

When Life Really Is A Stage: A Test Of Objectification Theory Using Dancers And Non-dancers

2005

Megan Duesterhaus
University of Central Florida

Find similar works at: <https://stars.library.ucf.edu/etd>

University of Central Florida Libraries <http://library.ucf.edu>

 Part of the [Sociology Commons](#)

STARS Citation

Duesterhaus, Megan, "When Life Really Is A Stage: A Test Of Objectification Theory Using Dancers And Non-dancers" (2005). *Electronic Theses and Dissertations*. 309.
<https://stars.library.ucf.edu/etd/309>

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.

WHEN LIFE REALLY IS A STAGE: A TEST OF OBJECTIFICATION THEORY USING
DANCERS AND NON-DANCERS

by

MEGAN L. DUESTERHAUS
B.A. Western Illinois University, 2003

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Arts
in the Department of Sociology and Anthropology
in the College of Arts and Sciences
at the University of Central Florida
Orlando, Florida

Spring Term
2005

© 2005 Megan L. Dueterhaus

ABSTRACT

This study tested a model of objectification theory proposed by Fredrickson and Roberts (1997) as it applies to disordered eating in a sample of dancers and non-dancers. The methods in this study are based on a previous test of objectification theory done by Tiggeman and Slater (2001). Two samples of participants were given a survey to measure self-objectification and its anticipated consequences. The first sample included 155 women who participated in either ballet, modern, jazz, or hip-hop dance. The second sample included 199 women enrolled in undergraduate classes at the University of Central Florida during the fall semester of 2004. Participants in the two samples did not score differently on the measure of self-objectification. However, dancers scored significantly higher on the self-surveillance, body shame, appearance anxiety, flow, awareness of internal body states, and disordered eating measures than the non-dancers. None of the proposed mediating variables were found to mediate the relationship between self-objectification and disordered eating in either sample.

“...’because I couldn’t find the food I liked. If I had found it, believe me, I should have made no fuss and stuffed myself like you or anyone else.’ These were his last words, but in his dimming eyes remained the firm though no longer proud persuasion that he was still continuing to fast.” *A Hunger Artist*, Franz Kafka

ACKNOWLEDGMENTS

There are many people who deserve my thanks for assisting me in some form with this piece of research. First, I acknowledge Dr. Jana Jasinski without whose expertise this project never would have been completed, and for being an overall excellent thesis chair. My thanks are also extended to Dr. James Wright for serving on my committee and supplying incentives to my survey participants, and Dr. Elizabeth Mustaine for agreeing to be on my committee with such short notice. I also thank the Florida Dance Festival, Orlando Magic Dancers, Western Illinois University Dance Theatre, RPM Dance, UCF KnightMoves, UCF Starlet Knights, all the instructors who allowed me access to their students, and everyone who filled out my survey. My greatest appreciation also goes to my friends Jessica (JJ) Magliocco, Rebecca Weichsel, and Kristina Dzara for all their help and expertise. Lastly, I acknowledge my family, Glori, Steve, and Eric Duesterhaus, and Jim AuBuchon for all their support along the way.

TABLE OF CONTENTS

LIST OF FIGURES.....	viii
LIST OF TABLES.....	ix
LIST OF ACRONYMS/ABBREVIATIONS	x
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: LITERATURE REVIEW	4
Objectification Theory	4
Disordered Eating.....	8
Research on Dancers	10
CHAPTER THREE: METHODOLOGY.....	15
Data	15
Measures.....	16
CHAPTER FOUR: FINDINGS.....	25
Sample Characteristics.....	25
Comparison of Groups on Measures	27
Relationships between Variables.....	30
Tests of the Model	33
CHAPTER FIVE: CONCLUSION	39
Limitations	41
Support of the Model	43
APPENDIX A: CONSENT FORM.....	45
APPENDIX B: SURVEY INSTRUMENT.....	47

LIST OF REFERENCES 57

LIST OF FIGURES

Figure 1: Proposed Causal Model.....	33
Figure 2: Path diagram of Model for Dancers (a) and Non-Dancers (b).....	37

LIST OF TABLES

Table1: Means for Sample Characteristics and Background Information.....	26
Table 2: Means of Self-Objectification and Proposed consequences (standard deviations in parentheses)	28
Table 3: Correlations Between Self-Objectification, Proposed Consequences, and Disordered Eating for Dancers (a) and Non-Dancers (b)	32
Table 4: Standardized Coefficients for Pathways in Causal Model	36

LIST OF ACRONYMS/ABBREVIATIONS

BMI	Body Mass Index
EAT-26	Eating Attitudes Test, Short Form
UCF	University of Central Florida

CHAPTER ONE: INTRODUCTION

“Dance is the only art where we ourselves are the stuff of which it is made”

Ted Shawn, Founder Jacob’s Pillow Dance Festival

In the past century conditions for women in Western society have no doubt improved considerably. In the United States alone, dramatic changes have been seen in the past 100 years. For example, the suffrage movement led to the 19th amendment, passed in 1920, which gave women the right to vote. Changes are also evident in women’s workforce participation. In 1920 only twenty percent of the nation’s workforce was made up of women (U.S. Department of Labor, 1990). In 2003, the latest year for which statistics are available, women constituted 47% of the workforce (U.S. Department of Labor 2003).

Despite the evident advancements toward equal treatment of women, the unequal treatment and oppression of women still continues in a more covert fashion and is oftentimes perpetrated unconsciously by men and women (Lindsey, 1997). The objectification of women is just one area where this occurs. Treating women’s bodies as objects is rampant in magazines, movies, television, and virtually every other arena of society (Fredrickson & Roberts 1997). As a result of this objectification by society, women come to view themselves as an object as well, that is, as a body whose value is assessed on its usefulness to others.

In their theoretical framework of objectification theory Fredrickson and Roberts (1997) propose several consequences of self-objectification including sexual dysfunction, depression, and disordered eating. The model suggests that the relationships between self-objectification, disordered eating, sexual dysfunction, and depression are mediated by appearance anxiety, body shame, awareness of internal body processes, and the ability to be completely engrossed in an important task or activity.

A particular population of women in our society who may be at a greater risk for self-objectification, and thus disordered eating habits, unhealthy weights and mental illnesses are dancers. Dancers' bodies in fact become objects that are constantly scrutinized by themselves and others and literally put on stage for others' enjoyment. In addition, images of women in publications focusing on dance tend to depict women in a manner akin to prepubescent children. This means absolutely no breasts, curves, etc.

The number of women who at some point in their lives take dancing lessons is unknown. However, substantial numbers of women are still actively involved in dance by the time they reach adulthood. The American College Dance Festival, held in nine regions of the United States annually, typically has over 3,000 participants. Countless other dance festivals such as the Florida Dance Festival and workshops with professional companies such as Counter Groove Dance Co. are held every year in the United States and abroad. Moreover, an Internet search using Peterson's college guide listed 226 colleges

or universities offering a major in dance. This listing did not include schools that had dance programs but offered only a minor.

Given the number of women involved in the dance community, problems associated with self-objectification occurring through exposure to mainstream society, as well as the dance community, have the potential to affect a significant number of women in our country's population. The extent to which self-objectification occurs and the negative consequences associated with it among dancers, are issues that have yet to be fully explained.

CHAPTER TWO: LITERATURE REVIEW

Objectification Theory

Objectification refers to treating a person, usually, a woman, as no more than a body to be judged and evaluated on its usefulness to others (Fredrickson & Roberts, 1997). Some would argue that males in our society are allowed to sexually objectify females on a constant basis (Westkott, 1986; Shur, 1983). According to Kaschak (1992), as cited in Fredrickson and Roberts (1997), the most covert and widely used method of sexual objectification is through gaze “or visual inspection of the body”. Fredrickson and Roberts (1997) propose that with the presence of sexual gazing there is a high probability of the occurrence of sexual objectification. Bartky (1990) describes sexual objectification as instances where a women’s body, or part of the body, is seen as the sole defining aspect of her person.

Constant objectification of one’s body by other people has been proposed by several theorists and researchers to lead to the internalization of the other’s view of the self, termed self-objectification (Fredrickson & Roberts, 1997; de Beauvoir, 1952; Young, 1990). As a result of self-objectification a person often comes to spend a significant amount of time monitoring and considering their outward appearance (Fredrickson & Roberts, 1997).

Self-objectification can have some positive outcomes for women in our society. For example, women who constantly monitor their appearances and

ensure their compliance with social beauty norms (i.e. weight) are usually rewarded in terms of the reaction of other people to themselves. Moreover, women who are considered attractive by society generally benefit in terms of employment experience and dating (Fredrickson & Roberts, 1997).

Unfortunately, the possibility for self-objectification to bring with it a host of undesirable outcomes is considered by some to be highly likely (Fredrickson & Roberts, 1997; McKinley, 1999; Huebner & Fredrickson, 1999). In their treatise on objectification theory Fredrickson and Roberts (1997) outline a framework for the consequences of self-objectification.

