when most people are developing leisure habits that will continue through the life-span (Iso-Ahola, Jackson, & Dunn, 1994). It stands to reason, therefore, that research regarding body image and leisure constraints may benefit by focusing on this population. It follows that this research should be taken further by investigating not only the influence of body image on leisure participation, but possible contributing factors to body image. One such factor is the effects of familial influences on body image and beliefs about appearance of young women.

Familial Influences

Much past literature has suggested that individual behaviors and attitudes are in large part shaped by the people with whom we spend time (Bandura, 1986). For most children today the greatest influence comes from family members (Motley, 1997). Social learning theory asserts that the family is the proximal learning environment for children (Marjoribanks, 1976). Social learning theory has recently been explored in the realm of body image and appearance attitudes (Markey, Tinsley, Ericson, Ozer, & Markey, 2002).

Research using primarily social learning theory and evolution theory has provided sociocultural explanations for body size preferences and suggested that familial relationships influence levels of weight concern for adolescent girls (McHale, Corneal, Crouter, & Birch, 2001). One study found that sisters have similar levels of body image

disturbance, sociocultural awareness and internalization. The research indicated that interaction and comparison between sisters greatly affects actual body image as well as attitudes regarding appearance (Tsiantas & King, 2001). Related research has explored the paternal influence on body image and appearance-related attitudes (Dixon, Gill, & Adair, 2003). Dixon et al. found associations between fathers' attitudes to physical attractiveness in females, their perceptions of the impact of being slimmer, and their daughters' dieting behavior. They concluded that fathers' attitudes about the importance of female appearance play an influential role in the body image, attitudes, and dieting behaviors of their daughters. While research has included multiple members of the family unit, the main body of research regarding appearance-related influence has focused on the impact of the mother (Cook, 2002).

Mothers' influences on daughters' body image. Recent research has supported the claim that there exists a relationship between the body related feelings and behaviors of mothers and daughters (McKinley, 1999; Ogle, 1999; Pike & Rodin, 1991). According to Motley (1997), "mothers act as vehicles for body image concerns and attitudes about dieting and food" (p. 2409). She asserts that an emotional connection joins mothers, daughters and food, and that this connection explains the escalating problems Western society has with eating, body image, and eating disorders. Feilke and Chambliss (1992) found that disordered eating in college-aged daughters was strongly associated with maternal behaviors. Mothers who were perceived as being preoccupied with fat, food, and weight were more likely to have daughters who exhibited disordered eating. Benedikt, Wertheim, and Love (1998) found similar results even when controlling for

daughters' actual body weight. Additionally, Tiggemann and Lowes (2002) found that mothers' dietary restraint predicted the degree of monitoring of daughters', but not sons' eating behavior, even when actual and perceived weight of the child was taken into account. Through this research, they concluded that "the degree of control over childfeeding might provide a behavioral mechanism for the intergenerational transmission of eating attitudes and beliefs within families" (p. 1).

It has been suggested that mothers influence not only daughters' attitudes and behaviors, but also actual body image and body dissatisfaction. Lowes and Tiggemann (2003) found that body dissatisfaction for girls aged 6-8 was predicted by perception of mothers' body dissatisfaction. Similarly, Hahn-Smith and Smith (2001) found that adolescent daughters of mothers who believed there to be a greater discrepancy between their daughter's current body shape and their ideal, tended to have lower body esteem scores. This research also found that mothers of low body esteem girls were more critical, and concluded that these mothers' feelings were "communicated in some manner to the girls, which in turn impacted the girls' body esteem" (p. 438). When studied in collegeaged women, research has demonstrated a significant predictive relationship between appearance related communication of mothers and body image of daughters (Schwartz, Phares, Tantleff-Dunn, & Thompson, 1997). Similar relationships between maternal communication and daughters' body image have been found consistently in populations of varying ages (Lawrence, 1999).

Influence of familial relationships on daughters' body image. Research has demonstrated the importance of group support when receiving treatment for body image

related problems (Wilfley, Grilo, & Rodin, 1997). For many young adults the family is the most influential unit of human interaction; therefore, family involvement could greatly improve results of body image treatment (Woodside & Shekter-Wolfson, 1991). Research has found that girls with high maternal identification, or those who aspire to be like their mother in terms of personality traits, felt better about themselves and their bodies compared to girls with low maternal identification (Hahn-Smith & Smith, 2001). These findings suggest that family members can have a significant influence on the body image and appearance attitudes of young women. Further research has indicated that parents also have power to "buffer" daughters from the thin ideal internalization that can contribute to poor body image (Frank, 1999).

Research has also suggested that familial dynamics and relationships have a significant affect on the body image of young women, and that improving family relationships are key to improving the body image of young women (Shekter-Wolfson & Woodside, 1991). Kichler and Crowther (2001) found that levels of familial communication moderated the affects of body image influence. Additionally, Byely, Archibald, Graber, and Brooks-Gunn (1999) found that girls' perceptions of family relations significantly predicted daughters' body image and dieting behaviors. These and other studies have suggested that family relationships play a major role in shaping the body image concerns and attitudes of young women and could, therefore, be utilized as a framework for improving them (Leung, Schwartzman, & Steiger, 1996).

Summary and Hypotheses

Theory and construct development in the area of leisure constraints has been expanded in the past two decades. This expansion has enabled researchers to look at constraints in new ways and explore the potential for constraint in areas that were previously unstudied. The implications of this movement are especially beneficial to women, a population particularly vulnerable to leisure constraints. A significant development in this movement that is of particular interest to women is the exploration of the concept that body image concerns constitute a leisure constraint.

Understanding the results of poor body image is increasingly important as modern society has seen a dramatic rise in body dissatisfaction and body image related dysfunctions among young women. These problems are having considerable detrimental affects on the lives of young American women and investigation into contributing factors is desperately needed to resist this trend. It has been suggested that families, particularly mothers, play a dramatic role in the shaping of body image and appearance attitudes of young women. Similarly, it has been suggested that families have significant influence in improving and preventing poor body image and dysfunctional appearance attitudes. Recent literature has begun to explore the issues of familial influence on body related concerns and has begun to identify leisure constraints as a consequence of these constraints, but research has yet to fully develop or support either concept. In the interest of developing these concepts, questions can be asked regarding the impact of body image on leisure constraints and the influence of mothers on the body image of daughters. Is there a relationship between body image, beliefs about appearance, and leisure constraints for young women and/or their mothers? Does the body image, beliefs about appearance, and leisure constraints of mothers influence those of their daughters? Based on theses questions, the following hypotheses were formed:

Hypothesis 1. A negative relationship exists between body image, beliefs about appearance, and leisure constraints of college-age women.

Hypothesis 2. A negative relationship exists between body image, beliefs about appearance, and leisure constraints of mothers.

Hypothesis 3. A positive relationship exists between the body image, beliefs about appearance, and leisure constraints of mothers and the body image, beliefs about appearance, and leisure constraints of daughters.

Methods

Sample

The participants were female students enrolled at a private western university during the course of the investigation, and their mothers. The sample consisted of 116 students and 76 mothers. The lower number of mothers responding was a factor of only having access to the students and relying on them to contact their mothers. Responding mothers were predominantly white (92.1%) and married (90.7%) with ages ranging from 39 to 63 (M = 47.6, SD = 4.9). Other ethnicities reported included Hispanic (2.6%), Asian (1.3%), and other/mixed origins (2.6%). The majority of daughters were white (93.9%) and not married (87.8%), with ages ranging from 18 to 30 (M = 20.53, SD = 2.6). Other ethnicities reported included Hispanic (1.7%).

Procedures

Volunteers were recruited at the beginning of several general education classes and from among a group of students living in campus housing over a period of two weeks during winter semester of 2004. A card or e-mail was given to each volunteer with a short paragraph of instructions and a three-digit code. The instructions referred participants to an online questionnaire. The students were asked to contact their mothers and supply them with a URL address and the same three-digit code. On the website, an opening paragraph explained that participation was voluntary and that completion of the questionnaire was considered to indicate consent. This paragraph also informed the participant that information was anonymous, as their names did not appear on the questionnaire. Completed questionnaires were automatically e-mailed to the principle investigator.

Instrumentation

The online questionnaire included three different instruments. The first was the Leisure Constraints Scale (LCS) (Raymore, Godbey, Crawford, & vonEye, 1993). Four additional study-specific questions asking the degree to which the participant feels that her body image constrains her leisure activities were added to the LCS. The next instrument was the Body Image Assessment Scale (Thompson & Gray, 1995) followed by the Beliefs About Appearance Scale (Spangler & Stice, 2001). Participants were also asked to supply demographic information regarding age, ethnicity, marital status, height and weight.

Leisure constraints. The LCS developed by Raymore, Godbey, Crawford, and vonEye (1993) was used to measure leisure constraints. This instrument measures barriers to leisure in three areas: intrapersonal, interpersonal, and structural. This measure takes into account the variety of ways that leisure can be constrained, as well as providing an overall score regarding the participants' leisure constraints. Subjects were asked to indicate the extent to which they agreed or disagreed with a total of 21 statements. This instrument includes statements such as "I'm too shy to start a new leisure activity" and "I am more likely to do a new leisure activity if the facilities I need to do the activity are not too crowded" (p. 104). Responses to each statement were given a score from one to four (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). Scores from the statements were combined to provide an assessment of total leisure constraints with a higher score indicating a high level of leisure constraints and a low score indicating a low level of leisure constraints.

During development of this scale, in order to establish evidence of the validity, a factor analysis was performed using a program that allowed for item and factor intercorrelations. The overall goodness-of-fit of chi-squared value was 258.14 (df = 158, n = 363) indicating a 0.938 goodness-of fit index and, therefore, a tenable model (Raymore et al., 1993). For the sample in this study, scores for this scale indicated adequate internal consistency coefficients for mothers ($\alpha = .82$) and daughters ($\alpha = .77$).

Because none of the statements on the original scale specifically addressed appearance constraints, four additional statements were added to specifically target appearance issues. These statements were as follows: 1) There are some leisure activities

that I choose NOT to participate in or participate in less frequently than I would like due to concerns about my appearance; 2) Sometimes I do NOT enjoy my leisure activities as much as I could due to concern about my appearance; 3) I spend some of my leisure time in activities that I feel would improve my appearance even when I would prefer another leisure activity; and 4) There are times I choose NOT to participate in physically active recreation activities (eg. Swimming, running, dancing, etc.) due to concern about my appearance. This subscale demonstrated adequate internal consistency for the mothers (α = .80) and daughters (α = .77) in this sample.

Body image. Levels of body image were assessed using Thompson and Gray's (1995) Body-Image Assessment Scale (BIAS). This scale is designed to determine how near to her ideal a participant feels that her own body size is. The scale consists of nine female drawings, which are designed with detailed features and are of "precisely graduated sizes" (p. 258). Participants were asked to indicate the figure that most closely represented their current body shape as well as the one that most closely represented their ideal body shape. The discrepancy between these two responses is used to assess the participant's level of dissatisfaction. In this section, in order to more fully understand body image, participants were also asked to what degree they were comfortable with their current body size using a Likert-type scale. Evidence of validity of the graduation of the drawings was measured by Thompson and Gray (1995) by asking participants to rank order the drawings by size; 95.2% (n = 51) of females positioned the drawings correctly. Test-retest analysis revealed an increase to 97.6% of females correctly positioning the drawings. Evidence of concurrent validity was examined by the degree of correspondence

between an individual's weight and current self-ratings. According to Thompson and Gray (1995, p. 266) contour drawing selections were "strongly correlated with reported weight" (r = 0.71, n = 51).

Beliefs about appearance. A measure of beliefs about appearance was obtained through the Beliefs About Appearance Scale (BAAS). This scale is designed to determine the intensity of body image awareness in the areas of interpersonal interactions, personal achievement, self-perception, and emotions. It provides a useful indicator of the degree to which the subject feels that appearance might affect everyday life. The questionnaire asks participants to indicate to what degree they agree with 20 statements on a five-point scale from "not at all" to "extremely." For example, one of the statements reads "People will think less of me if I don't look my best." Responses to each statement are given a score from zero to four (0 = Not at All, 1 = Somewhat, 2 = Moderately, 3 = A Lot, 4 =Extremely). Scores from the statements were combined to provide an assessment of beliefs about appearance. High scores indicate participants who place more emphasis on appearance.

The reliability and validity of the BAAS has been evaluated and replicated in three independent samples. It was found to be an "internally-consistent, unidimensional measure that exhibited both construct and criterion-related validity" (Spangler & Stice, 2001, p. 813). The internal consistency was high in each sample with alpha levels ranging from 0.94 (n = 462) to 0.95 (n = 117). Test-retest reliability was established by conducting analyses after three weeks with one sample and 10 months with another (r =

0.83, n = 231 and r = 0.73, n = 117, respectively). For the sample in this study, adequate internal consistency was demonstrated for both mothers (α = .94) and daughters (α = .95).

These instruments were followed by two questions requesting the four activities that the participant most often takes part in, and the four activities most enjoyed by the participant. The participant was then asked to explain any discrepancies in the two lists. These questions were used to suggest constraints away from activities that could provide enjoyment. They were also used to indicate constraints *into* certain activities that provide less enjoyment. For example, for some respondents, running may be listed a frequent activity, but not listed as a highly enjoyed activity. This discrepancy suggests a body image related leisure constraint if the participant responds that running is only chosen as a weight-loss method.

Analysis

Pearson correlations among the predictor variables were computed to check for multicollinearity. Although there were some significant correlations, the magnitude of the coefficients did not suggest multicollinearity (Tabachnick & Fidell, 1996). Pearson correlations between sociodemographic variables and the dependent variable were also analyzed to identify possible controlling factors that could be included in the regression equations. Based on the correlations, no statistical or theoretical reasons were found to warrant analysis of demographic variables; therefore, they were not included in the regression analyses.

To guard against increasing the possibility of type I error the independent variables of mothers and daughters were analyzed using a multivariate regression model.

The non-significant factors were then taken out in a backwards selection procedure to find the best fitting model for each scenario (analyzing mothers and daughters together and then separately). The regression models were analyzed to find out which factors were significant in predicting the individual response variables in each model.