Objectification theory makes the assumption that, “women exist in a culture in which their bodies are – for whatever reasons – looked at, evaluated, and potentially objectified.” The framework set up by the authors for objectification theory begins with self-objectification leading to frequent monitoring of the body. It is this self-monitoring, or self-surveillance that leads to a host of other negative consequences for women in our society.

The first negative outcome in Fredrickson and Robert’s (1997) framework is an increase in body shame. Shame is proposed to be the result of a person trying to adhere to a social ideal and frequently failing in their endeavors. Moreover, when a person continually falls short they tend to attribute their shortcomings to being a bad person, rather than a good person who made bad choices (Lewis, 1971). “Shame, then results from a fusion of negative self evaluation with the potential for social exposure” (Fredrickson & Roberts, 1997).

A second consequence of frequent self-monitoring is an increased level of anxiety. In particular, women in our society may be at an increased risk for appearance anxiety. Empirical research has supported the notion that women experience considerably more anxiety regarding their appearance than do men (Dion, Dion, & Keelan, 1990). Furthermore, as noted by Fredrickson and Roberts (1997), women's clothing, in and of itself, provides opportunity for increased appearance anxiety. Several types of necklines and hemlines, popular in current fashion, require vigilant monitoring to ensure they are not slipping up or down and revealing too much or, apparently, too little. Constantly worrying about exposing oneself can obviously become a source of anxiety for many women. Safety anxiety, another type of anxiety, has also been proposed to result from self-objectification and self-surveillance. However, as it does not apply to the present study, safety anxiety will not be discussed here.

A third consequence of self-objectification and self-monitoring is a decreased level in peak motivational states, termed "flow" by Csikszentmihalyi (1990). Flow is defined by Csikszentmihalyi as a state when ... "a person's body or mind is stretched to the limits in a voluntary effort to accomplish something difficult and worthwhile" (1990, p. 3). For example, women's ability to achieve flow may be disrupted by self-consciousness or the frequent comments and evaluation of others (Fredrickson & Roberts, 1997).

A fourth consequence proposed by objectification theory is decreased awareness of internal body states. Fredrickson and Roberts (1997) suggest, "Because women are vigilantly aware of their outer bodily experiences, they may

be left with fewer perceptual resources available for attending to inner body experience” (p. 185). Another explanation is that in the attempt to adhere to the cultural ideal of thinness, many women begin dieting as early as adolescence. As a result of dieting they may tune out cues to internal body states, such as hunger (Fredrickson & Roberts, 1997).

In summation, according to objectification theory, high levels of self-objectification lead to high levels of shame and anxiety and low levels of flow and awareness of internal body states, which in turn, may cause several undesirable outcomes. Fredrickson and Roberts (1997) suggest disordered eating, sexual dysfunction, and depression as possible negative outcomes of self-objectification.

On the surface, objectification theory seems a logical explanation for disordered eating, sexual dysfunction, and depression. However, empirical research is needed to verify the claims made in the framework of the theory. Several researchers have begun to examine the plausibility of the objectification theory framework (Noll & Fredrickson, 1998; Huebner & Fredrickson, 1999; McKinley, 1999). Noll and Fredrickson (1998) tested the relationship of self-objectification and body shame to disordered eating symptoms and dietary restraint in two samples of female college students. The study found a direct relationship between self-objectification and disordered eating, as well as a relationship mediated by body shame.

Another study attempted to assess the differences in male and female self-objectification (Huebner & Fredrickson, 1999). Autobiographical memories

were collected from two samples of college students: one male and one female. The study found that in describing their memories, women reported events as an outside observer much more often than did males.

The negative outcome of self-objectification that has received the most attention by researchers, thus far, is disordered eating (Huebner & Fredrickson, 1999; Tiggeman & Slater, 2001; Slater & Tiggeman, 2002). The concept of disordered eating itself has received a significant amount of treatment in the past several decades by researchers in the fields of sociology, psychology, health, and others.

Disordered Eating

Disordered eating and problems associated with it are, are not new phenomena. Dr. Richard Morton described the first incidence of anorexia nervosa in detail in 1689 (Murray, 2003). As early as 1873 anorexia and bulimia nervosa were recognized as symptoms present in those suffering from a disordered eating disease (Nagel & Jones, 1992). As defined by the Diagnostic and Statistical Manual of mental disorders (1994), symptoms of anorexia include: refusal to gain or maintain weight above a minimal level, intense fear of weight gain, severe disturbance in body image, and hormonal problems. Recent research has estimated that close to 3% of all young women are affected by an

eating disorder, and close to twice that number have significant eating issues (Becker, Grinspoon, Kiblinki & Herzog, 1999).

Although eating disorders are currently considered a disease, the exact etiology of these conditions is not known. Murray (2003) asserts, "There is little research suggesting a true biological link to anorexia or bulimia; however, the literature is replete with both psychological and sociological factors associated with these disorders." Specifically, family and culture are the two sociological factors thought to influence the development of an eating disorder. For example, past research has shown that growing up in an environment where weight is often a topic of conversation or an environment with strict and coercive parental control, both contribute to the likelihood of an individual developing an eating disorder (Murray, 2003).

With regard to the effect of culture on developing disordered eating symptoms, Murray (2003) felicitously states, "It seems as though our society which was founded on the precepts, 'life, liberty and the pursuit of happiness' has transcended to 'life, liberty and the pursuit of thinness'." Moreover, Western society has developed a "cult of thinness" whereby, in order to be considered beautiful women must also be thin (Lintott, 2003). Additionally, obese women are not just seen as undesirable physically, but are also labeled lazy, filthy, worthless, etc. From this standpoint it can be seen how weight in our society has become a moral value, not a biological predisposition (Lintott, 2003).

Research on Dancers

A handful of studies have examined some of the unhealthy practices of dancers. However, all of these studies have focused on ballet dancers and nearly all found negative outcomes for dancers in their studies (Abraham 1996a, 1996b; Calabrese et. al. 1983; Cohen et. al. 1983; Hamilton, Brooks-Gunn & Warren 1986; Pierce, Daleng & McGowen 1993; Pierce & Daleng 1998; Tiggeman & Slater, 2001).

A study done by Pierce and Daleng (1998) found that in a sample of professional ballet dancers that when presented with examples the participants were unable to accurately choose the silhouette that represented their percent of body fat. The dancers were all within an ideal range of body composition according to normal standards. However, nearly all choose a silhouette heavier than they actually were. The study concluded that there existed a significant body image distortion among the sample of dancers.

Researchers have also examined the eating habits and weight controlling behaviors employed by dancers. For example, Hamilton, Brooks-Gunn and Warren (1986) found that 57 percent their sample of professional ballet dancers consumed less than 85 % of the recommended amount of daily calories. Most likely, however, the dancers were expending enough energy to require even more calories than the normal recommended amount. Moreover, studies done by Calabrese et. al. (1983) and Cohen et. al. (1983) found their samples of dancers to be consuming only 1358 and 1600 daily calories respectively.

Another study on dancers found that ballet dancers had lower body weights and less fat than the comparison group of high school students (Abraham, 1996a). The dancers were also found to be more preoccupied with thoughts about their weight and felt they had a hard time maintaining their desired weight. Also, the dancers reported abusing laxatives and engaged in more disordered eating habits. In a related study Abraham (1996a) found that dancers were at high risks for developing eating disorders.

In addition to problems with eating, one study by Pierce, Daleng and McGowen (1993) examined dancer's engagement in healthy exercise activities. Participants in this study completed the Negative Addiction Scale, which was designed to assess exercise dependence by determining motivational, emotional and behavioral aspects of running behavior. The results of the study found that the dancers in the sample scored significantly higher on the scale than endurance and non-endurance athletes.

Given that research has found high rates of disordered eating among dancers, it is reasonable to assume that, as a group, dancers are a good sample for a test of the model of objectification theory. There has been an effort on the part of at least two researchers to incorporate a test of objectification theory specifically with dancers. Tiggeman and Slater (2001) performed a study using a sample of fifty former ballet dancers and fifty-one non-dancers which was designed to test Fredrickson and Robert's (1997) theory of objectification. The study compared the group of dancers with a group of undergraduate psychology

students on self-objectification and disordered eating, one of the negative consequences proposed by Fredrickson and Roberts (1997).

Tiggeman and Slater's (2001) study found that their sample of former dancers scored significantly higher on the measures of self-objectification, self-surveillance, and disordered eating than their non-dancer sample. However, no differences were found between the two groups on the measures of appearance anxiety, body shame, flow, or awareness of internal body states. Additionally, although body shame was found to mediate the relationship between self-objectification and disordered eating, none of the other variables predicted to be mediators were significant. The study concluded that although support for the objectification model was found, the variables for flow and awareness of internal body states did not mediate the relationship between self-objectification and disordered eating. The authors concluded that perhaps these two variables mediate the relationship between self-objectification and its other proposed consequences: sexual dysfunction and depression, rather than disordered eating.

Based on the findings of the Tiggeman and Slater (2001) study, a second study was designed to test objectification theory using dancers this time using adolescent ballet dancers (Slater & Tiggeman, 2002). The samples for this study consisted of 38 young women who studied classical ballet and 45 who did not. All participants in the study were aged 12 to 16. Unlike the prior study done by Tiggeman and Slater (2001), Slater and Tiggeman (2002) removed the variables measuring flow and awareness of internal body states from the model. The

young women were assessed only on self-objectification, self-surveillance, body shame, appearance anxiety, and disordered eating. The results of the study indicated that although the overall model of objectification was supported, no significant differences were found between the means of two groups on any of the measures. The study concluded that it is likely that many adolescent young women experience high levels of self-objectification and, hence, its consequences.

Although these studies suggest objectification theory may hold some validity, both the Tiggeman and Slater (2001), and Slater and Tiggeman (2002) studies had some limitations in terms of their sample. First, the sample sizes in dancer and non-dancer groups were relatively small, allowing for limited statistical power. Second, the dancers in the samples of both studies were all identified as studying classical ballet. Ballet, particularly classical ballet, requires stringent adherence to a certain body type and weight. Ballet dancers are typically required to maintain low levels of body weight. Case in point, the Russian ballerina, Anastasia Volochkova, was fired from the Bolshoi Ballet for reportedly being too tall and too heavy. An article posted on CBSNews.com cited her height as 5'6", and weight around 110 (2003).

Clearly, ballet dancers are required to maintain body weights well below the average female. However, many other forms of dance do not require such extreme ideals. For example, modern, hip-hop, and many forms of cultural dancing require their dancers only to maintain healthy weights. This trend can be observed in watching performances of non-ballet professional dance companies.

For example, when Montreal Danse Company, a well-recognized modern ensemble, performed at the Pacific Northwest American College Dance Festival in 2003, one of their principal female dancers performed in the show while being obviously in the last trimester of pregnancy.

A third problem with the Tiggeman and Slater (2001) study was that the dancers in the sample were all former dancers, who in some cases had not danced in some time. The Slater and Tiggeman (2002) study partially remedied this problem by including active dancers. However, the participants in this study were all adolescents, which as mentioned previously, are a group at greater risk than older women. This could potentially have an effect of the outcome on the study for both the sample and control groups.

The present study attempts to recreate the Tiggeman and Slater (2001) study with some differences in the samples. For example, to address the issue of the limited variation of dancers in the sample, the sample of dancers for the present study come from a wider range of dance backgrounds including modern, jazz, hip-hop, and ballet. Additionally, the sample sizes are much larger than the original Tiggeman and Slater (2001), and Slater and Tiggeman (2002) studies. Dancers in the current study are also all currently dancing and over the age of eighteen. Therefore, the purpose of the study is to see if the model of objectification theory holds with dancers other than ballerinas, dancers who are no longer adolescents, and with a larger sample size. Methods for this study follow the Tiggeman and Slater (2001) study unless otherwise noted.

CHAPTER THREE: METHODOLOGY

Data

The sample for this research was a convenience sample of female dancers over the age of 18, taken from a variety of sources. The original research proposal outlined a plan for data collection that included only dancers attending the Florida Dance Festival in Miami June 20 to July 3rd 2004. Unfortunately, enrollment for the festival was down significantly and sufficient numbers of surveys were not able to be collected. In order to obtain an adequate number of surveys data collection was expanded to include several other groups of willing dancers. The final sample includes 31 dancers from the Florida Dance Festival, 18 dancers from the Orlando Magic Dancers auditions, 12 dancers from the UCF Starlet Knights, 14 dancers from the UCF KnightMoves, 41 dancers from Western Illinois University Dance Theatre, 3 dancers from RPM Dance (a non-profit dance studio), and 36 participants taken from the non-dancer sample who met the criteria for being labeled a dancer. In order for a non-dancer participant to be reclassified as a dancer they had to have been dancing long enough to have been a dancer during their adolescent years and have danced regularly not more than two years prior. The reasoning behind the above criteria was to avoid the possible sampling bias of former dancers, and adolescent dancers in the Tiggeman and Slater (2001) and Slater and Tiggeman (2002) studies. To show appreciation of their time, dancers were given a pen with

dance quote by Isadora Duncan upon filling out the survey. A total of 155 respondents were included in the sample of dancers.

The sample of non-dancers was taken from female undergraduate students over the age of 18 at the University of Central Florida during the 2004-2005 academic year. Students were chosen as an appropriate comparison sample because most of the dancer sample was recruited from university students. Participants in the non-dancer sample were enrolled in classes in various departments within the College of Arts and Sciences and the College of Education. A total of 199 surveys were included in the sample of non-dancers.

Measures

Participants were given a survey to collect background information and to measure self-objectification and its proposed outcomes.

Independent Variables

Background Information

The first section of the survey instrument collected background information from respondents including their age, height, weight, gender, race, and locality of residence. Participants identified as dancers were also asked how long they had

been dancing, at what age they first started dancing, and average time per week spent dancing.

At the time of data entry Body Mass Index (BMI) was calculated based on respondent's height and weight. Body Mass Index is a measure that is correlated with body fat. Dividing a person's weight in pounds by height in inches squared and multiplying by 703 calculate a person's BMI. A BMI of less than 18.5 is considered underweight, 18.5-24.9 is considered normal, 25 to 29.9 is considered overweight, and 30.0 and above is considered obese.

Self-Objectification

The self-objectification section of the survey utilized Noll and Fredrickson's (1998) Self-Objectification Questionnaire. The purpose of this questionnaire was to measure self-objectification by determining the extent to which respondents view their bodies as objects. Participants were asked to rank twelve physical attributes in order of importance, six of the attributes reflected physical appearance, while the other six reflected physical competence. The attributes included were physical attractiveness, coloring, weight, sex appeal, measurements, muscle tone, muscular strength, physical coordination, stamina, health, physical fitness, and physical energy level. The numerical expression for respondent's level of self-objectification was calculated by subtracting the sum of the rankings of competence attributes from the sum of the rankings of the appearance attributes. Scores on this measure had the possibility to range from

–36 to 36, with higher positive scores indicating more importance placed on appearance and thus, greater levels of self-objectification. On this measure dancers scored a mean of –8.42 with a standard deviation of 17.80, while non-dancers scored a mean of –7.61 with a standard deviation of 16.40.

Self-Surveillance

Self-surveillance was measured using the Body-Surveillance Scale, a subscale of the Objectified Body Consciousness Scale. This scale developed by McKinley and Hyde (1996) posits that in order for women to avoid being negatively labeled by society they must adhere to specific cultural norms concerning the body and appearance. In order for women to ensure they are meeting societal standards, they often result to constantly monitor their bodies. Participants were asked to evaluate eight statements on a continuum ranging from strongly agree to strongly disagree. Examples of statements that appeared in this section are, “during the day I think about how I look many times”, and “I rarely compare how I look with how other people look.” Each response was assigned a value from one to six, and scores could potentially fall between eight and forty-eight, with higher scores indicating respondents who frequently monitored their bodies and physical appearance. On this measure dancers scored a mean of 26.25 with a standard deviation of 5.72, while non-dancers scored mean of 24.21 with a standard deviation of 5.02. Reliability for this scale was high with a Cronbach’s alpha of .804.

The dimensionality of the eight items from the self-surveillance measure were analyzed using maximum likelihood factor analysis. Based on the scree plot for the measure, it was decided to rotate two factors using a Varimax rotation procedure. Three items loaded on factor one, while five loaded on factor two. The rotated solution yielded two interpretable factors, how often respondents thought about their appearance, and if it was more important to look good or feel good. It was determined that these two factors represented two related dimensions of self-surveillance, and consequently, were kept together in one scale.

Mediating Variables

This study, based on the model of objectification theory proposes that the extent to which a person self-objectifies their body is related to their level of body shame, appearance anxiety, flow and awareness of internal body states. Four different scales measured these concepts.

Body Shame

Body shame is measured by another subscale of the Objectified Body Consciousness Scale, known as the Body Shame Scale (McKinley and Hyde 1996). The Body Shame Scale consists of eight statements to which participants responded with varying degrees of agreement or disagreement scored from one to six. Scores could range between eight and forty-eight, with higher scores

indicating higher amounts of body shame. On this measure dancers scored a mean of 22.49 with a standard deviation of 7.64, while non-dancers scored a mean of 19.68 with a standard deviation of 6.96. Reliability for this scale was high with a Cronbach's Alpha of .853.

The dimensionality of the eight items from the body shame measure was analyzed using maximum likelihood factor analysis. Based on the scree plot for the measure, it was decided to rotate two factors using a Varimax rotation procedure. Two items loaded on factor one, while six loaded on factor two. The rotated solution yielded two interpretable factors, looking bad means you are a bad person and physical self-perception and others perception of self. Both of these factors fit into the overall measure of body shame and were kept in a summative scale.