Results

The body image scores for this sample ranged from - 6 to 3, with mothers having a mean score of -2.17 (SD = -1.389), and daughters a mean score of -1.45 (SD = 1.197). A score of zero demonstrates a positive feeling as to one's body size, whereas a negative score demonstrates a desire to be thinner, and a positive score, a desire to be larger. The scores in this sample indicate that 93.4% of the mothers and 84.5% of the daughters believed their current body shape to be larger than their ideal. Body mass index (BMI) scores were also computed for this sample using height and weight as reported by the participant. Literature has shown this to be an adequately accurate method to assess BMI (Brooks-Gunn, Warren, Rosso, & Gargiulo, 1987; Goodman, Hinden, & Khandelwal, 2000; McLaren, Hardy, & Kuh, 2003). Mothers' BMIs ranged from 19.1 to 49.2 (M =26.869, SD = 5.768) while daughters' ranged from 17.8 to 39.9 (M = 22.335, SD =3.323). Normal BMIs range from 18.5 to 24.9 and overweight BMIs from 25 to 29.9. BMIs of 30 or greater are considered obese and those less than 18.5 are considered underweight. The range and distribution of BMIs present in the sample indicated a normal distribution and helped lessen some of the concern inherent in the self-selection methodology.

Appearance-Related Constraints

Beliefs about appearance scores (BAAS) ranged from 0 to 55 for mothers and from 0 to 76 for daughters, with mothers having a mean of 21.16 (SD = 14.059), and daughters having a mean of 22.03 (SD = 15.008). The total leisure constraint scores (LCT) for this sample ranged from 41 to 83 for mothers and 46 to 86 for daughters. The mothers had a mean of 66.95 (SD = 9.558), and the daughters a mean of 68.57 (SD =7.827). In response to questions related to appearance constraints, 37% of the daughters indicated that they agreed or strongly agreed that there were activities that they chose not to participate in due to concern about their appearance. Also for daughters, 40.5 % indicated that they agreed or strongly agreed with a statement regarding reduced enjoyment due to appearance concern, 61.2% agreed or strongly agreed that they feel constrained into activities that may improve appearance versus preferred activities, and 36.2% agreed or strongly agreed that they choose not to participate in physically active recreation activities due to appearance concern. For mothers, percentages were 56.6%, 54%, 59.2%, and 56.6 %, respectively.

Daughters' Constraints

To examine the influence of body image and beliefs about appearance on leisure constraints for daughters, multiple regressions were run using total scale scores as well as subscales. A statistically significant relationship was found when body image and beliefs about appearance total scores (BAAS) were regressed on leisure constraints total scores (LCT) ($R^2 = .146$, p < .01). Because the questions in three of the leisure constraints scale subscales did not address appearance related concerns, regressions were run using the

appearance related subscale as the dependent variable. A statistically significant model was found when body image, BAAS, and body comfort level were regressed on the appearance related constraints subscale ($R^2 = .334$, p < .01). This model accounted for 33.4% of the variance in appearance-related constraints among daughters. Body image, BAAS, and body comfort level were all significant predictors within the model (see Table 1).

Regressing the four subscales of the BAAS on total leisure constraints did not produce a significant model. In a bivariate analysis, however, the one that was found to be a significantly correlated with LCT was interpersonal interactions (r = .171, p < .01). When the four subscales of the BAAS were regressed on the appearance constraints subscale, a significant model was produced, but within the model only the interpersonal constraints subscale was a significant predictor variable ($R^2 = .171, p < .01$). In bivariate analysis, each of the BAAS subscales was also significantly correlated with the appearance constraints subscale (interpersonal, r = .393, p < .01; achievement, r = .294, p< .01; self-view, r = .330, p < .01; feelings, r = .325, p < .01).

Mothers' Constraints

To examine the influence of body image and beliefs about appearance on leisure constraints for mothers, similar tests were run. Regression of body image, beliefs about appearance (BAAS), and body comfort level on leisure constraints total scores (LCT) revealed a statistically significant model, however, within the model, BAAS was the only statistically significant predictor variable ($R^2 = .113$, p < .05). When body image, BAAS, and body comfort level were regressed on appearance related constraints, a significant

model was also revealed (R^2 = .490, p < .01). This model accounted for 49% of the variance in appearance-related constraints for mothers. Within this model, body image and BAAS were significant predictors (see Table 2).

When the four subscales of the BAAS were regressed on LCT, none were found to be significant predictors. According to Pearson Correlations, however, self-view (r =.301, p < .01), feelings (r = .336, p < .01), and interpersonal (r = .249, p < .05) were significantly related to total leisure constraints. Regression of the four subscales of the BAAS on appearance-related constraints, revealed a statistically significant model, but within the model, only the feelings subscale was a statistically significant predictor variable ($R^2 = .516$, p < .01).

Mother/ Daughter Relationships

In order to examine the relationships between mothers' body image and beliefs about appearance and those of daughters, Pearson correlations were computed (see Table 3). Significant correlations were found between the beliefs about appearance total scores (BAAS) of mothers and daughters (r = .297, p < .01) as well as between the ideal body shape responses of mothers and daughters (r = .295, p < .01). Regression of mothers' body image and BAAS on leisure constraints total scores (LCT) failed to produce a significant model. In addition, regression of mothers' body image and BAAS on appearance constraints failed to produce a significant model. Regression of mothers' body image and mothers' beliefs on daughters' BAAS did produce a statistically significant model within which both independent variables were significant predictors (R^2 = .119, p < .01). In addition, a significant correlation was found between the BAAS of

mothers and the appearance-related constraints of daughters (r = .232, p < .05). A summary of correlations can be found in Table 3.

Discussion

Poor body image was prevalent among the participants in this study. Results of this study support research that cites body image as a widespread problem for American women. A negative global body image was reported by 88% of the women in the sample. The majority of both mothers and daughters reported feeling that their ideal body shape is smaller than their current shape, and this concern about appearance has lead to a variety of constraints for many of them. Findings from this study also suggest that the beliefs about appearance of daughters are related to those of their mothers.

Appearance-Related Constraints

More than 92% of the women in this study reported experiencing at least one of the four types of appearance-related constraints. When asked to explain the discrepancy between frequent leisure activities and those most enjoyed, one woman responded, "[I enjoy swimming, but] I'm too big to swim in public"; another stated, "I am out of shape and a bit embarrassed at my physical appearance." Several mothers and daughters made comments suggesting that certain leisure activities frequently participated in (i.e., running, weight lifting) were not enjoyed, yet participated in for the sake of weight loss. One mother stated, "I only walk or run in an effort to keep my weight good." A daughter commented, "Of course I don't enjoy exercise, I just do it to lose weight." Many of these women choose not to participate in some leisure activities because of concern about their appearance, or participate in activities that they do not highly enjoy as a means of losing

weight. Many of these women also experience reduced enjoyment in the activities that they do choose due to concerns about their bodily appearance.

The findings from this research have direct implications for leisure constraints theory. There is currently very little constraints literature that acknowledges appearancerelated concerns as a substantial constraint. The results of this study, however, suggest that appearance dissatisfaction presents a prevalent constraint which warrants further research. It also supports the movement toward a broader conceptualization of constraints theory. For women in this study constraints were not experienced only in the form of reduced participation, but also reduced enjoyment and choice.

Findings from this study support findings from James (2000) and Frederick and Shaw (1995), and suggest that appearance concerns pose a serious constraint to the leisure choices and leisure enjoyment of women. As in research by James (2000), women in this study reported reduced participation in certain leisure activities, particularly physically active activities due to concern about their physical appearance. This is likely due to the body-focused nature of many physical activities. Additionally, these findings support those of Frederick and Shaw (1995) regarding constraints in the form of reduced enjoyment in activities due to appearance concerns. Frederick and Shaw suggest that this type of constraint is a product of social comparison. Results of the current study support their suggestion that for many women with poor body image, body-focused leisure activities are less enjoyable due to preoccupation with bodily appearance.

The data in this study support the hypotheses that there is a relationship between body image, beliefs about appearance, and leisure constraints for both mothers and daughters. These results suggest that for participants in this study body image is an issue for women of all ages, and that appearance concerns constrain leisure not only for college-aged women, but for middle-aged women as well. These findings support conclusions by Tiggemann and Lynch (2001) that body image remains a constant issue through the life span. In fact, for mothers in this study, mean body image was slightly lower than for daughters. Findings also support Tiggemann and Lynch in that beliefs about the importance of appearance slightly improve over the life span, as the BAAS scores of mothers were lower than those of daughters, suggesting that as women age, their attitudes regarding the importance of appearance on their lives improves somewhat. Interestingly, however, in this sample, mothers' appearance constraints were actually higher than those of daughters. As it has been suggested that these constraints result from body monitoring, appearance anxiety, and social comparison, these findings do not support those of Tiggeman and Lynch which suggest that aspects of body image decrease with age. This contradiction is likely a result of a difference in sampled populations (Australians vs Americans) as well as instrumentation used.

In response to four statements regarding appearance-related constraints, on average 56.6% of the mothers sampled agreed or strongly agreed with each, whereas the average percentage of daughters agreeing with these questions was just less than 43%, suggesting that mothers are slightly more constrained by appearance than those of daughters. The higher constraint for mothers may be in large part a result of increased body mass index (BMI), which on average was more than 20% higher for mothers than daughters. For women in this sample, analysis showed BMI to be negatively correlated

with body image (r = -.665, p < .001) and appearance constraints (r = -.363, p < .001). It follows then that by having higher BMIs, mothers would naturally experience higher levels of appearance-related constraints. The only statement with which daughters agreed more often than mothers was one regarding participation in activities for the purpose of weight loss. Interestingly, these results suggest that mothers suffer more often from lack of enjoyment or lack of participation due to appearance-related concerns; yet, daughters who have generally lower frequency of obesity are more often constrained into activities that promote weight-loss.

Relation of Mothers to Daughters

Some of the results of this study support the tenets of Social Learning Theory, which claims that social environment shapes attitudes and behaviors. The data suggested that mothers' appearance related attitudes are related to those of daughters, not only regarding the importance of appearance, but in what constitutes an ideal body shape. These findings support research regarding a maternal influence on body image and appearance related attitudes (McKinley, 1999; Ogle, 1999; Pike & Rodin, 1991). This research has suggested that as a mother interacts with her daughter, her beliefs regarding the role of appearance in society and the definition of physical attractiveness are conveyed and shape the development of her daughters' ideas regarding appearance.

The data from this sample failed to reveal a significant correlation between the body image of mothers and daughters (r = .220, p < .061). This can be accounted for, however, by significant difference in the average BMI of mothers and daughters. The measure of body image is assessed by the discrepancy between the current perceived

body shape and the perceived ideal body shape. As previously mentioned, the data suggests that, in this sample, the mothers' perceived ideal body image is related to those of daughters'. Since the BMI and perceived current body shape of the mothers is significantly larger (p < .001) than those of the daughters, the discrepancy (how body image was measured) is not likely to be correlated. The important factor to recognize is that there is a relationship between mothers' and daughters' perceived ideal body shape, therefore, in this way there is a relationship between the body image of mothers and daughters.

Practical Implications and Recommendations for Future Research

Results of this study suggest that concerns about body image should not be restricted to psychologists, but must also be recognized by recreation professionals. Concerns about appearance affect not only a disordered few, but a large percentage of the female population (Cash & Henry, 1995). Understanding the constraints that women face can aid recreation professionals in providing leisure opportunities that feel "safe" to these women, and direct the focus of the activity away from bodily appearance. Understanding these constraints can also help recreation professionals provide leisure education to women regarding ways that they can overcome appearance-related constraints. If women are feeling limited to the types of recreation activities they will participate in, recognizing these constraints. Recreation professionals can also benefit from this research by recognizing the need to help clients improve appearance related concerns in order to better facilitate positive recreation.

Implications of this research may also be beneficial for health care providers. Understanding the reasons why women do or do not participate in certain recreational activities can provide a view of possible causes of health problems, rather than symptoms alone. For example, some women may feel uncomfortable participating in physically active activities such as swimming or running. These same women may seek professional help to address weight loss, cardiovascular health, or other fitness related issues. If health care professionals are conscious of appearance related concerns that are constraining leisure participation, they can spend time helping their patients to improve body image and beliefs about appearance, thus building a foundation for future fitness strategies.

Finally, the results of this study have implications for families. First, understanding the constraints that women face can aid families in choosing activities that will be enjoyable to all. Secondly, being aware of the influence that mothers have on the appearance concerns of daughters and the negative effects of poor body image, parents can take preventative steps to help their daughters develop healthy appearance related attitudes. Finally, because the family is a social unit in which attitudes and behaviors are learned, awareness of this research can motivate family members to provide a supportive environment for improving body image for mothers and daughters.

Future research is needed to explore ways that appearance related constraints can be reduced. More research is also needed to explore the affects of appearance concerns on other populations. The participants in this study were mainly white and middle-class. Research regarding the body image and leisure of other ethnicities and income levels could help improve generalizability of this study. Also, further investigation is needed to examine the similarities and differences of these issues among women in diverse geographic locations. This research could benefit by using a random sampling method that would allow for increased generalizability. A recognized limitation of the current study is the inability to interpret definite causal relationships; therefore, future research could benefit also by using experimental design. Such approaches may provide more insights into and understanding of appearance and leisure and result in benefits for women everywhere.

References

- Bandura, A. (1986). Exercise of personal and collective efficacy in changing societies. In
 A. Bandura, (Ed.), *Self-efficacy: The exercise of control*. New York: W. H.
 Freeman & Co.
- Benedikt, R., Wertheim, E. H., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. *Journal of Youth and Adolescence, 27*, 43-57.
- Brooks-Gunn, J., Warren, M. P., Rosso, J., & Gargiulo, J. (1987). Validity of self-report of girls' pubertal status. *Child Development*, 58, 829-842.
- Byely, L., Archibald, B. A., Graber, J., & Brooks-Gunn. (1999). A prospective study of familial and social influences on girls' body image and dieting. *International Journal of Eating Disorders, 28*, 155-164.
- Cash, T., & Henry, P. (1995). Women's body images: The results of a national survey in the U.S.A. *Sex Roles, 33,* 19-28.
- Cook, R. A. (2002). The perceived impact of parental messages as a predictor of disordered eating in African American, Asian American, and European American women. Dissertation Abstracts International: Section B: The Sciences & Engineering, 63(5-B), 2577.
- Cooley, E., & Toray, T. (2001). Body image and personality predictors of eating disorder symptoms during the college years. *International Journal of Eating Disorders*, 30, 28-36.