Appearance Anxiety

The Appearance Anxiety Scale (Dion, Dion and Keelan 1990) was used to measure appearance anxiety. Fourteen items out of the thirty that comprise the total scale such as, "I worry about how others are evaluating the way I look" appeared in the survey. The fourteen items were chosen from the full scale based on how well they were thought to apply to dancers. Additionally, in the effort to reduce redundancy similar questions were not included in the survey. Participants were asked to rate each item on a scale from zero to four on how often the statements applied to them. Higher scores indicate higher levels of

appearance anxiety and could range from zero to fifty-six. On this measure dancers scored a mean of 29.33 with a standard deviation of 10.36, while non-dancers scored a mean of 27.11 with a standard deviation of 9.74. Reliability for this scale was high with a CronBach's Alpha of .875.

The dimensionality of the fourteen items from the body shame measure was analyzed using maximum likelihood factor analysis. Based on the scree plot for the measure, it was decided to rotate two factors using a Varimax rotation procedure. Eight items loaded on factor one, while six loaded on factor two. The rotated solution yielded two interpretable factors: positive and negative feelings. One item that should have loaded into the positive factor dimension ended up in the negative factor dimension. Upon analysis of the scale it was found that this item was, "Negative remarks about my appearance do not bother me." Many participants were confused by this statement and did not know how to respond. This confusion likely resulted in the statement ending up in the wrong dimension. However, the decision was made to keep the item in the scale because it could not be interpreted with complete certainty why it loaded in the wrong dimension.

Flow

Consistent with Csikszentmihalyi's (1990) definition, in the current study, Tiggemen and Slater's (2001) scale was used to measure Csikszentmihalyi's (1990) characteristics of peak motivational states. The scale consisted of four items such as: "I become so involved that I lose track of time" which participants

responded to on a six-point scale where zero represented “never” and six “always.” Scores could range from zero to twenty, with higher scores indicating greater levels of peak motivational states. On this measure dancers scored a mean of 9.65 with a standard deviation of 3.94, while non-dancers scored a mean of 8.36 with a standard deviation of 3.26. Reliability for this scale was good with a Cronbach’s alpha of .786. Factor analysis could not be performed on this measure because it contained too few items.

Awareness of Internal Body States

Miller, Murphy, and Buss (1981) developed the Private Body Conscious Scale to measure respondent’s awareness of internal body states. This scale was given to participants in the survey, and consisted of five items such as, “I can often feel my heart beating” to which participants respond on a five-point scale (0 “extremely uncharacteristic”, 4 “extremely characteristic”). Scores could range from zero to twenty, with higher scores indicating greater levels of awareness of internal body states. On this measure dancers scored a mean of 11.62 with a standard deviation of 4.08, while non-dancers scored a mean of 10.64 with a standard deviation of 4.05. Reliability for this scale was high with a Cronbach’s alpha of .759. Factor analysis of this measure could not be performed due to the small number of items in the scale.

Dependent Variable

Levels of self-objectification, self-surveillance and exposure to dance culture are predicted to affect the extent to which an individual experiences body shame, appearance anxiety, flow, awareness of internal body states, and thus symptoms of disordered eating.

Disordered Eating

The last scale of the survey consisted of the short form of the Eating Attitudes Test (EAT-26) developed by Garner and Garfinkel (1979). The EAT-26 contains twenty-six statements to which participants responded on a six-point scale from “always” to “never”. Higher Scores indicated less healthy attitudes toward food and eating. Responses were scored consistent with the Tiggeman and Slater (2001) study with a response of “always” receiving five points, “usually” receiving four, “often” receiving three, “sometimes” receiving two, “rarely” receiving one, and “never” receiving zero. Typically the EAT-26 is scored as “always” receiving three points, “usually” receiving two, “often” receiving one, and “sometimes”, “rarely” and “never” all receiving zero points. This alternate scoring is being used to prevent skewed distributions of scores on the EAT-26. Score could range between zero and 130, with higher scores indicating less healthy attitudes about eating. On this measure dancers scored a mean of 43.76 with a standard deviation of 22.59, while non-dancers scored a mean of 34.52

with a standard deviation of 16.26. Reliability for this scale was high with a Cronbach's alpha of .926.

The dimensionality of the twenty items from the body shame measure was analyzed using maximum likelihood factor analysis. Based on the scree plot for the measure, it was decided to rotate two factors using a Varimax rotation procedure. The rotated solution yielded two interpretable factors, dieting behavior and thoughts about eating. Only one item loaded on both factors.

CHAPTER FOUR: FINDINGS

Sample Characteristics

The sample of dancers consisted of 155 women who studied different forms of dance. Modern dancers were the largest group in the sample comprising 40% of the total, followed by jazz dancers (32%), ballet dancers (14%), hip-hop dancers (12%), and other type of dance (2%). Overall, participants in the sample had been dancing for a mean of 14.56 years, began at the mean age of 5.5, and currently spend about ten hours per week dancing.

The dancer sample was predominately white (84%). Ten percent of the sample identified as Hispanic, while the remaining six percent of participants identified as African American, Asian, or “other”. The mean age of the dancers in the sample was 21.57 years. The dancers stood at an average of 64.82 inches in height, and weighed 127.77 pounds. Based on their height and weight average BMI was found to be 21.38, which is within the normal range.

The non-dancer sample was a racially and ethnically more diverse sample. Unlike the dancer sample, only 65% were white, while 15% identified as African American, and 14% Hispanic, 5% identified as “other”, and only 2% were Asian. The mean age of the non-dancers in the sample was 22.40 years. The non-dancers stood at an average of 64.90 inches in height and weighed an average of 140 pounds. Based on their height and weight, average BMI was found to be 23.36, which is within the normal range.

In order to determine if the two samples differed from each other independent sample t-tests comparing the mean scores of age, height, weight and BMI for the dancer and non-dancer group were calculated. Only weight ($t(329)=4.49$, $p < .001$) and Body Mass Index ($t(320)=4.85$, $p < .001$) were found to be significantly different for the two groups. The significant difference in BMI is attributed to the difference in weight, since there was no difference in height between the two samples.

Table1: Means for Sample Characteristics and Background Information

	Dancers (n=155)	Non-dancers (n=199)
Age in years	21.57	22.41
Height in inches	64.82	64.82
Weight in pounds	127.77	140.00*
Body Mass Index (BMI)	21.38	23.26*
Age first began dancing	5.52	-----
Number of years danced	14.56	-----
Hours danced per week	10.36	-----

* $p < .001$

Comparison of Groups on Measures

Independent samples t-tests were calculated for the dancer and non-dancer groups for both of the self-objectification measures. Based on the t-test no significant differences were found between the dancer and non-dancer groups for the self-objectification measure ($t(324)=.425$ $p=.671$). Interestingly, both groups scored on the healthy side of the variable, placing more importance on physical competence than attractiveness.

Significant differences were found between the two groups on the self-surveillance measure ($t(308)=-3.50$, $p < .01$). The mean of the dancer group was significantly higher (Mean 26.25) than the mean of the non-dancer group (Mean 24.21). Dancers had higher levels of self-surveillance than non-dancers.

Independent samples t-tests were also calculated for the measures of the consequences of self-objectification. Significant differences were found between the means of the two groups on the body shame measure ($t(336)=-3.52$, $p < .001$); the mean for the dancer group was 22.49 and 19.68 for the non-dancer group. Dancers had higher levels of body shame than non-dancers. Significant differences were also found on the measure of appearance anxiety ($t(348)=-2.06$, $p < .05$), with dancers scoring a mean of 29.33 and non-dancers scoring 27.11. Dancers were found to have greater amounts of appearance anxiety than non-dancers. Significant differences were also found on the measure for awareness of internal body states between the dancer group (Mean 11.62) and non-dancer group (Mean 10.64) ($t(347)=-2.22$, $p < .05$). It was found that dancers had more

awareness of internal body states than non-dancers. Significant differences were found for the measure of flow ($t(296)=-3.30, p < .01$) with dancers scoring a mean of 9.65, and non-dancers 8.36. Dancers were found to have greater ability of achieve flow than non-dancers.

Lastly, independent samples t-tests were calculated for the proposed outcome in the model disordered eating. The t-test revealed significant differences between the two groups ($t(254)=-4.23, p < .001$). Dancers scored a mean of 43.76 on the disordered eating measure, while non-dancers scored only 34.52. Dancers found to have more symptoms of disordered eating than non-dancers.

As predicted, dancers had higher levels of self-surveillance, body shame, appearance anxiety, and disordered eating. Contrary to the objectification theory literature, dancers also scored higher on the measures of flow and awareness of internal body states, meaning they were more aware of their internal body processes, and able to achieve flow more often than their non-dancer counter parts. No differences were found between the two groups on the objectification measure; dancers were proposed to score higher than non-dancers.

Table 2: Means of Self-Objectification and Proposed consequences (standard deviations in parentheses)

	Dancers (n=155)	Non-dancers (n=199)
Self-Objectification	-8.42 (17.8)	-7.61 (16.40)
Self-Surveillance	26.25 (5.72)	24.21 (5.02)**
Body Shame	22.49 (7.64)	19.68 (6.96)***
Appearance Anxiety	29.33 (10.36)	27.11 (9.74)*
Flow	9.65 (3.94)	8.36 (3.26)**
Body Awareness	11.62 (4.08)	10.64 (4.05)*
Disordered Eating	43.76 (2.59)	34.52 (16.26)***

* $p < .05$, ** $p < .01$, *** $p < .001$

Due to the racial diversity of the dancer and non-dancer samples, means test was also performed on both samples to compare the scores of all racial and ethnic categories on each of the measures. No significant differences were found among any of the racial categories in either sample on self-objectification, self-surveillance, body shame, appearance anxiety, body awareness, flow, or disordered eating. Therefore, it was reasoned that the racial/ethnic variable was not needed as a control in the test of the model.

The dancer sample in this study was dramatically more diverse in the type of dance practiced by participants than the samples from the Tiggeman and Slater (2001) and Slater and Tiggeman (2002) studies, which included only ballet

dancers. In order to check for differences in ballet and non-ballet dancers, the variable for type of dance participants practiced was recoded into two groups: ballet and non-ballet. Independent samples t-tests were then calculated for these two groups on all measure in the model. No significant differences were found on any of the measures. However, it should be noted that there were only 21 dancers in the ballet category compared to 130 in the non-ballet category.

Relationships between Variables

A Pearson correlation coefficient was calculated for the relationship between the self-objectification and self-surveillance measures, proposed consequences of self-objectification and disordered eating. A moderate positive correlation was found between self-objectification and self-surveillance for both the dancer group ($r=.496$, $p < .001$) and the non-dancer group ($r=.594$, $p < .001$). Body shame was significantly correlated with self-objectification ($r=.434$, $p < .001$), self-surveillance ($r=.597$, $p < .001$), and disordered eating ($r=.735$, $p < .001$) in the dancer group. Body shame was also significantly correlated with self-objectification ($r=.440$, $p < .001$), self-surveillance ($r=.515$, $p < .001$), and disordered eating ($r=.589$, $p < .001$) in the non-dancer sample. In the dancer group, appearance anxiety was correlated with self-objectification ($r=.506$, $p < .001$), self-surveillance ($r=.679$, $p < .001$), and disordered eating ($r=.742$, $p < .001$). In the non-dancer group appearance anxiety was also correlated with self-objectification ($r=.482$, $p < .001$), self-surveillance ($r=.667$, $p < .001$), and

disordered eating ($r=.669$, $p < .001$). In the non-dancer group, awareness of internal body states was correlated only with self-objectification ($r=.158$, $p < .05$). In the dancer group awareness of internal body states was not correlated with self-objectification, self-surveillance, or disordered eating. Flow was not significantly correlated with self-objectification or self-surveillance in either group. However, flow was correlated with disordered eating in the dancer group ($r=.275$, $p < .01$). In the dancer group disordered eating was significantly correlated with self-objectification ($r=.405$, $p < .001$) and self-surveillance ($r=.579$, $p < .001$). In the non-dancer group disordered eating was significantly correlated with self-objectification ($r=.365$, $p < .001$) and self-surveillance ($r=.553$, $p < .001$). Table 3 presents all of the correlation coefficients and their significance level.

Table 3: Correlations Between Self-Objectification, Proposed Consequences, and Disordered Eating for Dancers (a) and Non-Dancers (b)

(a) **Dancers (N=155)**

	<i>Self-Object.</i>	<i>Surveillance</i>	<i>Disordered Eating</i>
Body Shame	.434***	.597***	.735***
App. Anxiety	.506***	.679***	.742**
Flow	-.125	.053	.275**
Body Awareness	-.058	.020	.138
Dis. Eating	.405***	.579***	-----

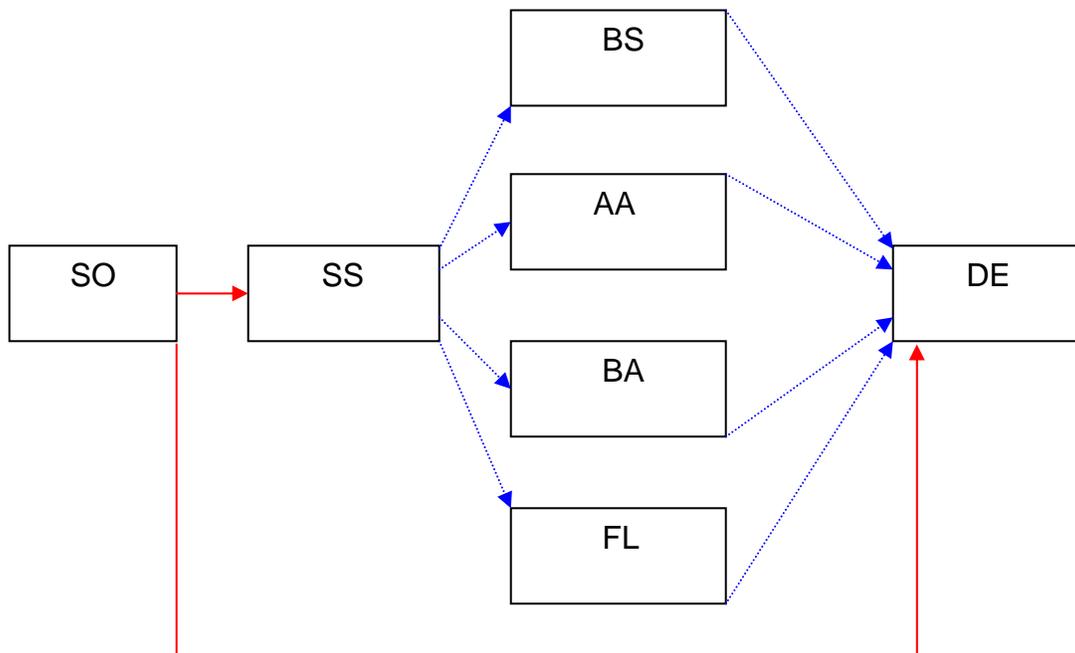
(b) **Non- Dancers (N=199)**

	<i>Self-Object.</i>	<i>Surveillance</i>	<i>Disordered Eating</i>
Body Shame	.440***	.515***	.589***
App. Anxiety	.482***	.667***	.669***
Flow	-.010	-.042	.038
Body Awareness	.158*	.125	.076
Dis. Eating	.365***	.553***	-----

*p < .05, **p < .01, ***p < .001

Tests of the Model

The causal model constructed by Tiggeman and Slater (2001) is utilized in this research to test the proposed model of objectification theory. The path diagram with all proposed direct and indirect relationships between variables in the model is shown in figure 1.



Direct 

Indirect 

Note: SO = self-objectification, SS = self-surveillance, BS = body shame, AA = appearance anxiety, BA = awareness of internal body states, FL = flow, DE = disordered eating.

Figure 1: Proposed Causal Model

Self-Objectification was proposed to lead to increased self-surveillance which, in turn, was proposed to lead to increased levels of body shame and appearance anxiety and decreased levels of awareness of internal body states and flow; the final proposed outcome was disordered eating.

A multiple linear regression with each variable, or set of variables entered in steps, was calculated predicting disordered eating based on levels of self-objectification, self-surveillance, body shame, appearance anxiety, awareness of internal body states, and flow. A significant regression equation was found for the dancer sample ($F(6,134)=41.70$, $p < .001$), with an R^2 of .651. Dancers' predicted disordered eating level was equal to $-26.642 + .022$ (self-objectification) $+ .123$ (self-surveillance) $+ .326$ (body shame) $+ .369$ (appearance anxiety) $+ .153$ (flow) $+ .068$ (body awareness). Self-surveillance, body shame, appearance anxiety, and flow were significant predictors of disordered eating. A significant regression equation was also found for the non-dancer sample ($F(158)=25.04$, $p < .001$), with an R^2 of .487. Non-dancers predicted disordered eating was equal to $-9.483 - .047$ (self-objectification) $+ .200$ (self-surveillance) $+ .290$ (body shame) $+ .330$ (appearance anxiety) $+ .010$ (flow) $- .010$ (body awareness). Self-surveillance, body shame, and appearance anxiety were significant predictors of disordered eating. Both regressions were checked for problems associated with multi-collinearity; no problems were identified.

To test each of the indirect paths in the model, bivariate linear regression was calculated for each variable in the model on each preceding variable in the model for both the dancer and non-dancer groups independently. So, disordered

eating was regressed separately on body awareness, flow, appearance anxiety, body shame, self-surveillance, and self-objectification. Body awareness, flow, appearance anxiety, and body shame were each regressed separately on self-objectification and self-surveillance. Self-surveillance was regressed on self-objectification. The structure of the model is visually represented in figure 1.