Connor-Greene, P. (1988). Gender differences in body weight perception and weight-loss

strategies of college students. Women and Health, 14(2), 27-42.

- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, *9*, 119-127.
- Cullari, S., Rohrer, J., & Bahm, C. (1998). Body-image perceptions across sex and age groups. *Perceptual and Motor Skills, 87*, 839-847.
- Dattilo, J., Dattilo, A., Samdahl, M., & Kleiber, D. (1994). Leisure orientations and selfesteem in women with low incomes who are overweight. *Journal of Leisure Research, 26,* 23-38.
- Dixon, R. S., Gill, J. M., Adair, V. A. (2003). Exploring paternal influences on the dieting behaviors of adolescent girls. *Eating Disorders: The Journal of Treatment* and Prevention, 11, 39-50.
- Feilke, K., & Chambliss, C. (1992). Disordered eating in college students: Links with childhood abuse and maternal eating behavior. *Technical Research Report*, Philidelphia, PA.
- Frank, M. L. (1999). Raising daughters to resist negative cultural messages about body image. *Women & Therapy*, 22(4), 69-88.
- Frederick, J., & Shaw, S. (1995). Body image as a leisure constraint: Examining the experience of aerobic exercise classes for young women. *Leisure Sciences*, 17, 57-73.
- Geller, J., Johnston, C., & Madsen, K. (1997). The role of shape and weight in selfconcept: The Shape and Weight Based Self-Esteem. *Cognitive Therapy & Research, 21,* 5-24.

- Goodman, E., Hinden, B. R., & Khandelwal, S. (2000). Accuracy of teen and parental reports of obesity and body mass index. *Pediatrics, 106,* 52-59.
- Hahn-Smith, A. M., & Smith, J. E. (2001). The positive influence of maternal identification on body image, eating attitudes, and self-esteem of Hispanic and Anglo girls. *Journal of Eating Disorders, 29*, 429-440.
- Hargreaves, D. A., & Tiggemann, M. (2003). Female "thin ideal" media images and boys' attitudes toward girls. Sex Roles, 49(9-10), 539-544.
- Hawkins, B., Peng, J., Hsieh, C., & Eklund, S. (1999). Leisure constraints: A replication and extension of construct development. *Leisure Sciences, 21*, 179-192.
- Henderson, K. A. (1997). A critique of constraints theory: A response. *Journal of Leisure Research, 29,* 453-458.
- Henderson, K. A. (2002). Women and adventure recreation: Reconstructing leisure constraints and adventure experiences to negotiate continuing participation. *National Recreation and Park Association, 34*, 157-177.
- Hofschire, L. J., & Greenberg, B. S. (2002). Media's impact on adolescents' body dissatisfaction. In J. Brown, & J. Steele, (Eds). *Sexual teens, sexual media: Investigating media's influence on adolescent sexuality*. Mahwah, NJ: Erlbaum.
- Hoyt, W., & Kogan, L. (2001). Satisfaction with body image and peer relationships for males and females in a college environment. Sex Roles, 45(3-4), 199-215.
- Hultsman, W. (1995). Recognizing patterns of leisure constraints: An extension of the exploration of dimensionality. *Journal of Leisure Research*, *27*, 228-244.

- Iso-Ahola, S. E., Jackson, E. L., & Dunn, E. (1994). Starting, ceasing and replacing leisure activities over the life-span. *Journal of Leisure Research*, 26, 227-249.
- Jackson, E. L. (1988). Leisure constraints: A survey of past research. *Leisure Sciences*, *10*, 203-215.
- Jackson, E. L. (1991). Special issue introduction: Leisure constraints/constrained leisure. *Leisure Sciences, 13,* 273-278.
- Jackson, E. L. (1993). Recognizing patterns of leisure constraints: Results from alternative analyses. *Journal of Leisure Research*, *25*, 129-149.
- Jackson, E. L., Crawford, D. W., & Godbey. G. (1993). The negotiation of leisure constraints. *Leisure Sciences*, 15, 1-11.
- Jackson, E. L., & Rucks, V. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 27, 85-105.
- James, K. A. (2000). 'You can feel them looking at you': The experiences of adolescent girls at swimming pools. *Journal of Leisure Research, 32,* 262-276.
- James, K. A. (2001). 'I just gotta have my own space!': The bedroom as a leisure site for adolescent girls. *Journal of Leisure Research*, *33*, 71-86.
- Kaplan, S., Busner, J., & Pollack, S. (1988). Perceived weight, actual weight, and depressive symptoms in a general adolescent sample. *International Journal of Eating Disorders, 7,* 107-113.
- Kay, T., & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *Journal of Leisure Research*, 23, 301-313.

- Kichler, J. C., Crowther, J. H. (2001). The effects of maternal modeling and negative familial communication on women's eating attitudes and body image. *Behavior Therapy*, 32, 443-457.
- Kinney, W., & Cole, C. (1992). Predicting life satisfaction among adults with physical disabilities. Archives of Physical Medicine and Rehabilitation, 73, 863-869.
- Kirkcaldy, B. D., Athanasou, J. A. (1995). Leisure interests of German workers: Gender differences and similarities. *Perceptual & Motor Skills*, 81, 429-430.
- Lawrence, C. M. (1999). Racial and maternal influences on preadolescent females' eating attitudes and body image. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, 59(7-B), 3736.
- Leung, F., Schwartzman, A., Steiger, H. (1996). Testing a dual-process family model in understanding the development of eating pathology: A structural equation modeling analysis. *Journal of Eating Disorders, 20*, 367-375.
- Low, K. G., Charanasomboon, S., Brown, C., Hiltunen, G., Long, K., Reinhalter, K., & Jones, H. (2003). Internalization of the thin ideal, weight and body image concerns. *Social Behavior and Personality*, *31*, 81-90.
- Lowes, J., & Tiggemann, M. (2003). Body dissatisfaction, dieting awareness and the impact of parental influence in young children. *British Journal of Health Psychology, 8,* 135-147.
- Mannell, R. C. & Zuzanek, J. (1991). The nature and variability of leisure constraints in daily life: The case of the physically active leisure of older adults. *Leisure Sciences, 13,* 337-351.

- Marjoribanks, K. (1976). Social learning theory of the family: An analysis. *Psychology in the Schools, 13,* 457-462.
- Markey, C. N., Tinsley, B. J., Ericksen, S. J., Ozer, D. J., & Markey, P. M. (2002).
 Preadolescents' perceptions of females' body size and shape: Evolutionary and social learning perspectives. *Journal of Youth and Adolescence*, *31*, 137-147.
- McGuire, F. A. (1984). A factor analytic study of leisure constraints in advanced adulthood. *Leisure Sciences, 6,* 313-326.
- McHale, S. M., Corneal, D. A., Crouter, A. C., & Birch, L. L. (2001). Gender and weight concerns in early and middle adolescence: Links with well-being and family characteristics. *Journal of Clinical Child Psychology*, *30*, 338-348.
- McKinley, N. M. (1999). Women and objectified body consciousness: Mothers' and daughters body experience in cultural, developmental, and familial context. *Developmental Psychology*, 35, 760-770.
- McLaren, L., Hardy, R., Kuh, D. (2003). Women's body satisfaction at midlife and lifetime body size: A prospective study. *Health Psychology*, 22(4), 370-377.
- Mintz, L., & Betz, N. (1988). Prevalence and correlates of eating disordered behaviors among undergraduate women. *Journal of Counseling Psychology*, *35*, 463-471.
- Morry, M., & Staska, S. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science*, 33, 269-279.

- Motley, C. I. (1997). Mothers, daughters, and food: Examining the emotional connection. Dissertations Abstracts International Section A: Humanities & Social Sciences, 58(6-A), 2049.
- Nezlek, J. (1999). Body image and day-to-day social interaction. *Journal of Personal Psychology*, 67, 793-817.
- Ogle, J. L. (1999). Body satisfaction and weight-related appearance in the two-way mirror: Mother-daughter interaction as mediation of the mass media's thin female ideal. *Dissertation Abstracts International Section A: Humanities & Social Sciences, 60(4-A),* 1328.
- Omran, K. (1999). Youth and the benefits of investing in free time (leisure). *Journal of the Social Sciences*, *27*(3), 125-154.
- Philipp, S. F. (1994). Racial differences in perceived leisure constraints. *Perceptual & Motor Skills*, 79, 1339-1343.
- Pike, K. M., & Rodin, J. (1991). Mothers, daughters, and disordered eating. *Journal of Abnormal Psychology*, 100, 198-203.
- Ragheb, M., & Griffith, C. (1982). The contribution of leisure participation and leisure satisfaction to life satisfaction of older persons. *Journal of Leisure Research, First Quarter*, 295-306.
- Raymore, L. A., Godbey, G. C., & Crawford, D. W. (1994). Self-esteem, gender, and socioeconomic status: Their relation to perceptions of constraint on leisure among adolescents. *Journal of Leisure Research*, *26*, 99-119.

- Raymore, L. A., Godbey, G., Crawford, D., von Eye, A. (1993). Nature and process of leisure constraints: An empirical test. *Leisure Sciences*, 15, 99-113.
- Reeder, C. W., Linkowski, D. C. (1976). An institute on attitudinal, legal, and leisure barriers to the disabled. *Rehabilitation Counseling Bulletin, 20,* 76-79.

Rodin, J. (1993). Body traps. New York: Norton.

- Russell, R. V. (1987). The importance of recreation satisfaction and activity participation to the life satisfaction of age-segregated retirees. *Journal of Leisure Research*, 19(4), 273-283.
- Samdahl, D. M., & Jekubovich, N. J. (1997). A critique of leisure constraints: Comparative analysis and understandings. *Journal of Leisure Research*, 29, 430-452.
- Schwartz, D. J., Phares, V., Tantleff-Dunn, S., & Thompson, K. J. (1997). Body image, psychological functioning and parental feedback regarding physical appearance. *International Journal of Eating Disorders*, 25, 339-343.
- Shaw, S. M. (1994). Gender, leisure and constraint: Towards a framework for the analysis of women's leisure. *Journal of Leisure Research*, *26*, 8-22.
- Shaw, S. M., Bonen, A., & McCabe, J. (1991). Do more constraints mean less leisure? Examining the relationship between constraints and participation. *Journal of Leisure Research*, 23(4), 286-300.
- Shekter-Wolfson, L. F., & Woodside, D. B. (1997). Social work treatment of anorexia and bulimia: Guidelines for practice. *Research on Social Work Practice*, *7*, 5-32.

- Spangler, D., L., & Stice, E. (2001). Validation of the Beliefs About Appearance Scale. Cognitive Therapy and Research, 25, 813-827.
- Spangler, D. L. (2002). Testing the model of eating disorders: The role of dysfunctional beliefs about appearance. *Behavior Therapy*, 33, 87-105.
- Stephens, N. M., Schumaker, J. F., Sibiya, T. E. (1999). Eating disorders and dieting behavior among Australian and Swazi university students. *The Journal of Social Psychology*, 139, 153-158.
- Stice, E., Spangler, D.L., & Agras, W.S. (2001). Exposure to media-portrayed thin-ideal images adversely effects vulnerable girls: A longitudinal experiment. *Journal of Social and Clinical Psychology*, 20, 271-289.
- Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics. California State University, Northridge: Harper Collins College Publishers.
- Thomas, L. G. (1956). Leisure pursuits by socio-economic strata. *Journal of Educational Sociology, 29,* 367-377.
- Thompson, M. A., & Gray, J. J. (1995). Development and validation of a new bodyimage scale. *Journal of Personality Assessment, 64,* 258-269.
- Tiggemann, M., & Lynch, J. E. (2001). Body image across the life span in adult women: The role of self-objectification. *Developmental psychology*, *37*, 243-253.
- Tiggemann, M., & Williamson, S. (2000). The effect of exercise on body satisfaction and self-esteem as a function of gender and age. *Sex Roles, 43,* 119-127.

- Tsiantas, G. & King, R. M. (2001). Similarities in body image in sisters: The role of sociocultural internalization and social comparison. *Eating Disorders: The Journal of Treatment & Prevention*, 9, 141-158.
- Vander Wal, J., & Thelen, M. (2000). Eating and body image concerns among obese and average-weight children. *Addictive Behaviors*, 25, 775-778.
- Wilfley, D. E., Grilo, C. M., & Rodin, J. (1997). Group psychotherapy for the treatment of bulimia nervosa and binge eating disorder: Research and clinical methods. In J. L. Spira (Ed.). *Group Therapy for Medically Ill Patients(225-295)*. New York: Guilford.
- Witt, P., & Goodale, T. (1981). The relationship between barriers to leisure enjoyment and family stages. *Leisure Sciences*, *4*, 29-49.
- Wood, V. (1971). Age-appropriate behavior for older people. Gerontologist, 11, 74-78.
- Zoerink, D. A. (2001). Exploring the relationship between leisure and health of senior adults with orthopedic disabilities living in rural areas. *Activities, Adaptations, & Aging, 26(2),* 61-73.