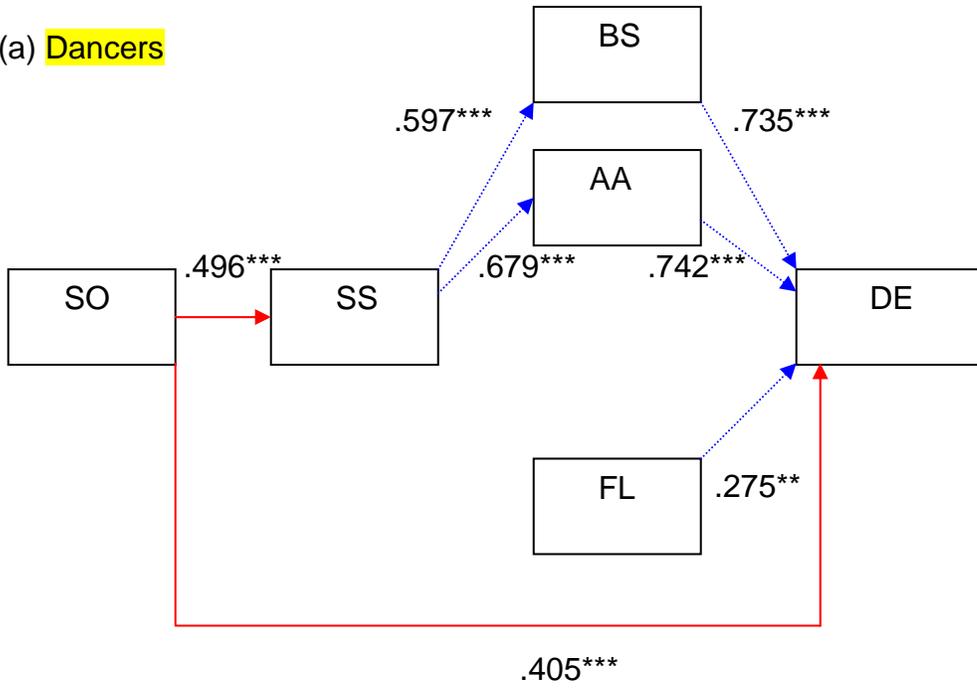
For the sample of dancers, no significant regression equations were found for flow on self-objectification ($F(1,152)=2.40, p > .05$), body awareness on self-objectification ($F(1,151)=.506, p > .05$), flow on self-surveillance ($F(1,153)=.492, p > .05$), body awareness on self-surveillance ($F(1,152)=.061, p > .05$), or disordered eating on body awareness ($F(1,145)=2.82, p > .05$). For the non-dancer sample no significant regression equations were found for flow on self-objectification ($F(1,170)=.018, p > .05$), flow on self-surveillance ($F(1,194)=.345, p > .05$), body awareness on self-surveillance ($F(1,192)=3.1, p > .05$), flow on disordered eating ($F(1,195)=.283, p > .05$), or body awareness on disordered eating ($F(1,193)=1.13, p > .05$). All other bivariate regressions were found to have significant equations; all standardized coefficients are shown in Table 4. Significant direct and indirect pathways are plotted in Figure 2 for dancers (a) and non-dancers (b).

Table 4: Standardized Coefficients for Pathways in Causal Model

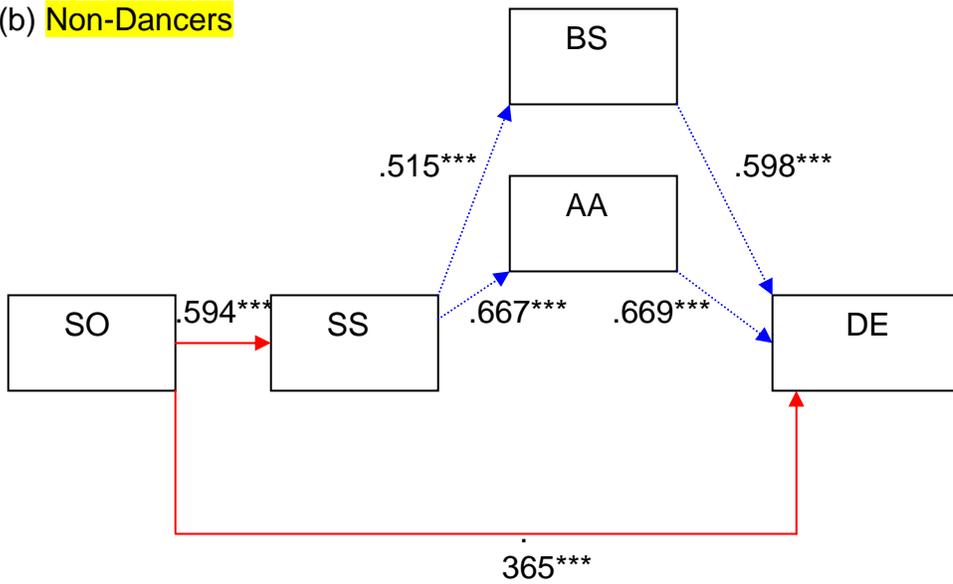
	Dancers (n=155)	Non-Dancers (n=199)
Self-Object.-Self-Surveillance	.496***	.594***
Self-Object.-Body Shame	.434***	.440***
Self-Object.-App. Anxiety	.506***	.482***
Self-Object.-Flow	-.125	-.010
Self-Object.-Body Awareness	-.058	.158*
Self-Object.-Dis. Eating	.405***	.365***
Self-Surveillance.-Body Shame	.597***	.515***
Self-Surveillance-App. Anxiety	.679***	.667***
Self-Surveillance-Flow	.053	-.042
Self-Surveillance-Body Awareness	.020	.125
Self-Surveillance- Dis. Eating	.579***	.553***
Body Shame-Dis. Eating	.735***	.598***
Appearance Ans.-Dis. Eating	.742***	.669***
Flow-Dis. Eating	.275**	.038
Body Awareness-Dis. Eating	.138	.076

*p < .05, **p < .01, ***p < .001

(a) **Dancers**



(b) **Non-Dancers**



Direct \longrightarrow
Indirect $\cdots\cdots\cdots\longrightarrow$

Figure 2: Path diagram of Model for Dancers (a) and Non-Dancers (b)

To evaluate whether the variables body shame, appearance anxiety, flow, and awareness of internal body states mediated the relationship between self-objectification and disordered eating the indirect paths were compared with the direct path. The resulting path coefficients were multiplied together to calculate the compound path, to compare against the coefficient from direct relationship of self-objectification to disordered eating. For example, the standardized coefficients of the paths from self-objectification to self-surveillance, self-surveillance to body shame, and body shame to disordered eating were multiplied together. This procedure was repeated three times substituting appearance anxiety, flow, and awareness of internal body states in the place of body shame.

The results of the four calculations were then compared to the coefficient for the direct path from self-objectification to disordered eating (.405 for dancers, .365 for non-dancers). For the dancer group the compound coefficient from the indirect path through body shame was .218, the path through appearance anxiety .250, .001 through body awareness and .007 through flow. In the non-dancer group the indirect path through body shame was .183, the path through appearance anxiety .265, .06 through body awareness, and .0009 through flow. Had any of the resulting numbers been larger than the coefficient between self-objectification and disordered eating, the variable being tested would have been labeled a mediator of the self-objectification/disordered eating relationship.

CHAPTER FIVE: CONCLUSION

Unlike the Tiggeman and Slater (2001) study, the present study found no significant differences on the self-objectification measure between dancers and non-dancers. However, both studies found significant differences in the amount of self-surveillance between dancers and non-dancers. The present study found significant differences between dancers and non-dancers on the measures of body shame, appearance anxiety, flow, and awareness of internal body states, while Tiggeman and Slater (2001) did not. Both studies found significant differences between the two groups on the disordered eating measure.

The overall fit of the model based on the regression analysis was very similar for both studies. Tiggeman and Slater (2001) reported an R^2 of .608 for the dancer group and .428 for the non-dancer group. The present study found an R^2 of .651 for the dancer group and .487 for the non-dancer group. The findings of both studies imply that the overall model of objectification theory is a better fit for dancers than non-dancers.

In terms of the bivariate regressions, the present study found several more significant equations for both the dancer sample and the non-dancer sample, than did Tiggeman and Slater (2001). Consistent with the findings from Tiggeman and Slater (2001), self surveillance on self-objectification, body shame on self-surveillance, appearance anxiety on self-surveillance, and disordered eating on body shame were found to have significant regression equations in

both groups. Additionally, no significant regression equations were found for flow on self-objectification, body awareness on self-surveillance, or disordered eating on body awareness for either group, also consistent with Tiggeman and Slater (2001). Unlike the Tiggeman and Slater (2001) study, however, the present study also found significant regression equations for both groups on body shame on self-objectification, appearance anxiety on self-objectification, disordered eating on self-objectification, disordered eating on appearance anxiety. The present study also found a significant regression equation for body awareness on self-objectification for the non-dancers, and disordered eating on flow for the dancers, whereas Tiggeman and Slater (2001) did not. The only significant regression equation that Tiggeman and Slater (2001) found that the present study did not was flow on self-surveillance for the dancer group.