Table 1

Regression Model Summary of Daughters' Appearance-Related Constraints

Predictor Variable	В	β	t	p
Belief About Appearance	.043	.216	2.598	.011
Body Image	842	341	-3.748	< .001
Body comfort level	659	341	-2.041	.044
$R^2 = .334, p < .01$				

Table 2

Regression Model Summary of Mothers' Appearance-Related Constraints

Mothers	В	β	t	р
Beliefs About Appearance	.119	.531	6.163	< .001
Body image	555	246	-2.235	.029
Body comfort level	464	151	-1.396	.167
$R^2 = .490, p < .01$				

Table 3

8 8	Pearson	Correlations	Among	Mothers	and Daughters
-----	---------	--------------	-------	---------	---------------

	Mothers' appearance constraints	Mothers' body shape ideal	Mothers' body comfort level	Mothers' body image	Mothers' BAAS	Mothers' BMI	Mothers' LCT
-	r = .167	r = .213	r =64	r =066	r = .232	r = .131	r = .033
	p = .158	p = .071	p = .592	p = .580	p = .048	p = .277	p = .785
Daughters' body shape ideal	r =196 p = .097	r = .295 p = .011	r =054 p = .649	r =031 p =798	r =063 p = .597	<i>r</i> = .243 <i>p</i> = .041	r =227 p = .053
Daughters' body image	r =227 p = .054	r =033 p = .782	r = .133 p = .264	r = .220 p = .061		r =223 p = .061	r =068 p = .570
Daughters' body comfort level	r =209 p = .079	r =120 p = .316	r = .197 p = .097	r = .193 p = .104	r =130 p = .277	r =216 p = .073	<i>r</i> =044 <i>p</i> = .715
Daughters'	r = .243	r = .012		r =222	r = .297	r = .183	r = .022
BAAS	p = .038	p = .921		p = .059	p = .011	p = .126	p = .851
Daughters'	r = .181	r = .195		r =207	r = .127	r = .451	r = .083
BMI	p = .125	p = .099		p = .021	p = .283	p < .001	p = .482
Daughters'	r =023	r = .272	r =050	r =014	r = .049	r = .138	r =053
LCT	p = .653	p = .020	p = .677	p = .907	p = .679	p = .250	p = .653

Appendix A

Prospectus

Chapter 1

Introduction

According to Mundy and Odum (1979), "the essence of leisure is freedom" (p. 9). A number of theoretical models have identified freedom as a central defining element of leisure (Neulinger, 1981; Kelly, 1972; Gunter & Gunter, 1980). In everyday life, however, there are countless factors that constrain our freedom to choose and enjoy leisure activities. In past research, the theory of leisure constraints has focused on three specific categories of constraints: interpersonal, intrapersonal, and structural. In addition, researchers have worked under the assumption that the primary result of experiencing constraints is reduced choice of leisure activities or lack of participation in leisure altogether. Recent literature, however, has begun to broaden the conceptual understanding of leisure constraints to explore a wider variety of constraints within the three main categories and additional outcomes related to identified constraints.

One area that has begun to be explored is how appearance affects leisure choices (Frederick & Shaw, 1995; James, 2000). In modern American society, appearance has become a prioritized virtue and is a top concern for many young women. Many feel that to have personal worth, to be recognized in society, and to be happy, they must expend seemingly endless time, funds, and effort in the pursuit of beauty, particularly bodily perfection (Evans, 2003, Hawks, 2002). Over the last 40 to 50 years, this ideal of bodily perfection has come to be defined more and more as being thin (Hawks, 2001). This drive for thinness often leads to poor body image, which can be extremely damaging in many facets of life. For some women, poor body image can lead to clinically diagnosable eating

disorders, which are physically damaging and potentially fatal (Cooley & Toray, 2001). For an even larger portion of women, poor body image and internalized attitudes regarding the importance of appearance leads to social anxiety, which reduces enjoyment of many daily activities, including leisure (Nezlek, 1999). This problem can lead to dissatisfaction and boredom in leisure (Iso-Ahola & Weissinger, 1987).

When addressing the constraining effects of poor body image, it is important to explore factors that may cause or exacerbate body image related problems. A significant influence on any behaviors and attitudes of children is the family. Children learn a great deal from family members through modeling and communication (Dixon, Gill, & Adair, 2003; Hain, 2002). In the area of body image, it has been suggested that the greatest familial relationship influencing young women comes from mothers (Cook, 2002). Therefore, exploring relationships between body image related concerns of mothers and daughters is needed to provide insights into the development of body image related dysfunctions and suggest venues for prevention and treatment strategies. According to Motley (1997), when reaching for the goal for improved health and improved body image for our children, "an understanding of the role family plays is of crucial importance" (p. 2049).

Statement of Problem

The first problem of this study is to determine the relationship between body image, beliefs about appearance, and leisure constraints for young women. The second problem of this study is to examine the influence of mothers' body image and beliefs about appearance on their daughters' body image and beliefs about appearance.

Purpose of Study

The information obtained through this study will contribute to the current trend of conceptual expansion in the area of leisure constraints. This information will also advance understanding regarding the maternal influence on body image and attitudes about appearance. The purpose of this study is to learn more about how leisure is constrained for young women as a result of poor body image and/or beliefs about appearance, and to provide insights into the degree to which maternal body image and beliefs about appearance influence these body image related concerns.

Significance of the Study

Body image and beliefs about appearance pose significant obstacles to the enjoyment of everyday activities in the lives of women (Reel, 2000; Russell & Cox, 2003). Research has consistently established that women in North America are pressured to "attain and maintain a thin body" (Frederick & Shaw, 1995, p. 58). Signs of this attitude permeate American culture; they are prevalent on television, in movies, and in magazines. This attitude can damage the lives of women by triggering eating pathologies, lowering self-esteem, and decreasing enjoyment in leisure activities (Connor-Greene, 1988; Cooley & Toray, 2001). The number of women aversely affected by these attitudes is becoming epidemic throughout U.S. culture (Cash & Henry, 1995). More research in this area is vital if we are to fully understand the constraints, concerns, and influential factors associated with body image.

There are two main studies that address the issue of body image as a leisure constraint. Frederick and Shaw (1995) suggested that constrained enjoyment of leisure

activities was related to bodily appearance concerns among Canadian women. They also indicated that concerns regarding appearance constrained women into certain activities like aerobics, because of their weight-loss appeal. They noted that "body-image-related concerns were a major motivating factor exerting pressure on young women to participate in aerobics" (p. 57). A similar study of Australian adolescents found that the quality of the leisure experience of girls participating in the study was constrained by body image related concerns that were heightened while at swimming pools (James, 2000). While swimming these girls felt very anxious about their bodily appearance. They admitted to reduced participation as a result of their anxiety and discussed hindered leisure enjoyment due to preoccupation with their bodily appearance.

Authors from both studies suggest that there is a continued need for research in the area of body image as a leisure constraint. Both studies were qualitative and activity specific, thus leaving a gap in the literature concerning body image and beliefs about appearance as they relate to leisure. Along with contributing to the literature in the field of body image and attitudes about appearance, the information provided by the proposed study will help broaden the understanding of leisure constraints theory. This study will also provide suggestions for factors to consider in addressing these problems.

Frederick and Shaw (1995) and James (2000) make the reasonable and researchsupported assumption that body image related concerns are a common and significant problem for American women. Neither study, however, investigated the influences behind the existing body image dissatisfaction. Other researchers have begun to explore the possibility of familial effects on a young woman's body image (Byely, Archibald, Graber,

& Brooks-Gunn, 1999; Ogden & Elder, 1998; Ogle, 1999). Because children spend many years in the family environment, they learn a great deal of their behavior and attitudes from family members, particularly parents (Bandura, 1986).

In the area of body image, and appearance attitudes, researchers have begun to look at the influence of family members on young women, particularly of mothers on daughters (Davison & Birch, 2001; Ogle, 1999). The results of these studies have produced some contradictory implications. Some research has indicated a relationship between mothers' and daughters' body image, through modeling of personal weight concerns and through "messages" from mothers about weight and eating issues (Benedikt, Wertheim, & Love, 1998). Other research, however, has failed to indicate a relationship between weight related behaviors and attitudes of mothers and daughters (Hain, 2002). Still other research has found a relationship in one female subgroup, but not in another (Usiana & Daniluk, 1997).

Although the results of these studies are mixed, overall, they have supplied some consistent findings. For instance, females receive more body image messages from, and are more significantly influenced in matters of weight concern by their mothers than their fathers (Cook, 2002). Media influence and internalization of a thin ideal by women also consistently appears as a significant factor in body image. Frank (1999) suggested that family members, specifically parents are capable of buffering daughters from "unfiltered absorption of the cultural influences that lead to disturbances in body image" (p. 69). From these findings one can infer that exploring the maternal influence on daughters' body

related concerns may offer insights useful in treatment and prevention of these concerns and their negative consequences.

Delimitations

The scope of the study will be delimited to the following:

1. This study will include 100 pairs of mothers and daughters. The daughters will be between the ages of 18 and 25 and enrolled at Brigham Young University.

The data will be collected over a period of two weeks during winter semester,
 2004.

3. Body image will be measured using Thompson and Gray's (1995) Body Image Assessment Scale.

4. Leisure constraints will be measured using Raymore, Godbey, Crawford, and von Eye's (1993) leisure constraints scale.

Beliefs about appearance will be measured using Spangler and Stice's (2001)
 Beliefs About Appearance Scale.

Limitations

The study will be limited by the following factors:

1. The daughters in this study will consist of a convenience sample of students attending a private, religiously founded university, which will limit the generalizability of the results.

2. Each of the instruments is self-report which could result in a social desirability effect.

3. The sample will be determined through a self-selection process. Considering the

nature of the information requested, some individuals may choose to participate.

4. Because the methods of this study are correlational, causal relationships cannot be established.

Assumptions

This study will be conducted based upon the following assumptions:

1. Poor body image is a negative factor in many areas of a woman's life.

2. The instruments being used will provide valid and reliable measurements.

3. The participants will complete questionnaires honestly and accurately.

Hypotheses

The study will test the following null hypotheses:

1. There is no relationship between body image, beliefs about appearance, and leisure constraints of College-Age women.

2. There is no relationship between body image, beliefs about appearance, and leisure constraints of mothers.

3. There is no relationship between the body image and beliefs about appearance of mothers and the body image and beliefs about appearance of daughters.

Definition of Terms

The following terms are defined to clarify their use in the study:

Body image. Perceived beliefs about one's bodily appearance and degree to which one is satisfied or dissatisfied with his or her body size (Thompson & Gray, 1995).

Leisure constraints. Anything that inhibits a person's ability to "participate in leisure activities, to spend more time doing so, to take advantage of leisure services, or to achieve a desired level of satisfaction" (Jackson, 1988, p. 203).

Beliefs about appearance. Functional or dysfunctional attitudes regarding importance of appearance in everyday life (Spangler & Stice, 2001).

Chapter 2

Review of Literature

The first problem of this study is to determine the relationship between body image, beliefs about appearance, and leisure constraints for young women. The second problem of this study is to examine the influence of mothers' body image and beliefs about appearance on their daughters' body image and beliefs about appearance. In order to frame these problems, this chapter will outline the literature related to leisure constraints, body image, and familial influences on body image and appearance attitudes. It will look at the progress of current research to provide a basis for exploring the relationship between body image, beliefs about appearance, and leisure constraints for young women. It will also frame the problem of examining the influence of mothers' body image and beliefs about appearance on their daughters' body image and beliefs about appearance. For organizational purposes, the literature is presented under the following topics: (a) Leisure Constraints, (b) Body Image, (c) Familial Influences, and (d) Summary.

Leisure Constraints

The concept of leisure constraints has been studied and examined in people of different ages and during different life stages (Jackson & Rucks, 1995; Mannell & Zuzanek, 1991; Wood, 1971). Researchers have also examined ethnicity, socioeconomic status, educational levels and other variables related to leisure constraints (Philipp, 1994). Constraints research, however, supports the central tenet that constraints "inhibit peoples" ability to participate in leisure activities, to spend more time doing so, to take advantage of leisure services, or to achieve a desired level of satisfaction" (Jackson, 1988, p. 203). Considerable research in this area has been devoted to identifying some of the more commonly reported types of constraints such as time constraints, financial constraints, and absence of facilities or opportunities. Most of this literature has also noted that women are particularly susceptible to experience many of these reported constraints (Shaw, 1994).

History of constraints research. Identifying barriers to leisure has been an area of interest since the 1950s (Reeder & Linkowski, 1976; Thomas, 1956; Witt & Goodale, 1981; Wood, 1971). Most early literature consisted of empirical research focused on what were later termed structural constraints. These barriers were generally physical and readily identifiable. Such constraints included financial issues, geographic locations, and physical disabilities. In 1984, however, McGuire attempted to cluster constraints into broad categories. In his study, participants completed questionnaires regarding leisure involvement and reasons for lack of participation. Participants also completed a life satisfaction index. "Factor analysis revealed five constraint factors: External, Time, Approval, Abilities/Social, and Physical Well-Being" (p. 313). At this time, literature began to emerge suggesting models of the nature and influence of constraints (Godbey, 1985; Iso-Ahola & Mannell, 1985; Jackson & Searle, 1985).

Soon after McGuire's (1984) research, Crawford and Godbey (1987) introduced a model of leisure constraints. It suggested that the prevailing conceptualization of leisure barriers at the time addressed only one of the ways in which barriers might be associated with preferences and participation. Their model proposed that barriers fall into three

categories: (a) intrapersonal, (b) interpersonal, and (c) structural. Structural barriers were described as factors that come between leisure preferences or choices and actual participation. Examples given include geographical location, financial resources, and available time. Interpersonal barriers involve the relationships and interactions between individuals, such as the inability to locate a suitable partner for participation. Intrapersonal barriers reflect individual attributes and psychological states such as fear, stress, or depression that steer people away from or into specific activities. Although these categories have utility for identifying the major types of constraints that impact leisure participation, the research up to the late 1980s had lacked a theoretical foundation.

Jackson (1988) reviewed the past constraints-related literature and suggested that it was "marred by fragmentation" (p. 213). He asserted that researchers were conducting studies without consideration of how they could be connected to other constraint research. He suggested that research needed consolidation and grounding in theory in order to avoid "providing the wrong answers to the wrong questions" (p. 213). Soon thereafter, Crawford, Jackson and, Godbey (1991) suggested that Crawford and Godbey's (1987) three discrete models of intrapersonal, interpersonal, and structural constraints could be recast as a "single integrated model" (p. 309). This model provided a means of connecting empirical research and began a shift toward viewing leisure constraints from a different perspective at a theoretical level.

Researchers began to look at constraints from a new perspective by challenging the assumption that leisure constraints necessarily restrict participation (Kay & Jackson, 1991; Shaw, Bonen, & McCabe, 1991). Studies began to suggest that some barriers to participation might be overcome and that through negotiation, constraints actively shape our leisure expression by interacting with preferences and patterns of behaviors (Jackson, Crawford, & Godbey, 1993; Jackson & Rucks, 1995). This research began a movement toward an expanded conceptualization of leisure constraints.

Conceptual developments. While leisure constraints research was originally seen as a mechanism for better understanding barriers to leisure participation, more recent literature has proposed that studying leisure constraints can help us understand broader factors and influences that shape everyday leisure behavior (Samdahl & Jekubovich, 1997). Several theories and models of leisure constraints have been explained and expanded upon in recent literature (Hawkins, Peng, Hsieh, & Eklund, 1999; Henderson, 1997; Hultsman, 1995; Jackson, 1991; Jackson, 1993). One of the most significant expansions has been regarding the definition of constraint. Most of the significant early research worked under the supposition that "leisure constraints either prevented participation or did not" (Frederick & Shaw, 1995, p. 59). More recent research, however, has shown that reported constraints do not always correlate with reduced leisure participation (Kay & Jackson, 1991; Shaw et al., 1991). Shaw et al. (1991) suggest that leisure constraints may result in decreased enjoyment or even increased participation in certain activities. This and other similar literature has been instrumental in developing a new paradigm that "incorporated a broader conceptualization of leisure constraints" (Frederick & Shaw, 1995, p. 59).