Perhaps the most striking difference between the regression equations of the present study and Tiggeman and Slater (2001) is that a significant regression equation predicting disordered eating based on self-objectification found in the present study. The present study found a standardized coefficient of .506 for the dancer group and .482 for the non-dancer group on the regression of disordered eating on self-objectification; both were significant at the .001 level. Tiggeman and Slater (2001) reported standardized coefficients of only .06 and .02 respectively, and neither were significant.

The present study and Tiggeman and Slater (2001) also had a marked difference in terms of the pathway analysis of the model. Tiggeman and Slater (2001) found body shame to mediate the relationship between self-objectification

and disordered eating. The present study found none of the predicted variables mediated the relationship between self-objectification and disordered eating.

One interesting finding in the present study was that although flow and awareness of internal body states were found to be significantly different between the two groups, the differences were in the opposite direction as expected. Dancers showed higher levels of ability to achieve flow and more awareness of internal body states than non-dancers. In retrospect, this is not surprising, given that a good dancer would not allow anything to interrupt them in the rehearsal process, and dance inherently places an emphasis on processes within the body.

Limitations

One major limitation of this piece of research lies in objectification theory itself. It is assumed by the theory that all women in Western society are subject to sexual objectification at the hands of their male counterparts. Therefore, no empirical measure was included in the model to see if sexual objectification did in fact lead to objectification of the self.

A second weakness of objectification theory is the underlying assumption that all women exposed to sexual objectification will fall into a pattern of self-objectification, and thus the proposed negative consequences. The theory does not take into account the possibility of women who have the strength and confidence to judge themselves based on their ability and contribution to life,

rather than solely on outward appearance. In order for objectification theory to be accurate substantially larger numbers of women would have disordered eating habits.

The present study also had several limitations in terms of the sample and the methods employed. First, the sample of dancers was not as large as planned in the original proposal of this project. Large groups of dancers were much more difficult to find in the central Florida area than anticipated. Complicating the data collection process, four separate hurricanes terrorized that state in the middle of data collection for this study. Understandably, in the wake of disaster, people's priorities change from filling out surveys for a master's thesis to more important concerns.

A second limitation of the study is that when the dancer group was broken into ballet and non-ballet, the ballet sample was tiny compared to the non-ballet sample. Although no significant differences were found between the ballet and non-ballet group on any of the measures, the findings may have resulted from the small sample of ballet dancers. A larger sample of ballet dancers is desirable to really compare difference of ballet and non-ballet dancers on the measure.

A third limitation of the study involves the measure of self-objectification itself. In this measure, participants were asked to rank twelve attributes, six appearances related and six physical competences related. It was reasoned that placing more emphasis on one's looks than on what one's body can do, would reflect the extent to which participants self-objectified. However, this reasoning may make little sense for dancers. A dancer who is a useful object to their

choreographer and a visually pleasing object to their audience must have the stamina, physical fitness, and physical energy level etc. to make it to the end of the performance with grace and style. A dancer's body must look good in motion, not just while standing still. In this way a dancer's self-objectifying may be likened to a sort of mechanical object rather than a motionless object. If this is the case an alternate measure of self-objectification needs to be found.

A fourth limitation is the possible misinterpretation of participants on the measure of flow. During the course of survey administration, it was observed that many participants seemed to view the ability to achieve flow (i.e. concentrating so intensely they could not think about anything else) in a negative way. Participants may not have wanted to appear incapable of multi-tasking, a skill highly valued in many organizations in our society. Although this is just a hunch on the part of the researcher, a rewording of the statements in the section on flow may result in a more accurate measurement of the concept.

Nevertheless, even with these limitations, the present study makes important contributions to the overall understanding of self-objectification with a more diverse sample than used in prior work.

Support of the Model

In conclusion, the model of objectification theory was partially supported. Levels of self-objectification did predict levels of disordered eating, and self-objectification did predict self-surveillance. However, as mentioned previously,

none of the mediating variables actually mediated the relationship. The fact that self-surveillance, body shame, appearance anxiety, and in the dancer group flow, were significant predictors of disordered eating implies a restructuring of the model may be in order. Future research should seek to improve the measures of flow and self-objectification, determine in what order these variables influence disordered eating, and continue to test larger and more varied samples, including a sample of male dancers.

APPENDIX A: CONSENT FORM

Dear Participant:

My name is Megan Duesterhaus, I am a graduate student in the Sociology department at the University of Central Florida. As part of my thesis I am surveying dancers, and non-dancer students on several issues involving background information, feelings on food, body image, appearance issues, and how you feel about yourself.

I am asking energetic dancers and/ or students, like you, to complete a brief survey regarding the aforementioned issues. I would appreciate it if you would take a few minutes to answer questions on the enclosed survey. The responses you provide will be combined with all other responses. The survey is anonymous, I am not asking for your name or any other information that could identify you specifically. If you cannot accurately provide an answer, or do not feel confident about a question, please leave that question blank rather than give erroneous information.

If you have any questions about this research, please contact me at (407) 823-0360 or my faculty supervisor, Dr. Jana Jasinski, at (407) 823-6568. Questions or concerns about research participants' rights may be directed to the UCFIRB Office, University of Central Florida Office of Research, Orlando Tech Center, 12443 Research Parkway, Suite 207, Orlando, FL 32826. The phone number is (407) 823-2901.

We realize this survey will take ten or fifteen minutes of your valuable time, but the result should be worth the effort. Thank you!

Sincerely,

Megan L. Duesterhaus

_____ I have read the procedure described above.

_____ I voluntarily agree to participate in the procedure.

_____ I would like to receive a copy of the procedure described above.

_____ I would not like to receive a copy of the procedure described above.

_____/_____
Participant Date

APPENDIX B: SURVEY INSTRUMENT

Thank you for participating in the survey!! Please write in or circle or responses

Section I: Background Information

Are you at least 18? (If not please stop here) YES NO

What is your date of birth? (mm/dd/yyyy)_____

What is your current height? _____lbs

What is your current weight? _____ft

What is your gender? FEMALE MALE

Where do you live _____City _____State

What do you consider to be your main racial or ethnic identification?

- 0 White/Caucasion/Euro-American
- 1 Black/African American
- 2 Asian
- 3 Hispanic/Latina(o)
- 4 Native American
- 5 Other

If you have never taken formal dance classes, please skip the next four questions.

How long have you been dancing? _____years

How old were you when you first began dancing? _____years

About how many hours per week do you spend dancing? _____years

What type of dance do you do most often? _____

Section II: Feelings about Food

Circle on response for each item.

1.) I am terrified about being overweight.

Always Usually Often Sometimes Rarely Never

2.) I avoid eating when I am hungry.

Always Usually Often Sometimes Rarely Never

3.) I find myself preoccupied with food.

Always Usually Often Sometimes Rarely Never

4.) I have gone on eating binges where I feel that I am unable to stop.

Always Usually Often Sometimes Rarely Never

5.) I cut my food into small pieces.

Always Usually Often Sometimes Rarely Never

6.) I am aware of the calorie content of the foods that I eat.

Always Usually Often Sometimes Rarely Never

7.) I particularly avoid foods with high carbohydrate content.

Always Usually Often Sometimes Rarely Never

8.) I feel that others would prefer if I ate more.

Always Usually Often Sometimes Rarely Never

9.) I vomit after I have eaten.

Always Usually Often Sometimes Rarely Never

- 10.) I feel extremely guilty after eating.
- Always Usually Often Sometimes Rarely Never
- 11.) I am preoccupied with the desire to be thinner.
- Always Usually Often Sometimes Rarely Never
- 12.) I think about burning up calories when I exercise.
- Always Usually Often Sometimes Rarely Never
- 13.) Other people think I am too thin.
- Always Usually Often Sometimes Rarely Never
- 14.) I am preoccupied with the thought of having fat on my body.
- Always Usually Often Sometimes Rarely Never
- 15.) I take longer than others to eat my meals.
- Always Usually Often Sometimes Rarely Never
- 16.) I avoid foods with sugar in them.
- Always Usually Often Sometimes Rarely Never
- 17.) I eat diet foods.
- Always Usually Often Sometimes Rarely Never
- 18.) I feel that food controls my life.
- Always Usually Often Sometimes Rarely Never
- 19.) I display self-control around foods.
- Always Usually Often Sometimes Rarely Never
- 20.) I feel that others pressure me to eat.
- Always Usually Often Sometimes Rarely Never
- 21.) I give too much time and thought to food.

- | | Always | Usually | Often | Sometimes | Rarely | Never |
|--|--------|---------|-------|-----------|--------|-------|
| 22.) I feel uncomfortable after eating sweets. | | | | | | |
| 23.) I engage in dieting behavior. | | | | | | |
| 24.) I like my stomach to me empty. | | | | | | |
| 25.) I enjoy trying rich new foods. | | | | | | |
| 26.) I have the impulse to vomit after meals. | | | | | | |

Section III: Internal Thoughts and Feelings

Please circle the response the best describes how you feel when doing a task or activity.

- | | | | | | | |
|--|--|--|--|--|--|--|
| 1.) I feel so involved that nothing else seems to matter. | | | | | | |
| 2.) I concentrate without feeling self-conscious. | | | | | | |
| 3.) I become so involved that I lose track of time. | | | | | | |
| 4.) I concentrate so intensely that I can't think about anything else. | | | | | | |

Section IV: Feelings about Your Body

Please circle the number that corresponds to the response that comes closest to how you feel.

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	NA
----------------	-------	----------------	-------------------	----------	-------------------	----

1.) I rarely think about how I look.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

2.) I think it is more important that my clothes are comfortable than whether they look good on me.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3.) I think more about how my body feels than how my body looks.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

4.) I rarely compare how I look with how other people look.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

5.) During the day I think about how I look many times.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

6.) I often worry about whether the clothes I am wearing make me look good.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

7.) I rarely worry about how I look to other people.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

8.) I am more concerned with what my body can do than how it looks.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

9.) When I can't control my weight I feel like something must be wrong with me.

1 2 3 4 5 6 7

10.) I feel ashamed of myself when I haven't made the effort to look my best.

1 2 3 4 5 6 7

11.) I feel like I must be a bad person when I don't look as good as I could.

1 2 3 4 5 6 7

12.) I would be ashamed for people to know what I really weigh.

1 2 3 4 5 6 7

13.) I never worry that something is wrong with me when I am not exercising
enough.

1 2 3 4 5 6 7

14.) When I am not exercising enough I question whether or not I am a good
enough person.

1 2 3 4 5 6 7

15.) Even when I can't control my weight I think I am on okay person.

1 2 3 4 5 6 7

16. When I am not the size I think I should be I feel ashamed.

1 2 3 4 5 6 7

Section V: Thoughts about your appearance

Please circle the number that corresponds to the response that comes closest to how you feel.

Almost Always	Usually	Often	Sometimes	Never
1.) I feel nervous about aspects of my appearance.				
4	3	2	1	0
2.) Concern about my appearance has prompted me to diet.				
4	3	2	1	0
3.) I enjoy looking at myself in the mirror.				
4	3	2	1	0
4.) I am self-conscious about the way I look.				
4	3	2	1	0
5.) I am aware of my appearance.				
4	3	2	1	0
6.) Negative remarks about how I look do not bother me.				
4	3	2	1	0
7.) I worry about how often others are evaluating how I look.				
4	3	2	1	0
8.) I feel helpless to change my appearance.				
4	3	2	1	0
9.) I like how I look.				
4	3	2	1	0
10.) I am satisfied with my body weight.				

- | | | | | |
|---|---|---|---|---|
| 4 | 3 | 2 | 1 | 0 |
| 11.) I am unconcerned with how others feel about my appearance. | | | | |
| 4 | 3 | 2 | 1 | 0 |
| 12.) Because my physical appearance is beyond my control, I do not dwell on it. | | | | |
| 4 | 3 | 2 | 1 | 0 |
| 13.) I get nervous when others comment on my physical appearance. | | | | |
| 4 | 3 | 2 | 1 | 0 |
| 14.) I am satisfied with my body's build or shape. | | | | |
| 4 | 3 | 2 | 1 | 0 |

Section VI: Body Awareness

Please choose the response that comes closest to how you feel.

- | | | | | | |
|--|--------|---------|-------|-----------|-------|
| 1.) I am sensitive to internal body tensions. | Always | Usually | Often | Sometimes | Never |
| 2.) I know immediately when my mouth or throat gets dry. | | | | | |
| | Always | Usually | Often | Sometimes | Never |
| 3.) I can often feel my heart beating. | | | | | |
| | Always | Usually | Often | Sometimes | Never |
| 4.) I am quick to sense the hunger contractions in my stomach. | | | | | |
| | Always | Usually | Often | Sometimes | Never |

Section VII: Thought about Your Body

Please put the following characteristics in the order they are most important to you. One being most important, twelve least important.

Physical coordination	Health	Coloring
Muscular strength	Physical fitness	Sex Appeal
Physical attractiveness	Muscle tone	Measurements
Stamina	Physical attractiveness	Weight

- 1.) _____ 7.) _____
2.) _____ 8.) _____
3.) _____ 9.) _____
4.) _____ 10.) _____
5.) _____ 11.) _____
6.) _____ 12.) _____

LIST OF REFERENCES

- Abraham, S. (1996). Characteristics of eating disorders among young ballet Dancers. *Psychopathology*, 29, 223-229.
- Abrahams, S. (1996). Eating and weight controlling behaviors of young ballet dancers. *Psychopathology*, 45, 725-735.
- Bartky, S. L. (1990). *Femininity and domination*. New York, NY: Routledge.
- de Beauvoir, S. (1952). *The second sex*. (H.M. Parshley, Trans.). New York: Knopf.
- Becker, A. S., Grinspoon, S. Kiblinki, A., & Herzog, D. (1999) Current concepts: Eating disorders. *The New England Journal of Medicine*, 340, 1092-98.
- Calabrese, L. H. & Kirkendall, D. T. (1983) Nutritional intake and medical considerations in dancers. *Clinics in Sports Medicine*, 2, 539-548.
- Cohen, J. L., Potosnak, L., Frank, O., & Baker, H. (1985). A nutritional hermatologic assessment of elite ballet dancers. *The Physician and Sports Medicine*, 13, 43-54.
- Csikszentmihalyi, M. (1990) *Flow*. New York: Harper Perennial.
- Dion, K. L., Dion, K.K., & Keelan, J. P. (1990). Appearance anxiety as a dimension of social evaluative anxiety: Exploring the ugly duckling syndrome. *Contemporary Social Psychology*, 14, 220-224.
- Fredrickson, B. L., & Roberts, T. (1997) Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21, 173-206.

- Hamilton, L. H., Brooks-Gunn, J., & Warren, M. P. (1986). Nutritional intake of female dancers: A reflection of eating problems. *International Journal of Eating Disorders*, 5, 925-934.
- Huebner, D. M., & Fredrickson, B. L. (1999). Gender differences in memory perspectives evidence for self-objectification in women. *Sex Roles*, 41, 459-467.
- Lewis, H. B. (1971) *Shame and guilt in neurosis*. New York: International Universities Press.
- Lindsey, L. L. (1997) *Gender roles: a Sociological Perspective*. New Jersey: Prentice Hall.
- Lintott, S. (2003). Sublime hunger: A consideration of eating disorders beyond beauty. *Hypatia*, 18, 65-86.
- McKinley, N. M. (1999) women and objectified body consciousness: Mothers and daughters' body experience in cultural, developmental, and familial context. *Developmental Psychology*, 35, 760-769.
- McKinley, N. M., & Hyde, J. (1996). Objectified body consciousness scale. *Psychology of Women Quarterly*, 20, 181-215.
- Miller, L. C., Murphy, R., & Buss, A. H. (1981). Consciousness of body: Private and public. *Journal of Personality and Social Psychology*, 41, 397-406.
- Murray, T. (2003). Wait not want not: Factors contributing to the development of anorexia nervosa and bulimia nervosa. *The Family Journal: Counseling and Therapy for Couples and Families*, 11, 276-280.

- Nagel, K. L., Jones, K. H. (1992) Sociological factors in the development of eating disorders. *Adolescence*, 27, 107-114.
- Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body, shame, and disordered eating. *Psychology of Women Quarterly*, 22, 623-636.
- Pierce, E. L., & Daleng, M. L. (1998) Distortion of body image among elite female dancers. *Perceptual and Motor Skills*, 87, 776-780.
- Pierce, E. L., Daleng, M. L., & McGowan, R. (1993). Scores on exercise dependence among dancers. *Perceptual and Motor Skills*, 76, 531-535.
- Shur, E. M. (1984) *Labeling Women Deviant: Gender stigma and social control*, New York, NY: McGraw-Hill Publishing Company.
- Slater, A., & Tiggeman, M. (2002). A test of objectification theory in adolescent girls. *Sex Roles*, 46, 343-349.
- Tiggeman, M., & Slater, A. (2001) A test of objectification theory in former dancers and non-dancers. *Psychology of Women Quarterly*, 25, 57-64.
- U. S. Department of Labor. (1990). Milestones: the Women's bureau celebrates 70 years of women's labor history.
- U.S. Department of Labor. (2003). <http://www.dol.gov/wb/stats/main/htm>, accessed 2/24/2005.
- Young, I. M. (1990). *Throwing like a girl and other essays in feminist philosophy and social theory*. Bloomington, IN: Indiana University Press.