The first area examined within the broader perspective of leisure constraints identified by Frederick and Shaw (1995) explored reasons for the lack of correlation

between leisure constraints and reduced participation. Researchers began to investigate the ways that some people negotiate leisure constraints. It was discovered that in many instances, people are able to overcome the constraints that they face when they highly prioritize leisure (Jackson et al., 1993). Additionally, Jackson and Rucks (1995) found that people generally negotiated constraints through behavioral rather than cognitive modifications; for example, by bringing friends to a party, rather than overcoming shyness.

The next area to be studied was the idea that "participation in leisure activities themselves may be 'constraining' (Frederick & Shaw, 1995, p. 59). Oftentimes for women pressures result from traditional gender stereotypes, such as the types of activities stereotypically seen as feminine and the pressure for bodily attractiveness (Shaw, 1994). These pressures often result in women feeling constrained into certain leisure activities, such as those activities which society deems appropriate for women or those that would improve their physical appearance. These pressures result in constraint by restricting people from choosing leisure activities from which they may derive more enjoyment or other personal benefits.

A third area of development that broadened the conceptualization of leisure constraint theory was the idea that even when leisure participation is not reduced, leisure activities are often constrained in the area of enjoyment (Frederick & Shaw, 1995; Witt & Goodale, 1981). One of the factors found to influence recreational enjoyment has been self-consciousness, which in women may be partially caused by poor body image (James, 2001). In a study of Australian high school girls, James (2000) found that 29% of the girls questioned reported that they would use pools more if boys were not around. Many of these girls reported that embarrassment affected both the frequency and quality of their participation. To reduce self-consciousness some had developed strategies to make themselves less visible including covering up their bodies, staying in groups, swimming at remote venues, and avoiding pools altogether.

As the conceptualization of constraints has expanded, researchers have also begun to broaden their scope in identifying specific constraints. Research initially focused on leisure constraints such as lack of time, lack of resources, and lack of sense of entitlement; but more recently less apparent constraints like body image have begun to be recognized as significant. Nezlek (1999) found that self-perceptions of body attractiveness and social attractiveness were positively related to women's confidence in social interaction and their perceived influence over the interaction. Because many, if not most, of an average woman's leisure activities are socially oriented (Kirkcaldy & Athanasou, 1995), the implications of research like Nezlek's must be acknowledged when considering the leisure constraints of women.

Leisure constraints for women. The dominant approach for understanding women's leisure focuses on the constraints women face in their leisure lives (Shaw, 1994). The emphasis of this research is on the ways in which women are limited in their access to and enjoyment of leisure within a patriarchal society. Data regarding the intensity and nature of leisure constraints have suggested that "women are overall more constrained in their leisure than men" (Jackson & Henderson, 1995, p. 31). More specifically, research has indicated that adult women have less leisure time, particularly

during weekdays (Thrane, 2000) and that they experience inequalities in "gaining access to leisure 'space' and activities" (Deem, 1982, p. 32). Some of the most common constraints identified in the literature were domestic labor, job attitudes, behavior and working hours of male partners, childcare, lack of independent income, and absence of transportation. Deem found that the women who participated in the fewest number of leisure activities tended to be married with young children in the home, minimal education and no transportation. Her article goes on to conclude that "the factors contributing to women's overall subordinate position in society thus contribute to their scant leisure activities" (p. 29).

Another approach to understanding women's leisure, which has received less attention in the leisure literature, is one that views the leisure activities themselves as being potentially constraining. This perspective is one in which the leisure itself is seen as problematic (Shaw, 1994). A key aspect for women is that the activities into which women and men tend to be channeled often serve to perpetuate gender stereotypes. This concept is evident in sports. While opportunities have increased for women in recent years, some sports are still considered more socially acceptable for females than others. The more acceptable activities are often those that emphasize physical attractiveness and body shape such as dance, gymnastics, and swimming (Lenskjy, 1986). Many parents continue to enroll their daughters in these "feminine" types of activities, and their sons in more "masculine" activities such as hockey, football, or baseball. Types of activities offered by recreation agencies both public and private, often fall in line with these traditional notions of socially appropriate gender roles. While it is possible that agencies are simply responding to expressed needs, rather than actively seeking to perpetuate gendered stereotypes, they add evidence to the suggestion that leisure may constrain women by reducing choices and restricting opportunities for non-traditional activities (Shaw, 1994).

A third approach that has recently become an area of focus in the analysis of women's leisure, is one which views women's participation in leisure activities as a means to challenge restrictive life constraints, particularly gender stereotypes (Shaw, 1994). The key theoretical notion for this perspective is the idea that leisure is freely determined or self-directed. This condition of relative freedom makes leisure an important potential site for transcendence of restrictive life constraints (Wearing, 1990). While empowerment or a sense of entitlement to leisure can lead to increased involvement and enjoyment of leisure by women, the participation in leisure itself can also lead to empowerment and resistance of stereotype-driven constraints (Henderson & Bialeschki, 1991). Research on women's participation in sports has indicated that involvement in a traditionally "masculine" activity provides females the opportunity to broaden their perception of social gender limitations, with beneficial psychological outcomes (Kleiber & Kane, 1985; Shaw, Kleiber, & Caldwell, 1995).

Literature from all of these approaches to understanding gender and women's issues has led to the development of a useful framework for analyzing leisure in recent research (Henderson, 1994). This framework has led to research regarding the constraining nature of gender socialization and societal attitudes in relation to women's leisure (Auster, 2001; Little, 2002). It has also provided a foundation for the exploration

of other constraints that face women in particular. Not only is women's leisure shaped by societal attitudes through gender stereotypes, but also through societal pressures to attain physical beauty. This pressure may present a greater obstacle to leisure than the quantity of available research suggests.

Body Image

Research has consistently established that women in North America are pressured to "attain and maintain a thin body" (Frederick & Shaw, 1995, p. 58). This drive for thinness is hitting women from all sides through the media and through the attitudes adopted by men and women (Low et al., 2003). Morry & Staska, (2001) showed that women reading beauty magazines internalized societal ideals, and this internalization predicted body shape dissatisfaction. Similar studies have shown that females of all ages experience internalization of the "thin ideal" from viewing television and other forms of media (Hargreaves & Tiggemann, 2003; Hofschire & Greenberg, 2002; Stice, Spangler & Agras, 2001). Consequently, in a society bombarded with media influences, most women are dissatisfied with their body shape or weight for one reason or another, and those who aren't have become the exception rather than the rule. In modern society, weight has been described as a "normative discontent," (Rodin, 1993, p. 66) and body size dissatisfaction has become simply part of life for the average woman.

Culture as it relates to body image. Body size dissatisfaction has been identified in many countries, even in cultures where Western media influence has only been introduced in recent years (Demarest & Allen, 2000; Tiggemann & Ruutel, 2001). According to Tiggemann and Ruutel, "women cross-culturally choose an ideal figure that is significantly smaller than their current figure" (p. 738). Body image has been studied in many North American, Asian and European populations. In the vast majority researchers found women to have negative global body image even when controlling for body mass index, or actual body size (Gupta, Chaturvedi, Chandarana, & Johnson, 2001; Nishizawa, Kida, Nishizawa, Hashiba, Saito, & Mita, 2003; Tsai, Curbow & Heinberg, 2003). Research has also indicated that the degree to which women in any culture internalize western ideals is correlated with body image dissatisfaction (Bilukha & Utermohlen, 2002; Jaeger et al., 2002)

Many studies, however, have shown that societal pressure for bodily beauty and negative effects of declining body image are especially a problem in the United States and among Caucasian women (Bann, 2001; Heesacker, Samson, & Shir, 2000; White, Kohlmaier, Varnado-Sullivan, & Williamson, 2003). In the United States, the ideal of bodily thinness and its affect on women's body image has reached epidemic proportions (Low et al., 2003). In a survey of more than 800 American women, "nearly one–half reported globally negative evaluations of their appearance" (Cash & Henry, 1995, p. 19). Some research has suggested that cultural identity may act as a buffer for some ethnic minorities, particularly African-Americans (Wildes & Emery, 2001). Wildes and Emery suggested that young women of minority ethnicity are less likely to be dissatisfied with their body weight because they identify with a culture that less strongly associates beauty with thinness. The discrepancy between minority women and Caucasian women, however, was not significant when sampling African Americans who attended predominantly Caucasian universities (James, Phelps & Bross, 2001). This and other

research supports the notion that vulnerability to poor body image is heightened by "thin ideal internalization" for women of any race or culture (Bross, 2002, p. 3845). Research also suggests that the body image of women of many cultures is steadily declining (White et al., 2003).

Body image perceptions. Body image dissatisfaction for American women is increasing due, in part, to the fact that many women have distorted views of their own bodies and of cultural norms and preferences. Accordingly, Connor-Greene (1988) found that females in her study "perceived themselves as overweight when they were not, failed to see themselves as underweight when they were, and many of those who did not see themselves as even slightly overweight wanted to lose weight" (p. 27). Furthermore, Demarest and Allen (2000) found that women guessed that men preferred body shapes thinner than those that men actually reported. In a follow up study by Cohn and Adler (1992), the female silhouette that women selected as most attractive to same-sex peers was significantly thinner than the silhouette that women actually selected as most desirable. In a similar study, Raudenbush and Zellner (1997) found that females "overestimate their size and therefore desire to be thinner" (p. 95), and 35 of the 40 females who perceived themselves as the correct weight nevertheless reported wanting to be thinner. Because of these distorted perceptions, women are often holding themselves to an impossible standard and the consequences can be devastating.

Negative effects of poor body image. For many women, poor body image issues have led to body monitoring, appearance anxiety, disordered eating, and excessive exercise behaviors (Cooley & Toray, 2001; Stephens, Schumaker, & Sibiya, 1999;

Tiggemann & Lynch, 2001). Connor-Greene (1988) found that nearly one-third of females reported either self-induced vomiting or use of laxatives as a weight-loss strategy. Furthermore, in a study of 643 non-anorexic, non-obese undergraduate women, only 33% of the subjects reported what could be considered normal eating habits. The degree of disturbed eating was highly correlated with "negative body image, greater tendency to endorse sociocultural beliefs regarding weight and appearance, and interference of weight and appearance concerns with other life domains" (Mintz & Betz, 1988). Dissatisfaction with one's figure has been consistently found to relate to worsening eating pathology (Cooley & Toray, 2001).

Dissatisfaction with her body can also affect a woman's relationships, her social and emotional development, and how she perceives her own worth (Cullari, Rohrer, & Bahm, 1998; Kaplan, Busner, & Pollack, 1988; Tiggemann & Williamson, 2000). Nezlek (1999) found that for college women body image affected day-to-day social interaction. His research also suggested that for college women, self-perceptions of social attractiveness were positively related to their confidence in social interaction and their perceived influence over interaction.

Harris's (1995) research suggested that women's social and emotional development may even be retarded by body image disturbances. This study, along with others, has suggested that body image has a significant relationship with self-esteem, selfconcept, and beliefs about appearance (Geller, Johnston, & Madsen, 1997; Rodin, 1993; Spangler, 2002). In one study, high school seniors who perceived themselves to be of normal weight displayed greater self-esteem than those who thought they were

underweight or overweight. Interestingly, women specifically tended to display greater self-esteem if they were actually underweight (Kaplan, et al., 1988). These problems have also been observed and have led to problem behaviors even in young children (Vander Wal & Thelen, 2000). Furthermore, in nearly every study, these problems have been found significantly more prevalent in females than males.

Gender differences in prevalence of poor body image. Mintz and Kashubeck (1999) found that regardless of race, women reported more body image related problem attitudes and behaviors than did men. Hoyt and Kogan (2001) found that women, especially those under or above average weight, were more dissatisfied with their appearance than were men. In a study by Connor-Greene (1988), results showed that females dieted, and took other weight loss measures more frequently than did males. Despite the fact that most were within ideal weight range, very few were satisfied with maintaining their current weights. In a study by Tiggemann and Williamson (2000), women reported exercising "more for reasons of weight control, tone, and mood enhancement than men" (p. 119). Most literature across the board has found body image to be poorer among women and the effects more damaging to women than to men.

Body image research in leisure. Until recently, body image related research has been mainly focused on understanding the relationship of body image to self-attitudes and psychological health and has made great contributions to psychology. Much less attention, however, has been given to the impact of body image on other life areas such as leisure (Frederick & Shaw, 1995). Research has shown positive correlations between active participation in recreation activities and self-esteem, as well as negative correlations between leisure constraints and self-esteem (Dattilo, Dattilo, Samdahl, & Kleiber, 1994). Body image has been shown to affect self-esteem. Furthermore, research has supported the relationship between self-esteem and leisure constraints. Therefore, researchers have begun to turn attention to the problem of body image in the context of leisure constraint theory.

Recently a few researchers have addressed the issues of body image as it relates to leisure choices and leisure constraints. Frederick and Shaw (1995) found that while body image did not seem to prevent participation in aerobics, body image concerns were shown to constrain the enjoyment of aerobics as a leisure activity. The data indicated that the reduction of enjoyment was related to the clothing worn for aerobics and to competition over appearance and body weight among participants. The study suggested that body image "can constrain leisure in some situations, although it is not a constraint in the traditional sense of preventing participation" (p. 57). Similarly, James (2000) found that for adolescent girls in a swimming pool setting, body image constrained participation as well as enjoyment of leisure time.

Because leisure has been shown to be correlated with life satisfaction (Ragheb & Griffith, 1982; Russell, 1987; Zoerink, 2001) as well as personal development (Kinney & Cole, 1992; Omran, 1999), more research as to how body image affects leisure is greatly warranted. The young adult stage of life has been shown as the time when most people are developing leisure habits that will continue through the life-span (Iso-Ahola, Jackson, & Dunn, 1994). It stands to reason, therefore, that research regarding body image and leisure constraints begin by focusing on this population. It follows that this research

should be taken further by investigating not only the effects of body image related dysfunction, but possible contributing factors. One such factor is the effects of familial influences on the body image and beliefs about appearance of young women.

Familial Influences

Much past literature has suggested that individual behaviors and attitudes are in large part shaped by the people with whom we spend time (Bandura, 1986). For most children today the greatest influence comes from family members (Motley, 1997). Social learning theory asserts that the family is the proximal learning environment for children (Marjoribanks, 1976). Social learning theory has recently been explored in the realm of body image and appearance attitudes (Markey, Tinsley, Ericson, Ozer, & Markey, 2002).

Research using social learning theory, evolution theory, and others has recently begun to investigate the relationship between the body image and appearance attitudes of family members McHale, Corneal, Crouter, & Birch, 2001). One study found that sisters have similar levels of body image disturbance, sociocultural awareness and internalization. The research indicated that interaction and comparison between sisters greatly affects actual body image as well as attitudes regarding appearance (Tsiantas & King, 2001). Related research has explored the paternal influence on body image and appearance-related attitudes (Dixon et al., 2003). Dixon et al. found associations between fathers' attitudes to physical attractiveness in females, their perceptions of the impact of being slimmer, and their daughters' dieting behavior. They concluded that fathers' attitudes about the importance of female appearance play an influential role in the body image, attitudes, and dieting behaviors of their daughters. While research has included multiple members of the family unit, the main body of research regarding appearancerelated influence has focused on the impact of the mother.

Mothers' influences on daughters' attitudes and behaviors. Recent research has supported the claim that there exists a relationship between the body related feelings and behaviors of mothers and daughters (McKinley, 1999; Ogle, 1999). According to Motley (1997), "mothers act as vehicles for body image concerns and attitudes about dieting and food" (p. 2409). She asserts that an emotional connection joins mothers and daughters and food, and that this connection explains the escalating problems Western society has with eating, body image, and eating disorders. Feilke and Chambliss (1992) found that disordered eating in college-aged daughters was strongly associated with maternal behaviors. Mothers who were perceived as being preoccupied with fat, food, and weight were more likely to have daughters who exhibited disordered eating. Benedikt et al. (1998) found similar results even when controlling for daughters' actual body weight. Additionally, Tiggemann and Lowes (2002) found that mothers' dietary restraint predicted the degree of monitoring of daughters', but not sons' eating behavior, even when actual and perceived weight of the child was taken into account. Through this research, they concluded that "the degree of control over child-feeding might provide a behavioral mechanism for the intergenerational transmission of eating attitudes and beliefs within families" (p. 1).

Mothers' influences on daughters' body image. It has been suggested that mothers influence not only daughters' attitudes and behaviors, but also actual body image and body dissatisfaction. Lowes and Tiggemann (2003) found that body dissatisfaction for

girls aged 6-8 was predicted by perception of mothers' body dissatisfaction. Similarly, Hahn-Smith and Smith (2001) found that adolescent daughters of mothers who believed there to be a greater discrepancy between their daughter's current body shape and their ideal, tended to have lower body esteem scores. This research also found that mothers of low body esteem girls were more critical, and concluded that these mothers' feelings were "communicated in some manner to the girls, which in turn impacted the girls' body esteem" (p. 438). When studied in college-aged women, research has demonstrated a significant predictive relationship between appearance related communication of mothers and body image of daughters (Schwartz, Phares, Tantleff-Dunn, & Thompson, 1997). Similar relationships between maternal communication and daughters' body image have been found consistently in populations of varying ages (Lawrence, 1999).

Importance of familial relationships on daughters' body image. Research has demonstrated the importance of group support when receiving treatment for body image related problems (Wilfley, Grilo, & Rodin, 1997). For many young adults the family is the most influential unit of human interaction; therefore, family involvement could greatly improve results of body image treatment (Woodside & Shekter-Wolfson, 1991). Research has found that girls with high maternal identification, or those who aspire to be like their mother in terms of personality traits, felt better about themselves and their bodies compared to girls with low maternal identification (Hahn-Smith & Smith, 2001). These findings suggest that family members can have a significant influence on the body image and appearance attitudes of young women. Further research has indicated that

parents also have power to "buffer" daughters from the thin ideal internalization that can contribute to poor body image (Frank, 1999).

Research has also suggested that familial dynamics and relationships have a significant affect on the body image of young women, and that improving family relationships are key to improving the body image of young women (Woodside & Shekter-Wolfson, 1991). Kichler and Crowther (2001) found that levels of familial communication moderated the affects of body image influence. Additionally, Byely et al (1999) found that girls' perceptions of family relations significantly predicted daughters' body image and dieting behaviors. These and other studies have suggested that family relationships play a major role in shaping the body image concerns and attitudes of young women and could therefore be utilized as a framework for improving them (Leung, Schwartzman, & Steiger, 1996).

Summary

Theory and construct development in the area of leisure constraints have been expanded in the past two decades. This expansion has enabled researchers to look at constraints in new ways and explore the potential for constraint in areas that were previously unstudied. The implications of this movement are especially beneficial to women, a population particularly vulnerable to leisure constraints. A significant development in this movement that is of particular interest to women is the exploration of the concept that body image concerns constitute a leisure constraint.

Understanding the results of poor body image is increasingly important as modern society has seen a dramatic rise in body dissatisfaction and body image related

dysfunctions among young women. These problems are having considerable detrimental affects on the lives of young American women and investigation into contributing factors is desperately needed to resist this trend. It has been suggested that families, particularly mothers, play a dramatic role in the shaping of body image and appearance attitudes of young women. Similarly, it has been suggested that families have significant influence in improving and preventing poor body image and dysfunctional appearance attitudes. Recent literature has begun to explore the issues of familial influence on body related concerns and literature has begun to identify leisure constraints as a consequence of these constraints, but research has yet to fully develop or support either concept.

Chapter 3

Methods

The purpose of this study is to determine the relationship between body image, beliefs about appearance, and leisure constraints for young women. The second problem of this study is to examine the influence of mothers' body image and beliefs about appearance on their daughters' body image and beliefs about appearance. The conduct of the study will include the following organizational steps: (a) sample, (b) procedures for conducting the study, (c) selection of measurement tools, and (d) treatment of the data. *Sample*

The participants will consist of a convenience sample of 100 pairs of mothers and daughters. The daughters will be students at a private western university. Due to the general demographics of the university, the sample will likely have a high percentage (85 to 95 percent) of Caucasians belonging to the dominant Christian religion. Body image has been repeatedly and consistently found to have a greater negative impact in the lives of women than men (Connor-Greene, 1988; Hoyt & Kogan, 2001; Mintz & Kashubeck, 1999; Tiggemann & Williamson, 2000). In addition, body dissatisfaction has been shown to play a more significant role in the everyday lives of women in their twenties, than any other age category (Tiggemann & Lynch, 2001). Finally, women in this stage of life are developing life-long leisure patterns (Raymore, Barber & Eccles, 2001). Therefore, the proposed sample of college-aged daughters is appropriate for this study.

Procedures

Volunteers will be recruited at the beginning of four general education classes over a period of two weeks during winter semester. A card or email will be given to each volunteer with a short paragraph of instructions and a three-digit code. The card will refer participants to an online questionnaire. The students will be asked to contact their mothers and supply them with the URL address and the three-digit code. Before taking the questionnaire, both members of the mother/daughter pair will enter the code, thus linking their questionnaires. On the website, an opening paragraph will explain that participation is voluntary, that ceasing participation is allowed at any time, and that completion of the questionnaire is considered to indicate consent. This paragraph will also inform the participant that information is completely confidential, as their names will not appear on the questionnaire. Completed questionnaires will automatically be e-mailed to the principle investigator.

Measures

The online questionnaire will include three diferent instruments. The first will be the Leisure Constraints Scale. This section will include three study-specific questions directly asking the degree to which the participant feels that her body image constrains her leisure activities. For example, one question reads, "Sometimes I do not enjoy my leisure activities as much as I could due to concern about my appearance." The next instrument will be the Body Image Assessment Scale Followed by the Beliefs About Appearance Scale.

Leisure constraints. The hierarchical leisure constraints scale developed by Raymore et al. (1993) will measure leisure constraints. This instrument measures barriers to leisure in three areas: intrapersonal, interpersonal, and structural. This measure takes into account the variety of ways that leisure can be constrained, as well as providing an overall score regarding the quality of a person's leisure. It asks subjects to respond to statements by indicating their strength of agreement with or the importance of specific constraints on a Likert-type scale. This scale does not target specific leisure activities but focuses on general or global perceptions of constraints on leisure associated with beginning any new leisure activity. To establish a referent for the constraint questions, subjects are initially provided with a short definition of leisure activities and are asked to list the four leisure activities they enjoy most. Subjects are then asked to indicate the extent to which they agree with or disagree with a total of 21 statements. This instrument is divided into intrapersonal, interpersonal, and structural subscales. This instrument includes statements such as "I'm too shy to start a new leisure activity" and "I am more likely to do a new leisure activity if the facilities I need to do the activity are not too crowded" (p. 104). To establish evidence of the validity of this scale, a factor analysis was performed using a program that allowed for item and factor intercorrelations. The overall goodness-of-fit of chi-squared value was 258.14 (df = 158, n = 363) indicating a 0.938 goodness-of fit index and, therefore, a tenable model. Hughes (1998) also provided support for the validity and reliability of this instrument.

Body image. Levels of body image will be assessed using Thompson and Gray's (1995) Body-Image Assessment Scale (BIAS). This scale is designed to determine how

near to her ideal the participant feels that her own body size is. The scale consists of nine female drawings, which are designed with detailed features and are of "precisely graduated sizes" (p. 258). Subjects are asked to indicate the figure that most closely represents their current body shape as well as the one that most closely represents their ideal body shape. The discrepancy between these two responses is used to assess the participant's level of dissatisfaction.

The test-retest reliability of this instrument was found to be acceptable with a reliability coefficient of r = 0.78 (n = 32). Evidence of validity of the graduation of the drawings was measured by asking participants to rank order the drawings in order of size; 95.2% of females positioned the drawings correctly and a test-retest analysis revealed an increase to 97.6% (n = 51). Concurrent validity was examined by the degree of correspondence between an individual's weight and current self-ratings. According to Thompson and Gray (1995, p. 266) contour drawing selections were "strongly correlated with reported weight" (r = 0.71, n = 51). In this section, in order to more fully understand body image, participants will be asked to what degree they are comfortable with their current body size using a Likert type scale.

Beliefs about appearance. A measure of beliefs about appearance will be obtained through the Beliefs About Appearance Scale (BAAS). This scale is designed to determine the intensity of body image awareness in the areas of interpersonal interactions, personal achievement, self-perception, and emotions. The questionnaire asks participants to indicate to what degree they agree with 20 statements on a five-point scale from "not at all" to "Extremely." For example, one of the statements reads "People will think less of me if I don't look my best." Another reads, "It is difficult for me to feel good about myself when I am not looking my best." This scale provides a useful indicator of the degree to which the subject feels that appearance might affect everyday life. The reliability and validity of the BAAS has been evaluated and replicated in three independent samples. It was found to be an "internally-consistent, unidimensional measure that exhibited both construct and criterion-related validity" (Spangler & Stice, 2001, p. 813). The internal consistency was high in each sample with alpha levels ranging from 0.94 (n = 462) to 0.95 (n = 117). Test-retest reliability was established by conducting analyses after three weeks with one sample and 10 months with another (r = 0.83, n = 231 and 0.73, n = 117, respectively).

The these instruments will be followed by two questions requesting the four activities that the subject most often participates in, and the four activities most enjoyed by the participant. These questions will indicate constraints if there are discrepancies between the activities the participant frequently chooses and the activities that she might prefer. These questions will thus suggest constraints away from activities that could provide enjoyment. They may also suggest constraints *into* certain activities that provide less enjoyment. Finally, the questionnaire will request information regarding age, gender, ethnicity, marital status, height, and weight of the participant.

Analysis

Data will be analyzed using the statistical package SPSS. In conducting an analysis, the researchers will review the data collected for any missing responses or misprinted answers. The next step will be an examination of the data for any outliers and

skewing. Pearson Product Moment Zero-Order Correlations will then be run on the independent variables of body image and attitudes about appearance as well as control variables to check for multicollinearity.

To test the null hypotheses that there is no relationship between body image, beliefs about appearance, and leisure constraints of university women, a multiple regression analysis will be run designating daughters' leisure constraints as (DLC) the dependent variable and daughters' body image (DBI) and daughters' beliefs about appearance (DBA) as independent variables. Subscales of the DLC and DBA will also be analyzed separately.

To test the null hypothesis that there is no relationship between the body image and beliefs about appearance of mothers and the body image and beliefs about appearance of daughters, a multiple regression will be run with DBI and DBA as the designated dependent variables and mothers' body image (MBI) and mothers' beliefs about appearance (MBA) as the designated independent variables. These relationships will also be tested for interactions, while controlling for daughters' body mass index (BMI). Relationships between mothers and daughters scores on subscales of the BAAS will also be analyzed separately while still controlling for BMI.

References

- Auster, C. J. (2001). Transcending potential antecedent leisure constraints: The case of women motorcycle operators. *Journal of Leisure Research, 33*, 272-298.
- Bandura, A. (1986). Exercise of personal and collective efficacy in changing societies. InA. Bandura, (Ed.), *Self-efficacy: The exercise of control*. New York: W. H.Freeman & Co.
- Bann, E. (2001). Effects of media representation of a cultural ideal of feminine beauty on self body image in college-aged women: An interactive qualitative analysis.
 Dissertation Abstracts International Section A: Humanities and Social Sciences, 62(3-A), 927.
- Benedikt, R., Wertheim, E. H., & Love, A. (1998). Eating attitudes and weight-loss attempts in female adolescents and their mothers. *Journal of Youth and Adolescence, 27*, 43-57.
- Bilukha, O. O., Utermohlen, V. (2002). Internalization of western standards of appearance, body dissatisfaction and dieting in urban educated Ukrainian females. *European Eating Disorders Review, 10,* 120-137.
- Byley, B. J. (2002). Life satisfaction, leisure satisfaction, and leisure participation among publicly housed older adults. *Dissertation Abstracts International Section A: Humanities & Social Sciences, 62(8-A),* 2881.
- Bross, A. L. (2002). Determining racial differences in the prediction of college women's body dissatisfaction: An examination of media influences, thin-ideal

internalization, and social comparison. *Dissertation Abstracts International:* Section B: The Sciences and Engineering, 62 (8-B), 3845.

- Byely, L., Archibald, B. A., Graber, J., & Brooks-Gunn. (1999). A prospective study of familial and social influences on girls' body image and dieting. *International Journal of Eating Disorders, 28*, 155-164.
- Carroll, A., & Spangler, D.L. (2001). A comparison of body image satisfaction among Latter- Day Saint and non-Latter-Day Saint college-age students. *Journal of the Association of Mormon Counselors and Psychotherapists, 26,* 6-18.
- Cash, T., & Henry, P. (1995). Women's body images: The results of a national survey in the U.S.A. *Sex Roles, 33,* 19-28.
- Cohn, L., & Adler, N. (1992). Female and male perceptions of ideal body shapes. *Psychology of Women Quarterly, 16,* 69-79.
- Cook, R. A. (2002). The perceived impact of parental messages as a predictor of disordered eating in African American, Asian American, and European American women. Dissertation Abstracts International: Section B: The Sciences & Engineering, 63(5-B), 2577.
- Cooley, E., & Toray, T. (2001). Body image and personality predictors of eating disorder symptoms during the college years. *International Journal of Eating Disorders,* 30, 28-36.
- Connor-Greene, P. (1988). Gender differences in body weight perception and weight-loss strategies of college students. *Women and Health, 14*(2), 27-42.

- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, *9*, 119-127.
- Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, *13*, 309-320.
- Cullari, S., Rohrer, J., & Bahm, C. (1998). Body-image perceptions across sex and age groups. *Perceptual and Motor Skills*, 87, 839-847.
- Dattilo, J., Dattilo, A., Samdahl, M., & Kleiber, D. (1994). Leisure orientations and selfesteem in women with low incomes who are overweight. *Journal of Leisure Research, 26,* 23-38.
- Davison, K. K., & Birch, L. L. (2001). Weight status, parent reaction, and Self-concept in five-year-old girls. *Pediatrics*, 107, 46-54.
- Deem, R. (1982). Women, leisure and inequality. Leisure Studies, 1, 29-34.
- Demarest, J., & Allen, R. (2000). Body image: Gender, ethnic and age differences. Journal of Societal Psychology, 140, 465-473.
- Dixon, R. S., Gill, J. M., Adair, V. A. (2003). Exploring paternal influences on the dieting behaviors of adolescent girls. *Eating Disorders: The Journal of Treatment* and Prevention, 11, 39-50.
- Evans, P. C. (2003). "If only I were thin like her, maybe I could be happy like her": The self implications of associating a thin female ideal with life success. *Psychology of Women Quarterly, 27,* 209-214.

- Feilke, K., & Chambliss, C. (1992). Disordered eating in college students: Links with childhood abuse and maternal eating behavior. *Technical Research Report*, Philidelphia, PA.
- Frank, M. L. (1999). Raising daughters to resist negative cultural messages about body image. *Women & Therapy*, 22(4), 69-88.
- Frederick, J., & Shaw, S. (1995). Body image as a leisure constraint: Examining the experience of aerobic exercise classes for young women. *Leisure Sciences*, 17, 57-73.
- Geller, J., Johnston, C., & Madsen, K. (1997). The role of shape and weight in selfconcept: The Shape and Weight Based Self-Esteem. *Cognitive Therapy & Research, 21,* 5-24.
- Godbey, G. (1985). Nonuse of public leisure services: A model. *Journal of Park and Recreation Administration, 3*, 1-12.
- Gupta, M. A., Chaturvedi, S. K., Chandarana, P. C., & Johnson. (2001). Weight-related body image concerns among 18-24-year-old women in Canada and India: An empirical comparative study. *Journal of Psychosomatic Research*, 50(4), 193-198.
- Gunter, B. G., & Gunter, N. C. (1980). Leisure styles: A conceptual framework for modern leisure. *The Sociological Quarterly*, 21, 361-374.
- Hahn-Smith, A. M., & Smith, J. E. (2001). The positive influence of maternal identification on body image, eating attitudes, and self-esteem of Hispanic and Anglo girls. *Journal of Eating Disorders, 29*, 429-440.

- Hain, P. (2002). Like mother, like daughter? An examination of the relationships between mothers' and daughters' eating attitudes, level of depression, body satisfaction, and perceived quality of the mother-daughter relationship. *Dissertations Abstracts International, 63(1-B)*, 527.
- Hargreaves, D. A., & Tiggemann, M. (2003). Female "thin ideal" media images and boys' attitudes toward girls. Sex Roles, 49(9-10), 539-544.
- Harris, S. (1995). Body image attitudes and the psychosocial development of college women. *The Journal of Psychology, 129,* 315-329.
- Hawkins, B., Peng, J., Hsieh, C., & Eklund, S. (1999). Leisure constraints: A replication and extension of construct development. *Leisure Sciences*, *21*, 179-192.
- Hawks, S. R. (2001). *Making peace with the image in the mirror: Spiritual solutions for self-esteem and inner acceptance*. Salt Lake City, UT: Deseret Book.
- Heesacker, M., Samson, A., & Shir, J. (2000). Assessment of disordered eating by Israeli and American college women. *College Student Journal*, *34*, 572-584.
- Henderson, K. A., & Bialeschki, M. D. (1991). A sense of entitlement to leisure as constraint and empowerment for women. *Leisure Sciences*, *13*, 51-66.
- Henderson, K. A. (1994). Broadening an understanding of women, gender, and leisure. Journal of Leisure Research, 26, 1-7.
- Henderson, K. A. (1997). A critique of constraints theory: A response. *Journal of Leisure Research, 29*, 453-458.

- Henderson, K. A. (2002). Women and adventure recreation: Reconstructing leisure constraints and adventure experiences to negotiate continuing participation. *National Recreation and Park Association*, 34, 157-177.
- Hofschire, L. J., & Greenberg, B. S. (2002). Media's impact on adolescents' body dissatisfaction. In J. Brown, & J. Steele, (Eds). *Sexual teens, sexual media: Investigating media's influence on adolescent sexuality*. Mahwah, NJ: Erlbaum.
- Hoyt, W., & Kogan, L. (2001). Satisfaction with body image and peer relationships for males and females in a college environment. Sex Roles, 45(3-4), 199-215.
- Hughes, J. S. (1998). The relationship of leisure to selected risk behaviors of adolescents. Dissertations Abstracts International Section A: Humanities & Social Sciences, 59(6), 1921.
- Hultsman, W. (1995). Recognizing patterns of leisure constraints: An extension of the exploration of dimensionality. *Journal of Leisure Research*, *27*, 228-244.
- Iso-Ahola, S. E., Jackson, E. L., & Dunn, E. (1994). Starting, ceasing and replacing leisure activities over the life-span. *Journal of Leisure Research, 26*, 227-249.
- Iso-Ahola, S. E., & Mannell, R. C. (1985). Social and Psychological constraints on leisure. In M. Wade (Ed.), *Constraints on leisure*. (pp. 111-162) Springfield, IL: Charles C. Thomas.
- Iso-Ahola, S. E., & Weissinger, E. (1987). Leisure and boredom. Journal of Social and Clinical Psychology, 5, 356-364.
- Jackson, E. L. (1988). Leisure constraints: A survey of past research. *Leisure Sciences*, *10*, 203-215.

- Jackson, E. L. (1991). Special issue introduction: Leisure constraints/constrained leisure. *Leisure Sciences, 13,* 273-278.
- Jackson, E. L. (1993). Recognizing patterns of leisure constraints: Results from alternative analyses. *Journal of Leisure Research*, *25*, 129-149.
- Jackson, E. L., Crawford, D. W., & Godbey. G. (1993). The negotiation of leisure constraints. *Leisure Sciences*, 15, 1-11.
- Jackson, E. L., & Henderson, K. A. (1995). Gender-based analysis of leisure constraints. *Leisure Sciences*, 17, 31-51.
- Jackson, E. L., & Rucks, V. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 27, 85-105.
- Jackson, E. L., & Searle, M. S. (1985). Recreation nonparticipation: Variables related to the desire for new recreational activities. *Recreation Research Review*, *10*, 5-12.
- Jaeger, B., Ruggier, G. M., Edlund, B., Gomez-Perretta, C., Lang, F., Mohammadkhani,
 P., Sahleen-Veasey, C., Schomer, H., Lamprecht, F. (2002). Body dissatisfaction and its interrelations with other risk factors for bulimia nervosa in 12 countries. *Psychotherapy & Psychomatics, 71,* 54-61.
- James, K. A. (2000). 'You can feel them looking at you': The experiences of adolescent girls at swimming pools. *Journal of Leisure Research, 32,* 262-276.
- James, K. A. (2001). 'I just gotta have my own space!': The bedroom as a leisure site for adolescent girls. *Journal of Leisure Research*, *33*, 71-86.

- James, K. A., Phelps, & Bross. (2001). Body image dissatisfaction, drive for thinness, and self-esteem in African American college females. *Psychology in Schools, 38*, 491-496.
- Kaplan, S., Busner, J., & Pollack, S. (1988). Perceived weight, actual weight, and depressive symptoms in a general adolescent sample. *International Journal of Eating Disorders, 7,* 107-113.
- Kay, T., & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *Journal of Leisure Research*, 23, 301-313.
- Kelly, J. R. (1972). Work and leisure: A simplified paradigm. *Journal of Leisure Research*, *4*, 50-62.
- Kichler, J. C., Crowther, J. H. (2001). The effects of maternal modeling and negative familial communication on women's eating attitudes and body image. *Behavior Therapy*, 32, 443-457.
- Kinney, W., & Cole, C. (1992). Predicting life satisfaction among adults with physical disabilities. *Archives of Physical Medicine and Rehabilitation*, 73, 863-869.
- Kirkcaldy, B. D., Athanasou, J. A. (1995). Leisure interests of German workers: Gender differences and similarities. *Perceptual & Motor Skills*, 81, 429-430.
- Kleiber, D. A., & Kane, M. J. (1985). Sex differenced and the use of leisure as adaptive potentiation. *Loisir et Societe, 7*, 165-174.
- Lawrence, C. M. (1999). Racial and maternal influences on preadolescent females' eating attitudes and body image. *Dissertation Abstracts International: Section B: The Sciences & Engineering*, *59*(7-*B*), 3736.

- Lenskjy, H. (1986). *Out of bounds: women, sport, and sexuality*. Toronto, Ontario: The Women's Press.
- Leung, F., Schwartzman, A., Steiger, H. (1996). Testing a dual-process family model in understanding the development of eating pathology: A structural equation modeling analysis. *Journal of Eating Disorders, 20*, 367-375.
- Little, D. E. (2002). Women and adventure recreation: Reconstructing leisure constraints and adventure experiences to negotiate continuing participation. *Journal of Leisure Research, 34,* 157-177.
- Low, K. G., Charanasomboon, S., Brown, C., Hiltunen, G., Long, K., Reinhalter, K., & Jones, H. (2003). Internalization of the thin ideal, weight and body image concerns. *Social Behavior and Personality*, *31*, 81-90.
- Lowes, J., & Tiggemann, M. (2003). Body dissatisfaction, dieting awareness and the impact of parental influence in young children. *British Journal of Health Psychology, 8*, 135-147.
- Mannell, R. C. (1989). Leisure satisfaction. In E. L. Jackson & T. L. Burton (Eds.),
 Understanding leisure and recreation: Mapping the past, charting the future (pp. 281-301). State College, PA: Venture.
- Mannell, R. C. & Zuzanek, J. (1991). The nature and variability of leisure constraints in daily life: The case of the physically active leisure of older adults. *Leisure Sciences*, 13, 337-351.
- Marjoribanks, K. (1976). Social learning theory of the family: An analysis. *Psychology in the Schools, 13,* 457-462.

- Markey, C. N., Tinsley, B. J., Ericksen, S. J., Ozer, D. J., & Markey, P. M. (2002).
 Preadolescents' perceptions of females' body size and shape: Evolutionary and social learning perspectives. *Journal of Youth and Adolescence*, *31*, 137-147.
- McGuire, F. A. (1984). A factor analytic study of leisure constraints in advanced adulthood. *Leisure Sciences, 6,* 313-326.
- McHale, S. M., Corneal, D. A., Crouter, A. C., & Birch, L. L. (2001). Gender and weight concerns in early and middle adolescence: Links with well-being and family characteristics. *Journal of Clinical Child Psychology*, *30*, 338-348.
- McKinley, N. M. (1999). Women and objectified body consciousness: Mothers' and daughters body experience in cultural, developmental, and familial context. *Developmental Psychology*, 35, 760-770.
- Mintz, L., & Betz, N. (1988). Prevalence and correlates of eating disordered behaviors among undergraduate women. *Journal of Counseling Psychology*, 35, 463-471.
- Mintz, L., & Kashubeck, S. (1999). Body image and disordered eating among Asian American and Caucasian college students: An examination of race and gender differences. *Psychology of Women Quarterly*, 23, 781-796.
- Morry, M., & Staska, S. (2001). Magazine exposure: Internalization, self-objectification, eating attitudes, and body satisfaction in male and female university students. *Canadian Journal of Behavioural Science*, 33, 269-279.
- Motley, C. I. (1997). Mothers, daughters, and food: Examining the emotional connection. Dissertations Abstracts International Section A: Humanities & Social Sciences, 58(6-A), 2049.

- Mundy, J., & Odum, L. (1979). *Leisure education: Theory and practice*. Springfield, IL: Sagamore Publishing, Incorporated.
- Neulinger, J. (1981). *The psychology of leisure, 2nd ed.* Springfield, IL: Charles C. Thomas.
- Nezlek, J. (1999). Body image and day-to-day social interaction. *Journal of Personal Psychology*, 67, 793-817.
- Nishizawa, Y., Kida, K., Nishizawa, K., Hashiba, S., Saito, K., & Mita, R. (2003).
 Perception of self-physique and eating behavior of high school students in Japan.
 Psychiatry & Clinical Neurosciences, 57, 189-196.
- Ogden, J., & Elder, C. (1998). The role of family status and ethnic group on body image and eating behavior. *International Journal of Eating Disorders, 23,* 309-315.
- Ogle, J. L. (1999). Body satisfaction and weight-related appearance in the two-way mirror: Mother-daughter interaction as mediation of the mass media's thin female ideal. *Dissertation Abstracts International Section A: Humanities & Social Sciences, 60(4-A),* 1328
- Omran, K. (1999). Youth and the benefits of investing in free time (leisure). *Journal of the Social Sciences*, *27*(3), 125-154.
- Philipp, S. F. (1994). Racial differences in perceived leisure constraints. *Perceptual & Motor Skills*, 79, 1339-1343.
- Ragheb, M., & Griffith, C. (1982). The contribution of leisure participation and leisure satisfaction to life satisfaction of older persons. *Journal of Leisure Research, First Quarter*, 295-306.

- Raudenbush, B., & Zellner, D. (1997). Nobody's Satisfied: Effects of abnormal eating behaviors and actual and perceived weight status on body image satisfaction in males and females. *Journal of Social and Clinical Psychology*, 16, 95-110.
- Raymore, L. A., Barber, B. L., & Eccles, J. S. (2001). Leaving home, attending college, partnership and parenthood: The role of life transition events in leisure pattern stability from adolescence to young adulthood. *Journal of Youth and Adolescence, 30*, 197-223.
- Raymore, L. A., Godbey, G., Crawford, D., von Eye, A. (1993). Nature and process of leisure constraints: An empirical test. *Leisure Sciences*, 15, 99-113.
- Reeder, C. W., Linkowski, D. C. (1976). An institute on attitudinal, legal, and leisure barriers to the disabled. *Rehabilitation Counseling Bulletin, 20*, 76-79.
- Reel, J. J. (2000). Body image and physical self-perceptions among African-American and Caucasian women across the adult life span. *Dissertation Abstracts International: Section B: The Physical Sciences & Engineering, 61(5-B),* 2467.
- Rodin, J. (1993). Body traps. New York: Norton.
- Russell, R. V. (1987). The importance of recreation satisfaction and activity participation to the life satisfaction of age-segregated retirees. *Journal of Leisure Research*, 19(4), 273-283.
- Russell, W. D., & Cox, R. H. (2003). Social physique anxiety, body dissatisfaction, and self-esteem in college females of differing exercise frequency, perceived weight discrepancy, and race. *Journal of Sport Behavior, 26*, 297-318.

- Samdahl, D. M., & Jekubovich, N. J. (1997). A critique of leisure constraints: Comparative analysis and understandings. *Journal of Leisure Research*, 29, 430-452.
- Schwartz, D. J., Phares, V., Tantleff-Dunn, S., & Thompson, K. J. (1997). Body image, psychological functioning and parental feedback regarding physical appearance. *International Journal of Eating Disorders*, 25, 339-343.
- Shaw, S. M. (1994). Gender, leisure and constraint: Towards a framework for the analysis of women's leisure. *Journal of Leisure Research, 26*, 8-22.
- Shaw, S. M., Bonen, A., & McCabe, J. (1991). Do more constraints mean less leisure? Examining the relationship between constraints and participation. *Journal of Leisure Research*, 23(4), 286-300.
- Shaw, S. M., Kleiber, D. A., & Caldwell, L. L. (1995). Leisure and identity formation in male and female adolescents: A preliminary examination. *Journal of Leisure Research, 27*, 245-263.
- Shekter-Wolfson, L. F., & Woodside, D. B. (1997). Social work treatment of anorexia and bulimia: Guidelines for practice. *Research on Social Work Practice*, *7*, 5-32.
- Spangler, D. L. (2002). Testing the model of eating disorders: The role of dysfunctional beliefs about appearance. *Behavior Therapy*, 33, 87-105.
- Spangler, D., L., & Stice, E. (2001). Validation of the Beliefs About Appearance Scale. Cognitive Therapy and Research, 25, 813-827.
- Stephens, N. M., Schumaker, J. F., Sibiya, T. E. (1999). Eating disorders and dieting behavior among Australian and Swazi university students. *The Journal of Social*

Psychology, 139, 153-158.

- Stice, E., Spangler, D.L., & Agras, W.S. (2001). Exposure to media-portrayed thin-ideal images adversely effects vulnerable girls: A longitudinal experiment. *Journal of Social and Clinical Psychology, 20*, 271-289.
- Thomas, L. G. (1956). Leisure pursuits by socio-economic strata. *Journal of Educational Sociology*, *29*, 367-377.
- Thompson, M. A., & Gray, J. J. (1995). Development and validation of a new bodyimage scale. *Journal of Personality Assessment, 64,* 258-269.
- Thrane, C. (2000). Men, women, and leisure time: Scandinavian evidence of gender inequality. *Leisure Sciences*, *22*, 109-122.
- Tiggemann, M. (2001). Person x situation interactions in body dissatisfaction. *International Journal of Eating Disorders*, 29, 65-70.
- Tiggeman, M. & Lowes, J. (2002), Predictors of maternal control over children's eating behaviour. *Appetite*, *39*, 1-7.
- Tiggemann, M., & Lynch, J. E. (2001). Body image across the life span in adult women: The role of self-objectification. *Developmental psychology*, *37*, 243-253.
- Tiggemann, M., Ruutel, E. (2001). A cross-cultural comparison of body dissatisfaction in Estonian and Australian young adults and its relationship with media exposure. *Journal of Cross-Cultural Psychology*, 32, 736-742.
- Tiggemann, M., & Williamson, S. (2000). The effect of exercise on body satisfaction and self-esteem as a function of gender and age. *Sex Roles, 43,* 119-127.

- Tsai, G., Curbow, B., & Heinberg, L. (2003). Sociocultural and developmental influences on body dissatisfaction and disordered eating attitudes and behaviors of Asian women. *Journal of Nervous & Mental Disease*, 191(5), 309-318.
- Tsiantas, G. & King, R. M. (2001). Similarities in body image in sisters: The role of sociocultural internalization and social comparison. *Eating Disorders: The Journal of Treatment & Prevention, 9*, 141-158.
- Usiana, S., & Daniluk, J. (1997). Mothers and their adolescent daughters: Relationship between self-esteem, gender, role identity, and body image. *Journal of Youth & Adolescence, 26,* 45-62.
- Vander Wal, J., & Thelen, M. (2000). Eating and body image concerns among obese and average-weight children. *Addictive Behaviors*, 25, 775-778.
- Wearing, B. M. (1990). Beyond the ideology of motherhood: Leisure as resistance. Australian and New Zealand Journal of Sociology, 26, 36-58.
- White, M. A., Kohlmaier, J. R., Varnado-Sullivan, P., & Williamson D. A. (2003).
 Racial/ethnic differences in weight concerns: Protective and risk factors for the development of eating disorders and obesity among adolescent females. *Eating & Weight Disorders, 8,* 20-25.
- Wildes, J. E., & Emery, R. E. (2001). The roles of ethnicity and culture in the development of eating disturbance and body dissatisfaction: A meta-analytic review. *Clinical Psychology Review*, 21, 521-551.
- Wilfley, D. E., Grilo, C. M., & Rodin, J. (1997). Group psychotherapy for the treatment of bulimia nervosa and binge eating disorder: Research and clinical methods. In J.

L. Spira (Ed.). *Group Therapy for Medically Ill Patients(225-295)*. New York: Guilford.

Witt, P., & Goodale, T. (1981). The relationship between barriers to leisure enjoyment and family stages. *Leisure Sciences*, *4*, 29-49.

Wood, V. (1971). Age-appropriate behavior for older people. Gerontologist, 11, 74-78.

Zoerink, D. A. (2001). Exploring the relationship between leisure and health of senior adults with orthopedic disabilities living in rural areas. *Activities, Adaptations, & Aging, 26(2),* 61-73.

Appendix A-1a

Leisure/Body Image Questionnaire

This study is being conducted by a Brigham Young University graduate student to explore attitudes of students toward appearance and leisure. Participants will be female BYU students and their mothers. The survey consists of three parts: a leisure activities questionnaire, body image and beliefs about appearance scales, and some demographic questions. It should take only five to ten minutes to complete. There are no known risks or benefits to you for participating in the survey. Involvement is voluntary. You may refuse to participate or withdraw at any time without penalty. **Please be completely candid. These questionnaires will be kept completely confidential. Your name will never be associated with your answers.** If you have any questions regarding your rights as a participant in research projects, you may contact Dr. Shane Schulthies, Chair of the Human Subjects Institutional Review Board, 120B RB, Brigham Young University, Provo, UT, 84602; phone (801) 422-5490. Return of this survey implies your consent to participate in this research. Thank you very much for your participation!

Please tell us whether you are the:

Mother

Daughter

Please enter your 3-digit code number

Appendix A-1b

Leisure Activities Questionnaire

SECTION I

	05	Somewhat Disagree	Somewhat Agree	Strongly Agree
1. I'm too shy to start a new leisure activity.				
2. I am more likely to do a new leisure activity that my family would think is alright.	C	0	0	C
3. I am unlikely to do a new leisure activity that makes me feel uncomfortable.	0	Ľ	Ľ	C
4. I am more likely to do a new leisure activity that my friends thought was alright.	0			C
5. I am more likely to do a new leisure activity that is in keeping with my religious beliefs.	G			C
6. I am more likely to do a leisure activity that doesn't make me feel self-conscious.	0			С
7. I am more likely to do a new leisure activity that doesn't require a lot of skill.	0	C	U	C

SECTION II

	0,2	Somewhat Disagree	Somewhat Agree	Strongly Agree
1. The people I know live too far away to start a new leisure activity with me.	C			C
2. The people I know usually don't have time to start a new leisure activity with me.	0	0	0	C
3. The people I know usually have enough money to begin a new leisure activity with me.	G		Ľ	
4. The people I know usually have too many family obligations to start a new leisure activity with me.	C	0	C	C
5. The people I know usually know what new leisure activities they could do with me.	C		Ľ	C
6. The people I know usually don't have enough skills to start a new leisure activity with me.	0	0	0	C
7. The people I know usually don't have transportation to get to a new leisure activity with me.	3	C	L	C

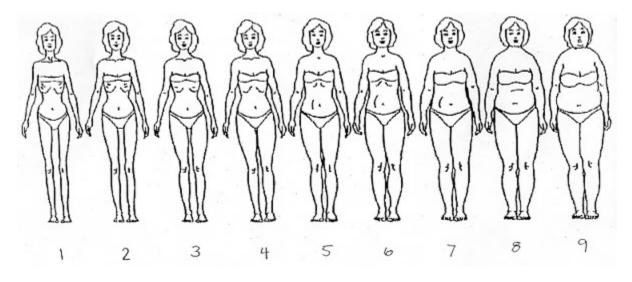
SECTION III

	0,2	Somewhat Disagree	Somewhat Agree	Strongly Agree
1. I am more likely to do a new leisure activity if the facilities I need to do the activity are not crowded.	E			
2. I am unlikely to do a new leisure activity if I have other commitments.	0	0	0	C
3. I am more likely to do a new leisure activity if I have transportation.	0			C
4. I am more likely to do a new leisure activity if I know what is available.	0	0		C
5. I am unlikely to do a new leisure activity if the facilities I need to do the activity aren't convenient.	0	U	Ľ	C
6. I am unlikely to do a new leisure activity if I don't have time.	0	0		C
7. I am more likely to do a new leisure activity if I have money.	0	C	C	C

SECTION IV

	Strongly	Somewhat	Somewhat	Strongly
	Disagree	Disagree	Agree	Agree
1.There are some leisure activities that I choose <u>NOT</u> to participate in or participate in less frequently than I would like due to concern about my appearance.	C	П		C
2. Sometimes I do <u>NOT</u> enjoy my leisure activities as much as I could due to concern about my appearance.	Ø	C	C	C
3. I spend some of my leisure time in activities that I feel would improve my appearance even when I would prefer another leisure activity.	C	U	Ľ	Ľ
4. There are times I choose <u>NOT</u> to participate in physically active recreation activities (e.g. swimming, running, dancing, etc.) due to concern about my appearance.	C			C

Appendix A-1c



Looking at the figures above, which number do you feel most accurately depicts your current body shape?

Again looking at the figures above, which number do you feel most accurately depicts your ideal body shape, or the one that you would most like to be?

On a scale from 1 to 5, with one being "not at all" and 5 being "completely", to what degree are you comfortable with your current body shape?

Appendix A-1d

Beliefs About A	ppearance
-----------------	-----------

	Not At All		Moderately	A Lot	Extremely
1. The opinion others have of me is based on my appearance.	Ο		Ľ	C	
2. The amount of influence I have on other people depends upon how I look.	Ο			C	
3. People will think less of me if I don't look my best.	0	C		C	C
4. People would be more interested in me if I looked better.	0	C		0	
5. My relationships would improve if I looked the way I wished.	Ο	C	Ľ		C
6. The amount of success I have in my future job or career depends largely upon how I look.	0	C		O	
7. My appearance influences my ability to do things.	Ο				
8. My performance in activities (e.g. school, work, hobbies) is influenced by how I look.	0		0	0	
9. The opportunities that are available to me depend upon how I look.	O		L		C
10. My school and work performance or opportunities would improve if I looked the way I wished.	0	С	C	C	C
11. My value as a person depends upon how I look.	٥	C		C	C
12. How I feel about myself is largely based on my appearance.	0	C		0	
13. I would think more highly of myself if I looked the way I wished.	٥	C		D	
14. How I look is a large part of who I am.	0				
15. It is difficult ot feel good about myself when I am not looking my best.	O	C			
16. My ability to feel happy depends upon how I look.	0	C		C	
17. Improving my appearance is one of the few activities that makes me feel good or like I am accomplishing something.	0	C	Ľ	C	C
18.My life will be more exciting or rewarding if I look good.	0	C	0	0	C
19. My moods are influenced by how I look.	Ο				
20. I would enjoy life more if I looked the way I wished.	0	0		C	C

Appendix A-1e

In order to help us understand more about your leisure habits, please list the four leisure activities that you participate in most frequently (ie. swimming, reading)

- 1.
- 2.
- 3.
- 4.

Please list the four leisure activities that you most enjoy participating in (These may not necessarily be activities in which you participate frequently)

 1.

 2.

 3.

 4.

If there is a discrepancy between your responses to the two previous questions, please state briefly what you believe is the reason for this.

Demographic Information

To help us better describe our sample of study participants, please respond to the following items. Remember, all information is anonymous. We cannot link your responses to you.

Age
Marital Status: C married not married
Ethnicity: C Asian C African American/Black C Pacific Islander C Native American Hispanic C White, Non Hispanic C Other (please list)
Height:
Weight: