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HEALTHY AGING AND SELF-OBJECTIFICATION:  
THE IMPACT OF EMPOWERMENT AND FEMINIST ATTITUDES  
ON BODY IMAGE, EATING BEHAVIOR, AND AGING SATISFACTION

by

KAREN P. GRIPPO

B.A. State University of New York at Geneseo, 1995  
M.A. State University of New York at New Paltz, 2004

A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy in Clinical Psychology  
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in the College of Sciences  
at the University of Central Florida  
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Major Professor: Stacey Tantleff Dunn

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## **ABSTRACT**

The purpose of this study was to contribute to women's healthy aging across the adult lifespan by empirically examining potential protective factors (e.g., empowerment and feminist attitudes) in maintaining positive body image, healthy eating behavior, and aging satisfaction.

Objectification Theory (Fredrickson & Roberts, 1997) provided a theoretical framework for understanding the connections between sexual-objectification experiences, media influences, and self-objectification, and the resulting negative psychological consequences for women in Western society. This study was the first to examine empowerment in relation to Objectification Theory. Additionally, a developmental perspective was gained by using a diverse sample of young, middle-aged, and older women in the investigation of the impact of self-objectification on aging satisfaction. Results indicated that women of all ages were just as likely to report either body image satisfaction or body image dissatisfaction after accounting for BMI. However, younger women were more likely than older women to view their bodies as objects. Structural Equation Modeling (SEM) was performed utilizing Objectification Theory as a framework for predicting body image, eating behaviors, and aging satisfaction. Empowerment and feminist attitudes were not protective factors in promoting healthy eating behavior and positive thoughts related to body image and aging. The final structural model did, however, provide support for Objectification Theory and its proposed relationships between sexual-objectification experiences and the development of self-objectification and the negative consequences of self-objectification on a variety of health-related constructs. Long-term implications include incorporating this knowledge into empirically supported prevention and intervention programs aimed at reducing body image and eating disturbance and promoting healthy aging across the adult lifespan.

## **ACKNOWLEDGMENTS**

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## **CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW**

Normative discontent (Rodin, Silberstein, & Striegel-Moore, 1984) describes how the societal norms and gender stereotypes of Western cultures, specifically in the United States, often result in women being preoccupied with beauty and thinness. These stringent beauty ideals are conveyed to women through innumerable media messages and everyday objectification experiences (Hall, 1984; Swim, Hyers, Cohen, & Ferguson, 2001; Van Zoonan, 1994). Objectification Theory (Fredrickson & Roberts, 1997) explains how women encounter both subtle and overt sexual objectification experiences in their personal lives and through the media. Over time, this may result in the internalization of societal beauty ideals as women begin to self-objectify their own bodies by viewing them as objects. Habitual body monitoring and appearance-related concerns may lead to numerous negative consequences for women and interfere with psychological and physical well-being. Preoccupation with an unrealistic ideal has been associated with body image dissatisfaction for women of all ages, and contributes to other negative psychological consequences for women including low self-esteem (e.g., Fea & Brannon, 2006), depression (e.g., Tiggemann & Kuring, 2004), and eating disorders (e.g., Calogero, Davis, & Thompson, 2005; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tylka & Hill, 2004).

In Western society, all women are faced with the same unrealistic beauty ideal, but there are many factors that increase some women's risk level while protecting other women from adverse psychological ramifications. In an attempt to identify potential protective factors to

alleviate these negative consequences, the present study explored whether or not empowerment and feminist identity assisted women in reducing the possible effects of self-objectification (viewing one's own body as an object). The purpose of this research study was to contribute to women's healthy aging across the adult lifespan by empirically examining potential protective factors (e.g., empowerment and feminism) in maintaining positive body image. This project reviewed the research literature on Objectification Theory in relation to body image and eating disturbance. In addition, the impact of aging and getting further and further from societal ideals of youthful beauty were examined. Previous research on feminist attitudes as a protective factor was reviewed, along with descriptions of feminist intervention programs designed to promote healthy body image and eating behaviors in adolescents. Empowerment, which had not been previously empirically examined in relation to Objectification Theory, was introduced as a component of successful feminist interventions that may be a significant protective factor in promoting and maintaining healthy body image and eating behaviors. Finally, the clinical implications of this research project involving possible protective factors on future intervention programs for women of all ages is discussed.

### Sexual Objectification, Self-Objectification, and Internalization of Societal Ideals of Beauty

Women are faced with sexual objectification experiences through the media and in their daily lives that convey the message that their bodies are sexual objects (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996). This sexual objectification ranges from subtle forms including gazes at the female body, to direct comments on the appearance of the body or body parts, to

more overt acts such as sexual harassment and sexual violence (Bartky, 1990; Fredrickson & Roberts, 1997). Sexual objectification happens when women's bodies, body parts, or sexual functions are either separated from her as a whole person, or made to represent her as a person (Bartky, 1990; Fredrickson & Roberts, 1997). The "objectifying gaze" occurs during interpersonal interactions, in visual media that portray interpersonal situations, and in visual media that spotlight certain parts of the female body creating an implicit sexualizing gaze (Fredrickson & Roberts, 1997). Sexual objectification of the female body can be very harmful to some women as evidenced by empirical research that has demonstrated a connection between exposure to portrayals of the thin ideal in the media and mental and physical health consequences including anxiety, depression, and eating disorders (e.g., Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Stice & Shaw, 1994). Understanding the process by which sexual objectification may ultimately result in negative psychological consequences for some women is an important step toward uncovering possible protective factors to prevent or reduce the severity of the impact of this harmful cycle.

The first part of Objectification Theory is the theoretical link between sexual objectification experiences and self-objectification. Once sexual objectification experiences have repeatedly occurred, self-objectification and habitual body monitoring may become common ways that women experience their bodies in Western society. In 1997, Fredrickson and Roberts proposed Objectification Theory to explain how societal objectification may result in women internalizing an observer's perspective of their own bodies by way of self-objectification. More specifically, self-objectification occurs when a woman views her body as an object to be critiqued and evaluated, and she consequently expends significant time and energy focusing on

her appearance. Self-objectification is similar to the construct of body surveillance proposed by McKinley and Hyde (1996) which also involves having an observer's perspective of the outward appearance of one's body and subsequent habitual monitoring of physical appearance.

Research has empirically supported the link between sexual objectification experiences and self-objectification (e.g., Hill, 2003; Moradi, Dirks, & Matteson, 2005). For example, Hill (2003) found that the number of sexual objectification experiences reported by both heterosexual and lesbian women was predictive of their level of self-objectification. Through gender socialization, young girls learn to place value on their physical appearance and are often rewarded for being attractive with social, occupational, and even educational benefits (see Fredrickson & Roberts, 1997 for review). Attractiveness becomes a form of social and economic currency and provides women with a sense of power (Unger, 1979). In the power structure of Western society, specifically the white male dominant culture, women are socialized to internalize and value societal ideals of beauty both explicitly and implicitly and this may lead to self-objectification (Fredrickson & Roberts, 1997).

Previous research findings also point to the importance of measuring women's internalization of sociocultural ideals when explaining how sexual objectification experiences may lead to self-objectification. More specifically, Heinberg, Thompson, and Stormer (1995) have emphasized the role that awareness and internalization of sociocultural attitudes towards appearance plays in body image and eating disturbance. One research study that examined the role of internalization of cultural ideals of beauty found that internalization was a mediator between sexual objectification experiences and body surveillance, body shame, and disordered eating (Moradi et al., 2005). Low and colleagues (2003) also examined internalization in

relation to eating behaviors and body image concerns in a female college students. They found that women who reported higher internalization of the thin ideal were more likely to have eating and weight concerns compared to women with lower levels of internalization. Furthermore, they found that internalization was predictive of increasing drive for thinness over the course of the school year. Therefore, recognizing the occurrence of sexual objectification experiences and the impact of these experiences by way of internalization is important in understanding the possible development of self-objectification.

#### Self-Objectification, Habitual Body Monitoring, and Negative Psychological Consequences

Objectification Theory has provided researchers with a theoretical framework to envision a possible pathway that begins with sexual objectification experiences, leads to self-objectification and habitual body monitoring, and results in numerous negative psychological consequences for women (e.g., Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Noll & Fredrickson, 1998; Smolak & Murnen, 2004). Objectification Theory's second theoretical link between self-objectification and negative consequences has been supported by previous research. Specifically, self-objectification and habitual body monitoring have been empirically linked to higher risk of disordered eating (e.g., Calogero et al., 2005; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tylka & Hill, 2004), increased body dissatisfaction (e.g., Noll, 1997; Prichard & Tiggemann, 2005; Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001), increased appearance anxiety (e.g., Fea & Brannon, 2006; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005), increased body shame (e.g., Calogero et al.,

2005; Fea & Brannon, 2006; Fiissel, 2006; Greenleaf & McGreer, 2006), decreased self-esteem (e.g., Fea & Brannon, 2006), depressed mood (e.g., Muehlenkamp & Saris-Baglana, 2002; Tiggemann & Kuring, 2004), and even decreased cognitive performance through the disruption of focused attention (e.g., Quinn, Kallen, Twenge, & Fredrickson, 2006).

One serious health consequence related to self-objectification in women is unhealthy eating behaviors. Muehlenkamp and Saris-Baglana (2002) found self-objectification to be related to restrictive eating, bulimic eating behaviors, and depressive symptoms in college women. Tiggemann and Slater (2001) examined disordered eating behaviors in former dancers and in college women and found that higher levels of self-objectification and self-surveillance were associated with more disordered eating. Some studies have found that body shame, or unhappiness with the self related to body dissatisfaction (Fredrickson & Roberts, 1997), mediated the relationship between self-objectification and eating disorders. For example, Noll (1997) found body shame mediated the relationship between self-objectification and eating disorders in college women, and Moradi and colleagues (2005) found that both internalization of societal ideals of beauty and body surveillance were mediated by body shame and predictive of eating disturbance in young women (Moradi et al., 2005).

These research findings on mediators that contribute to the development of eating disorders highlight one of the more detrimental health consequences of self-objectification for women. Importantly, women of all ages are faced with the potential to suffer from a variety of negative consequences associated with self-objectification. In order to better understand Objectification Theory as it relates to women of various age cohorts, we will first examine body image and eating disturbance as they relate to aging.

## Aging, Body Image, and Eating Disturbance

Previous research has found that body dissatisfaction remains relatively stable for women across the adult lifespan (Grippe & Hill, 2008; Hetherington & Burnett, 1994; Tiggemann, 2004; Tiggemann & Lynch, 2001). Prevalence rates of body dissatisfaction in older women are high with 60% of 60- to 70-year olds (Mangweth-Matzek et al., 2006) and 80% of 54-year-olds reporting body dissatisfaction (McLaren & Kuh, 2004). Body dissatisfaction in older women has been found to be similar to young women, with sociocultural standards of body image thought to “affect different generations of women in similar ways” (Lewis & Cachelin, 2001, p. 29). Women of all ages have been found to report their ideal figure as being significantly smaller than their current figure (e.g., Stevens & Tiggemann, 1998). Western cultures equate beauty with youth, and this definition of beauty is nearly impossible for older women to achieve, resulting in unique challenges for aging women (The Boston Women’s Health Book Collective, 1998). Consequently, a growing body of literature has examined the body image concerns of women of middle-age and older (e.g., Chrisler & Ghiz, 1993; Clarke, 2001; Fey-Yensan, McCormick, & English, 2002; McKinley, 2006; Tiggemann, 2004).

The few studies that have examined rates of body dissatisfaction in women of different age cohorts underscore the importance of understanding more about body image across all age groups. Cash and Henry (1995) surveyed 803 women ages 18 to 70 years old and found that 48 percent of these women reported significant levels of body dissatisfaction. The researchers found that all age groups reported similar levels of dissatisfaction with regard to discrete aspects of their appearance and weight preoccupation. However, the 18 to 24-year-old age group had a



more favorable body image with specific regard to their evaluation of their feelings concerning their own physical attractiveness when compared to the four older groups. Thus, the researchers concluded that body dissatisfaction continues to be a significant concern for all age groups of American women. (Cash & Henry, 1995)

Researchers have examined body image as it relates to psychological variables and this is also an area in need of further research utilizing a lifespan approach. Another study that focused on women of various age cohorts examined body dissatisfaction as it related to happiness in women ages 18 to 87 (Stokes & Frederick-Recascino, 2003). The findings indicated that sexual attractiveness, weight concern, and physical condition were significant components of body esteem that correlated with happiness in all age groups. Furthermore, sexual attractiveness was more important for older women than expected. The researchers emphasized the importance of examining body image satisfaction and how body image influences emotional well-being in women across age groups. (Stokes & Frederick-Recascino, 2003)

Eating disorders are often thought of as a disorder that only afflicts young women; however, research on eating disturbance in older women has clearly demonstrated the need for more research on this problem in women of all ages. Fey-Yensan and colleagues (2002) have discussed the increased prevalence of eating disorders in the elderly as a reaction to older women viewing their bodies as objects and attempting to meet the societal pressure to be thin and attractive. The researchers mention that although many of these women are comparing their figures to media images of similar age, even older women portrayed in the media are often attractive and thin (Fey-Yensan et al., 2002). This link between self-objectification and eating

disorders in older women demonstrates the extreme health risks that some women are willing to take in their pursuit of the thin ideal throughout their lives.

Women's thoughts and feelings regarding aging in relation to life satisfaction have been examined mainly in qualitative research utilizing interviews with older women (e.g. Clarke, 2001; Hurd, 2000). Given that there are very few measures of aging satisfaction, fear of aging, or aging anxiety, more empirical research on these constructs is needed (Lasher & Faulkender, 1993). Since fear of aging has been linked to eating disturbance (Lewis & Cachelin, 2001), finding protective factors to reduce aging anxiety and increase aging satisfaction is important.

Taken together, the research on aging in relation to body image and eating disturbance highlights the fact that body dissatisfaction continues to be a concern for women as they grow older. This concern is linked to emotional consequences such as unhappiness and anxiety related to aging itself, and physical health consequences such as eating disorders. These findings accentuate the importance of understanding the factors that contribute to both the physical and psychological health of women as they age.

### Aging and Objectification Theory

The impact of physical aging on older women's body image is directly related to how much she "internalizes the feminine ideals prescribed by a culture that objectifies the female body" (Fredrickson & Roberts, 1997, p. 194). According to Fredrickson and Roberts (1997), as women grow older they can either continue to internalize the societal beauty ideal, or they can let go of this outward appearance focus. If older women choose to continue to internalize the

youthful beauty ideal they will continue to self-objectify and habitually monitor their appearance and they may resort to rigorous beauty rituals, cosmetic surgery, and even unhealthy eating behaviors. Age-related physical changes such as wrinkles, loss of skin elasticity, and varicose veins may be extremely difficult for women who base their self-image on their appearance (Hurd, 2000).

On the other hand, women can decide to escape this culture of objectification by “relinquish[ing] the internalized observer’s perspective as her primary view of physical self” (Fredrickson & Roberts, 1997, p. 195). By letting go of cultural ideals women may experience freedom to focus on other aspects of the self including relationships, hobbies, and personal achievements. Women who base their sense of self solely on their physical self and have become accustomed to maintaining their self-esteem through their appearance may experience psychological difficulties with either of these options. With each passing year, these older women become more and more aware that their pursuit of culturally defined beauty is getting further and further out of reach, and they struggle with the transition from an external appearance-based focus to an internal awareness of self, and thus experience identity confusion (Clarke, 2001). When these aging women no longer encounter the same amount of attention from others regarding their physical attractiveness, they may have a self-esteem crisis, especially if they have not developed other skills and ways of relating that do not involve physical appearance to maintain positive self-esteem. Along these lines, Fredrickson and Roberts (1997) have suggested that adjusting to physical aging is easier for women who view their identity as based on more than just physical attractiveness.

As women age, they report a significant decrease in personal objectification experiences (McKinley, 1999; Tiggemann & Lynch, 2001). Since research has demonstrated that sexual objectification experiences are associated with the development of self-objectification, one might assume that when sexual objectification experiences decrease as women age, so would older women's levels of self-objectification. However, the research findings on this phenomenon are mixed. Some researchers have found that self-objectification and habitual body monitoring decrease with age (e.g., Cash, Winstead, & Janda, 1986; Clarke, 2001; McKinley, 1999; Tiggemann, 2004; Tiggemann & Lynch, 2001), but at least two studies found that self-objectification remains stable across the lifespan (Grippio & Hill, 2008; Hill, 2003).

Grippio and Hill (2008) examined the influence of age on self-objectification, habitual body monitoring, and body dissatisfaction in a sample of 138 European American heterosexual women ranging in age from 40 to 87 years old. Consistent with previous research, self-objectification and habitual body monitoring were both positively correlated with body dissatisfaction and both self-objectification and habitual body monitoring remained stable across the lifespan. The findings indicated that age moderated the relationship between habitual body monitoring and body dissatisfaction such that this relationship was smaller for older women than for middle-aged women. These results demonstrate that older women may spend less time monitoring the outward appearance of their body. Consequently, habitual body monitoring may not be as important to the conceptualization of body dissatisfaction in older women compared to middle-aged women.

Tiggemann and Lynch (2001) examined Objectification Theory (Fredrickson & Roberts, 1997) as it related to body dissatisfaction, self-objectification, habitual body monitoring,

appearance anxiety, and disordered eating in a sample of 322 women ages 20 to 84 years. The researchers found that there were age differences in level of self-objectification, habitual body monitoring, appearance anxiety, and disordered eating with women in their 20s and 30s reporting high levels, women in their 40s and 50s reporting medium levels, and women in their 60s, 70s, and 80s reporting the lowest levels. The researchers found support for Objectification Theory (Fredrickson & Roberts, 1997) with a path model that demonstrated how self-objectification can lead to habitual body monitoring, which can lead to body shame and appearance anxiety, which often can lead to disordered eating (Tiggemann & Lynch, 2001). Tiggemann and Lynch (2001) emphasized the need to examine how body image is conceptualized when examining age-related differences. In relation to body satisfaction, women of all ages report a desire to be thinner. However, when body image is examined in relation to the importance placed on physical appearance, older women report lower levels of monitoring of their physical appearance compared to younger women (Tiggemann & Lynch, 2001). To further support this conceptual distinction, McKinley (1999; 2006) found that body surveillance was not significantly related to body esteem in middle-aged women.

Hurd (2000) and Clarke (2001) have suggested that although older women often evaluate their aging bodies negatively, they also may shift their focus away from physical appearance toward physical health and feeling young on the “inside.” Older women who re-focus their attention on the importance of non-appearance related characteristics may be less inclined to self-objectify their bodies. Hurd (2000) found that women aged 61 to 92 in a qualitative research study emphasized their health and acceptance of the aging process, yet they concurrently demonstrated an internalization of ageist beauty norms. Thus, there was a dichotomy between

the reflected image of an older physical appearance in the mirror and the experience of a younger self trapped on the inside. These studies highlight the discrepancy between the intellectual and emotional aspects of body image in older women.

Overall, research on aging and self-objectification focuses mainly on whether or not women choose to “relinquish the observer’s perspective” and how they cope both physically and psychologically with the increasing difficulty of obtaining the youthful and thin societal ideal of beauty. Differentiating between the similar constructs of self-objectification (viewing the body as an object to be evaluated), and habitual body monitoring (the act of scanning the physical appearance of the body) seems to be important since the latter is less central to understanding body image for older women compared to middle-aged women (Grippe & Hill, 2008).

### Feminism as a Protective Factor

Research on Objectification Theory has supported the theoretical links between sexual objectification and self-objectification, and self-objectification and a variety of negative consequences for the psychological and physical health of women in western society. Now that these links have been established, the next step is to research protective factors that may intervene in this negative cycle. As one might imagine, changing the societal ideals of beauty and the pattern of sexual objectification that leads to self-objectification would be a daunting task. Therefore, the most realistic point of intervention in the objectification cycle is likely between self-objectification and its negative consequences.

One protective factor that has been researched recently is feminist identity. Feminist attitudes have been examined in relation to body dissatisfaction (e.g., Affleck, 2000; Cash, Ancis, & Strachan, 1997; Grippo & Hill, 2008; Ojerholm & Rothblum, 1999; Peterson, Grippo, & Tantleff-Dunn, 2008; Peterson, Tantleff-Dunn, & Bedwell, 2006; Rubin, Nemeroff, & Russo, 2004; Tiggemann & Stevens, 1999), and eating disturbance (e.g., Affleck, 2000; Doninger, Enders, & Burnett, 2003; Guille & Chrisler, 1999; Martz, Handley, & Eisler, 1995; Peterson et al., 2008; Peterson et al., 2006; Sabik & Tylka, 2006; Zone, 1998). Upon review of these research studies it is apparent that the findings are variable, leading to speculation regarding the nature of these inconsistencies.

Researchers have argued that feminists have an awareness of how mainstream culture and patriarchal society objectify the female body, and this knowledge allows feminist women to recognize and develop coping skills for dealing with societal pressure (Affleck, 2000; Grippo & Hill, 2008; Orbach, 1978; Wolf, 1991). Women who subscribe to feminist ideals still encounter sexual objectification and may still engage in self-objectification, but their feminist perspective may allow them to challenge this oppression and focus on more than just their physical appearance (Affleck, 2000; Grippo & Hill, 2008). Feminist ideology also may assist women in “relinquishing the observer’s perspective” that Fredrickson & Roberts (1997) mention, and this may become particularly salient in relation to aging. A feminist woman would hold the belief that women’s self-worth and self-esteem are not appearance-based, but instead involve a multitude of elements including intellectual, emotional, and personality aspects (Affleck, 2000; Orbach, 1978; Wolf, 1991), all of which are less negatively, or even positively, affected by aging.

A number of studies have found support for feminist attitudes as a protective factor in relation to body image disturbance (e.g., Affleck, 1999; Martz et al., 1995; Peterson et al., 2008; Peterson et al., 2006; Snyder & Hasbrouck, 1996). Specifically, research has shown that the ways in which women view their bodies and the importance they place on physical appearance are related to their attitudes towards feminist ideals (Affleck, 2000; Dionne, Davis, Fox, & Gurevich, 1995; Doninger et al., 2003; Gilmore, 2001; Guille & Chrisler, 1999; Martz et al., 1995; Tiggemann & Stevens, 1999; Zone, 1998). For example, Peterson and colleagues (2006) compared a feminist theory intervention, psychoeducational intervention, and an assessment only control group. The feminist theory intervention consisted of information on feminist theories of body image and eating disturbance along with a visual packet that contained pictures of the women's movement. The findings of this study indicated that brief exposure to the feminist intervention led to increased self-identification as a feminist and increased appearance satisfaction.

Feminist attitudes also have been shown to predict eating disturbance (e.g., Doninger et al., 2003; Guille & Chrisler, 1999; Martz et al., 1995; Peterson et al., 2008; Tiggemann & Stevens, 1999). With regard to weight concern, Tiggemann and Stevens (1999) found that feminists reported decreased levels of weight concern compared to women who did not subscribe to a feminist orientation. With regard to eating disturbance, Peterson and colleagues (2008) found that feminist identity accounted for a significant amount of the variance in predicting eating disturbance in young women. Similarly, Guille and Chrisler (1999) found support for feminism as a protective factor in eating disorder risk in a lesbian population. Furthermore, Martz and colleagues (1995) demonstrated that adherence to a traditional female gender role



correlated with higher eating disorder risk, and Doninger and colleagues (2003) found lower levels of risk for eating disorders due to less drive for thinness in women with higher levels of feminist identity and/or egalitarian gender roles.

In contrast, there are several studies that have not found feminist attitudes to be a protective factor for body image disturbance (e.g., Cash et al., 1997; Grippo & Hill, 2008; Mintz & Betz, 1986; Ojerholm & Rothblum, 1999; Xinaris & Boland, 1990). Researchers have argued that there are numerous possible reasons for null findings. One line of reasoning pertains to the development and internalization of societal ideals of beauty. Cash and colleagues (1997) and Tiggemann and Stevens (1999) compared culturally held views on appearance to core beliefs that are strongly instilled due to years of social reinforcement, and are often outside of conscious awareness. Research has demonstrated that children become aware of societal ideals of beauty at a very young age (e.g., Anesbury & Tiggemann, 2000; Davison, Markey, & Birch, 2000; Tiggemann & Wilson-Barrett, 1998), and consequently it may be hard to erase these messages despite later education and experience with feminist culture (Tiggemann & Stevens, 1999). Similarly, Rubin and colleagues (2004) revealed that although feminism advanced an intellectual sensitivity to cultural messages, it did not transform women's personal feelings about beauty and their appearance. Although Cash and colleagues (1997) found higher levels of appearance focus and greater internalization in women with greater conformity to sex-role expectations in social interactions, overall, feminist identity did not promote more positive body image or less reliance on appearance-based evaluations.

A contributing factor that may explain some of the inconsistent findings with regard to feminism in these studies lies in the operational definition and measurement of this construct

(Fassinger, 1994). Researchers have measured feminism using anything from a few simple questions regarding attitudes about gender roles and the women's movement, to brief empirically validated measures of feminist beliefs, to more comprehensive measures that take into account the specific stage of feminist identity development. The way in which feminist attitudes are measured can have significant implications for the subsequent research findings. Measures that assess feminism with a few simple questions, or ones that result in just one overall score and do not account for the stages of feminist identity development, may not adequately measure the nuances of feminist ideals and therefore contribute to inconsistent research findings. One empirically supported and comprehensive measure is the Feminist Identity Composite (FIC; Fischer, Tokar, Mergl, Good, Hill, & Blum, 2000), which measures feminist identity according to the five theorized stages of feminist identity development (Passive Acceptance, Revelation, Embeddedness-Emanation, Synthesis, Active Commitment). The last two stages denote the highest levels of feminist identity with the Synthesis stage involving positive feminist identity and the Active Commitment stage incorporating a commitment to social change and gender equality. Empirical support was provided for the Synthesis and Active Commitment stages of the FIC as protective factors between perceived sexist events and disordered eating (Sabik & Tylka, 2006). Peterson and colleagues (2008) also used the FIC and found that both the Synthesis and the Active Commitment stages were related to lower levels of body image and eating disturbance. The current study also will use the FIC to measure feminist identity so that the stage of feminist identity development can be taken into account.

## Empowerment in Feminist Intervention Programs to Promote Healthy Body Image

Another plausible explanation for the inconsistent findings on feminist attitudes as a protective factor in some empirical research studies is offered from applied research that has tested feminist ideals and specifically incorporated empowerment. Psychological empowerment has been defined as involving individual thoughts and behaviors and “integrating perceptions of personal control, a proactive approach to life, and a critical understanding of the sociopolitical environment” (Zimmerman, 1995, p.581). Feminist prevention and intervention programs have demonstrated success in reducing body image dissatisfaction and eating disturbance in child and adolescent populations by emphasizing the construct of empowerment (e.g., Girl Talk: McVey, Lieberman, Voorberg, Wardrope, & Blackmore, 2003; Go Girls: Piran, Levine, & Irving, 2000; Every BODY is a Somebody: Seaver, McVey, Fullerton, & Stratton, 1997; Full of Ourselves: Advancing Girl Power, Health, and Leadership: Sjostrom & Steiner-Adair, 2005; Steiner-Adair et al., 2002). Empowerment has been implemented successfully within numerous domains including self-help, mental health, and social work programs (Rogers, Chamberlin, Ellison, & Crean, 1997; Rosenfield, 1992). Peterson and colleagues (2008) suggested that feelings of empowerment may buffer women from the effects of sexual objectification and self-objectification.

Body image programs for young girls generally focus on media literacy, societal messages related to body image and the thin ideal of beauty, developing positive self-esteem, healthy body image, stress and anxiety management, appropriate peer relations, and social advocacy skills. Some of these intervention programs have been manualized to ensure that they

are implemented correctly and to set a standard for research studies that use them (e.g., Every BODY is a Somebody: Seaver et al., 1997). For example, McVey and colleagues (2003) successfully implemented a program called “Every BODY is a Somebody” which taught media literacy, life-skills, management of stress, appropriate peer relations, and emphasized the development of healthy body image by empowering girls. Similarly, McVey, Tweed, and Blackmore (2007) demonstrated that an 8-month school based intervention program entitled “Healthy Schools-Healthy Kids” was effective in reducing the internalization of the thin ideal in both male and female 6<sup>th</sup> and 7<sup>th</sup> grade students, and in decreased eating disturbance in female students. Furthermore, the girls who were at highest risk for body image and eating disturbance showed the most benefit from this intervention program (McVey et al., 2007). The “Healthy Schools-Healthy Kids” program empowered students through information and activities focusing on media ideals, healthy eating, peer pressure, active living, problem-solving/assertive communication, relationship issues, weight-based teasing, size acceptance, role models, and how to manage normative stressors that can trigger body image concerns (McVey et al., 2007).

Another program entitled “Go Girls” that involved media education, advocacy skills, and positive body image was shown to reduce internalization of the thin ideal, increase self-acceptance and increase empowerment in a female middle school and high school population (Piran et al., 2000). “Full of Ourselves: Advancing Girl Power, Health, and Leadership ” (Sjostrom & Steiner-Adair, 2005; Steiner-Adair et al., 2002) also achieved a successful outcome in an adolescent population by way of body image activities and social advocacy that involved letter writing campaigns. There also has been some evidence that adolescents benefit from feminist empowerment groups in which girls can critically discuss and put in societal perspective

their own personal experiences related to body image and objectification and create action plans for dealing with these situations in the future (e.g., Piran, 2001).

In general, these empowering feminist intervention programs have been geared toward a mostly female middle school age population. This period of adolescence is a logical choice given the onset of puberty and the appearance-related concerns that accompany these physiological changes. However, these programs have potential applications for older female populations as well. It appears both feasible and potentially fruitful to extend the benefits of these programs by empowering women of all ages. It is quite possible that similar programs aimed at media literacy, body image, healthy eating, self-esteem building, and social advocacy will also be beneficial to adult women. Specific components could be added to the basic structure of existing empowerment programs to address various age-related milestones (e.g., child-bearing years, menopause, and retirement). Therefore, research on the impact of empowerment within these programs and as a protective factor in reducing body image and eating disturbance will be an important first step toward developing effective programs for women of all ages.

### Psychological Empowerment as a Protective Factor

Third wave feminism is a movement that has occurred in recent decades in response to criticisms that the previous wave of feminism focused primarily on issues relevant to white, middle-class women and therefore did not adequately capture the diversity of women's experiences (Park, 2008). Third wave feminism recognizes that all women do not encounter the

same challenges and conceptualizes gender oppression as just one form of societal oppression which includes discrimination based on race, sexual orientation, socio-economic class, age, and disability status (Park, 2008). Third wave feminists state that each woman encounters varied levels of oppression based on her classifications with regard to the aforementioned societally constructed categories (Park, 2008). Park (2008) explains that these unique identities are celebrated by third wave feminists, and women are empowered by overcoming these barriers and refusing to play the role of the victim. Feminist scholars (e.g., Wolf, 1991) argue that our society is structured to maintain the power advantage of the white heterosexual upper-class able-bodied male, and these power differentials may result in women feeling a sense of inadequacy and powerlessness. This sense of powerlessness is particularly detrimental for women who simultaneously identify with other minority categories in addition to their gender. The construct of empowerment seems to be a key component in third wave feminist theory that may not have been adequately captured by previous conceptualizations of feminism.

The construct of empowerment has been defined by numerous researchers and theorists. Zimmerman (1995) defined psychological empowerment as involving individual thoughts and behaviors and “integrating perceptions of personal control, a proactive approach to life, and a critical understanding of the sociopolitical environment” (p.581). Rappaport (1987) and Zimmerman and Rappaport (1988) defined empowerment as “the connection between a sense of personal competence, a desire for and a willingness to take action in the public domain” (Rogers et al., 1997, p. 1042; Zimmerman & Rappaport, 1988). Segal, Silverman, and Temkin (1995) defined empowerment as “gaining control over one’s life and influencing the organizational and societal structure in which one lives” (Rogers et al., 1997, p. 1042). According to Freire (1970,

1973) empowerment education theory emphasizes the value of knowledge of both social and historical issues in developing new social advocacy agendas. Empowerment has been promoted as an essential part of healthy aging in relation to retaining control over one's own health choices (Beckingham & Watt, 1995).

Thinking back to the negative cycle theorized by Objectification Theory, in which sexual objectification experiences may lead to self-objectification, and self-objectification in turn is associated with negative psychological consequences for women (Fredrickson & Roberts, 1997), the most plausible point of intervention is to find protective factors that buffer the deleterious impact of self-objectification on psychological functioning. Feminist scholars (e.g. Anleu, 2006; Wolf, 1991) argue that feelings of powerlessness can occur when women experience societal pressure to conform to unrealistic ideals of beauty and expectations based on their gender. Similarly, Objectification Theory (Fredrickson & Roberts, 1997) describes the process by which self-objectification and habitual body monitoring focus women on external appearance and subsequent desperate attempts to control the way their bodies are perceived by others, likely resulting in a loss of internal perspective and control (or power) over their own body.

Given the centrality of the construct of empowerment to feminist interventions, it is somewhat surprising that to date only one previous study has compared feminist attitudes and empowerment directly in relation to body image and eating disturbance (Peterson et al., 2008). Peterson and colleagues (2008) theorized that empowerment may serve as a protective factor in buffering the negative consequences of self-objectification by allowing women to maintain a sense of personal power with regard to their bodies. The researchers demonstrated that empowerment was more predictive of body image and eating disturbance than feminism in a

sample of undergraduate women in a study that focused on the key components of psychological empowerment (i.e., self-esteem/self-efficacy, power/powerlessness, community activism and autonomy, optimism and control over the future, and righteous anger) determined to be important in previous research (e.g., Bergsma, 2004; Freire, 1970, 1973; Zimmerman, 1995).

As women age they are marginalized by a society that values youth and report feeling “invisible” (Clarke, 2001; Hurd, 2000). This sense of invisibility can result in older women feeling unimportant, worthless, and in essence, powerless. Women who focus less on outward appearance and more on connecting with other individuals and fostering personal interests and abilities may maintain a sense of purpose, life satisfaction and, perhaps most importantly, empowerment, which may protect them from the negative effects of societal ageism. Morell (2003) stated that empowerment is a crucial element of social work and feminist gerontology, and highlighted the paradox of psychological empowerment at a time when aging of the physical body is not controllable. Morell (2003) discussed the myth of the controllable body and emphasized the need for a realistic balance between complete power (needing to control every aspect of the aging body), and complete embodiment (feeling helplessly trapped in an aging body). In other words, feminists are encouraged to see power and powerlessness as coexisting aspects of an age-sensitive model of empowerment (Morell, 2003). Taken together, the dearth of empirical research on empowerment as a protective factor, and its promising potential applications to prevention and intervention programs to promote healthy body image, eating behavior, and healthy aging, suggest that more research is needed utilizing this construct.



### The Current Study

Based on Objectification Theory, the current study examined a model utilizing empowerment and feminist attitudes as potential protective factors that might moderate the relationship between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction. To date, empowerment had not been examined empirically in relation to Objectification Theory or self-objectification in any age group. Therefore, the aim of the current study was to further elucidate the influence of empowerment and feminist attitudes on self-objectification, body image and eating behaviors across the adult female lifespan. The current study included young, middle-aged, and older women in examining the impact of self-objectification on aging satisfaction and in determining whether or not that relationship was moderated by empowerment.

Since research has clearly demonstrated that body image disturbance remains stable across the adult lifespan (Grippio & Hill, 2008; Hetherington & Burnett, 1994; Tiggemann, 2004; Tiggemann & Lynch, 2001), it is essential to study the construct of empowerment and its potential efficacy as a focus of prevention and intervention programs for women of all ages. Intervention programs designed for adolescents (e.g., Girl Talk: McVey, Lieberman, Voorberg, Wardrope, & Blackmore, 2003; Go Girls: Piran, Levine, & Irving, 2000; Every BODY is a Somebody: Seaver, McVey, Fullerton, & Stratton, 1997; Full of Ourselves: Advancing Girl Power, Health, and Leadership: Sjostrom & Steiner-Adair, 2005; Steiner-Adair et al., 2002) can be adapted for adults to examine the impact of empowerment on self-objectification as it relates to aging satisfaction, body image and eating disturbance in an older female population.

Importantly, a better understanding of protective factors and their impact on the negative cycle theorized by Objectification Theory (Fredrickson & Roberts, 1997) will contribute to empirically based interventions aimed at breaking this detrimental cycle and promoting healthy body image, healthy eating behavior, and healthy aging in our society.

Therefore, the hypotheses of the current study were as follows:

1. The relationship between age and body image will be non-significant indicating that women of all ages are equally likely to report body image satisfaction or dissatisfaction.
2. The relationship between age and self-objectification will be non-significant indicating that women of all ages are equally likely to report high or low levels of self-objectification.
3. Sexual objectification experiences will be correlated with internalization of societal ideals of beauty/media influences.
4. Sexual objectification experiences and internalization of societal ideals of beauty/media influences will predict self-objectification.
5. Empowerment and feminist attitudes will moderate the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction, such that those women who have higher levels of empowerment and feminist attitudes will have more positive body image, less eating disturbance, and greater satisfaction with aging. Empowerment will account for a greater percentage of variance in these constructs compared to feminist attitudes.

## CHAPTER 2: METHODOLOGY

### Participants

Participants were recruited through an on-line extra credit research participation system at a large Southeastern metropolitan university, through in-person and online recruiting of faculty and staff at the university, and through other recruiting announcements to older individuals and groups of older individuals (Learning Institute for Elders) on the university campus. All participants were provided a link to a secure website for confidential online data collection (SurveyMonkey.com). University students were given extra credit for their participation.

According to MacCallum, Browne, and Sugawara (1996), a structural equation model (SEM) with 100 degrees of freedom and power of .90 would require a sample size of 78 participants. The hypothesized SEM model for the current study was calculated to have 387 degrees of freedom indicating that 78 participants would be more than adequate to achieve power of .90. However, Loehlin (2004) recommends a minimum of 100 participants for SEM sample sizes in order to avoid statistical difficulties. For the proposed correlational analyses, G\*Power3 (Faul, Erdfelder, Lang, & Buchner, 2007) recommends a sample size of 109 for a medium effect size to achieve power of .90. Therefore, the sample size of 150 participants was originally proposed for the current study to be sufficient in achieving high power with a medium effect size.

However, the actual number of participants that were recruited from a large Southeastern metropolitan university that completed this study was 361 participants, which was over twice as many as originally proposed. The sample consisted of all female adults, ranging in age from 18- to 80-years-old (Mean = 29.53; SD = 15.07). The age breakdown of the sample was as follows: 18 to 19 (32.7%), 20 to 29 (34.2%), 30 to 39 (12.1%), 40 to 49 (7.4%), 50 to 59 (6.0%), 60 to 69 (6.3%), 70 to 80 (2.1%). The ethnic/racial background identified by participants was as follows: Caucasian (77.6%), Hispanic/Latin (8.3%), Black/African American (4.7%), Multiracial (4.4%), Asian/Pacific Islander (3.3%), Native American/American Indian (0.3%), and Other Race/Ethnicity (1.4%). The sexual orientation of participants was as follows: Heterosexual (95%), Bisexual (3.3%), and Homosexual (1.7%). Participants identified their current relationship status as follows: Single (36.9%), Committed Relationship (33.6%), Married (23.1%), Divorced (4.2%), Widowed (1.4%), and Separated (0.8%). Body Mass Index (BMI) of the sample ranged from 15.64 to 57.94 (Mean = 24.34 (Normal Weight); SD = 5.31), with 6.9% of participants falling within the Underweight (BMI<18.5), 57.4% in the Normal Weight (BMI between 18.5 - 24.9), 23.0% in the Overweight (BMI between 25 – 29.9), and 12.7% falling within the Obese (BMI of 30 or greater) categories.

### Procedure

All participants who were recruited for this study were provided with a link to a secured website for confidential online data collection (SurveyMonkey.com). Participants were able to access this link at any time that was convenient for them and from any computer of their choice.

Once participants typed in the secure survey link for this study, they immediately read a detailed informed consent form and provided their informed consent to participate in this study anonymously. The informed consent form explained confidentiality to participants, notified them that the study was approved by the University of Central Florida's Institutional Review Board (IRB), and ensured participants that they could cease participation at any time without penalty. Upon completion of the study, all participants received a debriefing form that explained the purpose of the study and provided contact information for the researchers. Adverse emotional reactions to the survey were not expected and none were reported. Information for local counseling centers was provided to participants as part of the debriefing process in case of any subsequent distress. University students earned extra credit for their participation.

### Measures

*Consent Form.* This form outlined the general purposes of the study and informed the participants of their rights as research participants.

*Demographics.* Participants were asked to provide demographic information including age, ethnicity, sexual orientation, education level, height and weight.

*Experiences with Aging Questionnaire (EAQ),* designed specifically for this study, is a 33-item scale that assesses the importance of and satisfaction with various appearance-related changes associated with aging and overall aging satisfaction. Each item is rated on a 5-point Likert scale. The EAQ consists of five subscales: General Dissatisfaction with aging (GD), Aging Changes (AC), Negative Psychosocial Impact (NPI), Cosmetic Procedures (CP), and

Importance of Attractiveness when Older (older was defined as age 56+) (IAO). Higher scores on the EAQ indicate more dissatisfaction with aging in general (GD subscale), more dissatisfaction with age-related changes in physical appearance (AC subscale), more negative perceptions of the psychosocial impact of aging (NPI subscale), more likely to consider having cosmetic procedures (CP subscale), and more importance placed on attractiveness when older (IAO subscale). For the current sample, Cronbach's alphas were .89 for the GD subscale, .94 for the AC subscale, .91 for the NPI subscale, .84 for the CP subscale, and .92 for the IAO subscale.

*Anxiety about Aging Scale (AAS; Lasher & Faulkender, 1993)* is a 20-item scale that uses a 5-point Likert scale (1=strongly agree; 5=strongly disagree) to measure aging anxiety in people of all ages in relation to four dimensions (physical, psychological, social, and transpersonal). It consists of four 5-item subscales: Fear of Old People (FOP), Psychological Concern (PC), Physical Appearance (PA), and Fear of Losses (FL). Sample items include: "I enjoy being around old people" (FOP), "I expect to feel good about life when I am old (PC), "When I look in the mirror, it bothers me to see how my looks have changed with age (PA), and "I worry that people will ignore me when I am old" (FL). Higher scores on all subscales of the AAS indicate more anxiety about aging. Cronbach's alpha was reported as .82 (Lasher & Faulkender, 1993) and .84 (Yun & Lachman, 2006). For the current sample, Cronbach's alphas were .80 for the total AAS, .88 for the FOP subscale, .78 for the PC subscale, .37 for the PA subscale, and .61 for the FL subscale. In the current sample, when the PA subscale was removed (due to low reliability) then the Cronbach's alpha for the AAS total became .83.

*Interpersonal Sexual Objectification Scale (ISOS; Kozee, Tylka, Augustus-Hovath, & Denchik, 2007)* is a 15-item scale rated on a 5-point Likert scale (1=never; 5=almost always) that

measures women's interpersonal sexual objectification experiences. It consists of two subscales: Body Evaluation (BE) and Unwanted Explicit Sexual Advances (UESA). The BE subscale consists of 11 items including "How often have you felt that someone was staring at your body?" and "How often have you heard someone make sexual comments or innuendos when noticing your body?" The UESA subscale consists of 4 items including "How often have you experienced sexual harassment?" and "How often have you been touched or fondled against your will?" Higher scores indicate higher levels of sexual objectification. Cronbach's alphas have been reported as .92 for the total ISOS, .91 for the Body Evaluation subscale, and .78 for the Unwanted Explicit Sexual Advances subscale (Kozee et al., 2007). For the current sample, Cronbach's alphas were .93 for the total ISOS, .93 for the BE subscale, and .81 for the UESA subscale.

*Self-Objectification Questionnaire (SOQ; Noll & Fredrickson, 1998)* is a 12-item scale that examines the extent to which individuals view their bodies in observable/appearance-based (objectified) terms versus nonobservable/competence-based (non-objectified) terms. This scale measures the impact of a list of 12 attributes on self-concept. The six appearance-based items include physical attractiveness and weight, and the six competence-based items include muscular strength and stamina. After the attributes are ranked in order of importance, the appearance-based and competence-based scores are summed separately. The total score is computed by subtracting the competence-based score from the appearance-based score. The final score ranges from -36 to 36, with higher scores indicative of more importance given to appearance attributes (Noll & Fredrickson, 1998). Construct validity was demonstrated in an undergraduate sample by showing that the SOQ was positively correlated with scores on scales measuring preoccupation

and satisfaction with observable aspects of the physical self and body dissatisfaction (Noll, 1997).

*Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996)* is a 24-item scale that consists of three 8-item subscales that are rated with a 7-point Likert scale (1=strongly disagree; 7=strongly agree). The Surveillance (S) subscale assesses the degree to which the individual monitors her body and thinks of her body in terms of how it looks versus how it feels. Items on the S subscale include “During the day, I think about how I look many times” and “I often worry about whether the clothes I am wearing make me look good.” Higher scores indicate more surveillance/habitual body monitoring. For undergraduates and middle-aged women, Cronbach’s alphas have been reported as .79 and .76 for the S subscale (McKinley & Hyde, 1996). For the current sample, Cronbach’s alphas were .85 for the S subscale of the OBC.

*Empowerment Scale (ES; Rogers, Chamberlin, Ellison, & Crean, 1997)* is a 28-item scale that measures psychological empowerment and consists of 5 factors each rated on a 4-point Likert scale (1=strongly disagree; 4=strongly agree). The Self-Esteem/Self-Efficacy (SE/SE) subscale assesses feelings of self-worth and an internal locus of control and consists of 9 items including, “I generally accomplish what I set out to do” and “I see myself as a capable person.” The Power/Powerlessness (PP) subscale assesses feelings of control over societal and personal decisions and consists of 8 items including, “You can’t fight city hall” and “Experts are in the best position to decide what people should do or learn.” The Community Activism and Autonomy (CAA) subscale assesses beliefs that groups are able to influence change and it measures participation in social activism. The subscale consists of six items including, “People working together can have an effect on their community” and “People have the right to make



their own decisions, even if they are bad ones.” The Optimism and Control over the Future (OCF) subscale assesses having a positive outlook for the future and consists of four items including “People are limited only by what they think possible” and “I am generally optimistic about the future.” The Righteous Anger (RA) subscale assesses beliefs that one can harness anger in a positive manner to accomplish goals and consists of three items including “Getting angry about something never helps.” Higher scores on all of the ES subscales indicate higher levels of each construct. The PP subscale is typically scored so that higher scores indicate more feelings of powerlessness; however, in the current study the PP subscale was reverse scored (ESppR) for use in the structural equation modeling analyses making higher scores indicate more feelings of power. Cronbach’s alpha for the ES has been reported as .86; however, alphas have not been reported for the subscales (Rogers et al., 1997). For the current sample, Cronbach’s alphas were .88 for the total ES, .91 for the SESE subscale, .71 for the PP subscale, .78 for the CAA subscale, .57 for the OCF subscale, and .63 for the RA subscale.

*Feminist Identity Composite (FIC; Fischer, Tokar, Mergl, Good, Hill, & Blum, 2000)* is a 33-item scale that is a combination of the majority of the items from both the Feminist Identity Development Scale (FIDS; Bargad & Hyde, 1991) and the Feminist Identity Scale (FIS; Rickard, 1987). The FIC assesses participants on five theorized stages of feminist identity according to Downing and Roush’s (1985) model of feminist identity development. 1) Passive Acceptance (PA) assesses adherence to traditional gender roles and consists of seven items including “I don’t see much point in questioning the general expectation that men should be masculine and women should be feminine” and “I think that men and women had it better in the 1950’s when married women were housewives and their husbands supported them.” 2) Revelation (REV) is the

questioning of traditional gender roles and making generalizations about men and consists of eight items including “Gradually, I am beginning to see just how sexist society really is” and “My female friends are like me in that we are all angry at men and the ways we have been treated as women.” 3) Embeddedness-Emanation (EE) is a feeling of connection with other women and consists of four items including “I am very interested in women artists” and “I am very interested in women’s studies.” 4) Synthesis (SYN) is the development of positive feminist identity and consists of five items including “I am proud to be a competent woman” and “I feel like I have blended my female attributes with my unique personal qualities.” 5) Active Commitment (AC), the highest stage of feminist identity development, involves a commitment to social change and gender equality and is assessed with nine items including “I care very deeply about men and women having equal opportunities in all respects” and “On some level, my motivation for almost every activity I engage in is my desire for an egalitarian world.” Participants respond on a 5-point Likert scale (1=strongly disagree; 5=strongly agree), and then each subscale is totaled separately with higher scores indicating higher levels of each stage of feminist identity development. Cronbach’s alpha has been reported as ranging from .68 to .86 (Fischer et al., 2000). For the current sample, Cronbach’s alphas were .85 for the total FIC, .90 for the AC subscale, .85 for the SYN subscale, .88 for the REV subscale, .92 for the EE subscale, and .82 for the PA subscale.

*Multidimensional Body-Self Relations Questionnaire (MBSRQ;* Brown, Cash, & Mikulka, 1990) is a 69-item scale that measures self-attitudinal aspects of body image. Two of the ten total subscales of the MBSRQ will be used. The Appearance Evaluation (AE) subscale assesses feelings of physical attractiveness or unattractiveness and consists of seven items rated on a 5-

point Likert scale (1=definitely disagree; 5=definitely agree) including “My body is sexually appealing” and “I dislike my physique.” The Body Areas Satisfaction (BAS) subscale assesses satisfaction with discrete aspects of one’s appearance and consists of nine items rated on a 5-point Likert scale (1=very dissatisfied; 5=very satisfied) including “lower torso (buttocks, hips, thighs, legs)” and “weight.” Higher scores on the AE subscale indicate greater satisfaction with appearance and higher score on the BAS subscale indicate greater satisfaction with specific body areas (Cash, 2000). Cronbach’s alphas have been reported as .88 for the AE subscale and .73 for the BAS subscale (Brown et al., 1990). For the current sample, Cronbach’s alphas were .91 for the AE subscale and .83 for the BAS subscale.

*Sociocultural Attitudes Toward Appearance Questionnaire-3 (SATAQ-3*; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004) is a 30-item scale that assesses the extent to which women view the media as an informational source, feel pressures related to media images, and internalize media images. The Information (I) subscale consists of nine items including “TV programs are an important source of information about fashion and “being attractive.” The Pressures (P) subscale consists of seven items including “I’ve felt pressure from TV and magazines to be thin.” The Internalization-General (I-G) subscale consists of nine items including “I compare my appearance to the appearance of TV and movie stars.” The Internalization-Athlete (I-A) subscale consists of five items including “I try to look like sports athletes.” Participants respond on a 5-point Likert scale (1=completely disagree; 5=completely agree), and total scores are created for each subscale, with higher scores indicating higher levels of each construct. Cronbach alphas have been reported as .96 for the I subscale, .92 for the P subscale, .96 for the I-G subscale, and .95 for the I-A subscale (Thompson et al., 2004). For the

current sample, Cronbach's alphas were .93 for the I subscale, .94 for the P subscale, .94 for the I-G subscale, and .83 for the I-A subscale.

*The Eating Disorder Inventory 3 (EDI-3; Garner, 2004)* is a 91-item scale that assesses attitudes, feelings, and behaviors related to eating that are commonly associated with Anorexia Nervosa and Bulimia Nervosa. Two subscales of the EDI-3 were used. The Drive for Thinness (DT) subscale measures excessive concern with dieting, weight preoccupation, and fear of gaining weight. The DT subscale consists of seven items including "If I gain a pound, I worry that I will keep gaining" and "I exaggerate or magnify the importance of weight." The Bulimia (B) subscale assesses thoughts and behaviors associated with binge eating. The B subscale consists of seven items including "I stuff myself with food" and "I have the thought of trying to vomit in order to lose weight." Items are rated as "always," "usually," "often," "sometimes," "rarely," and "never." To score the subscales, responses for each item are weighted as follows: always = 4, usually = 3, often = 2, sometimes = 1, rarely = 0, and never = 0 and the items for that subscale are then summed. Higher scores on each subscale indicate higher levels of eating pathology. Cronbach's alphas for the DT subscale have been reported as .86 for eating disorder patients and .91 for non-patient females (Clausen, Rosenvinge, Friberg, & Rokkedal, 2011). Cronbach's alphas for the B subscale have been reported as .92 for eating disorder patients and .87 for non-patient females (Clausen et al., 2011). For the current sample, Cronbach's alphas were .84 for the DT subscale and .84 for the B subscale.

*Rosenberg Self-Esteem Inventory (RSEI; Rosenberg, 1965)* is a 10-item scale that assesses self-esteem. Sample items include "I feel that I am a person of worth, at least on an equal basis with others" and "I take a positive attitude towards myself." Participants respond on

a Likert scale (0=strongly disagree; 3=strongly agree) with higher scores indicative of more positive self-esteem. Cronbach's alpha has been reported as .88 (Fleming & Courtney, 1984). For the current sample, Cronbach's alpha was .90 for the RSEI.

*Debriefing Form.* Participants were debriefed fully as to the hypotheses and purposes of the study in which they participated. They also were provided with contact numbers for the investigators.

## CHAPTER 3: RESULTS

### Data Screening

Participants who completed the entire survey ( $N = 361$ ), and who answered all four manipulation check questions correctly, were used in the data analyses. The four manipulation check questions were randomly placed throughout the survey and consisted of items such as “Please select the response ‘strongly agree’ for this question.” Only participants who completed all measures were included in the final sample, and missing data were addressed using mean replacement. Analyses were conducted to evaluate the normality of all variable distributions and to ascertain whether any transformations were necessary to avoid violating assumptions of normality. Outliers (scores that were more than three standard deviations from the mean) were not found in the data of the participants included in the analyses. It is possible that there may have been some outliers in the data for participants that did not complete the entire survey and/or participants that failed the manipulation checks, but these participants were not included in the final sample. All of the variables were determined to have normal distributions with regard to skewness (the scores were normally distributed around the mean with relatively equal tails at each end) and kurtosis (the data distribution was not excessively peaked/leptokurtic or flat/platykurtic), and thus did not require any statistical transformations.

## Factor Analysis of the Experiences with Aging Questionnaire

The *Experiences with Aging Questionnaire (EAQ)* was designed specifically for this study to assess the importance of and satisfaction with various appearance-related changes associated with aging and overall aging satisfaction. The original scale consisted of a total of 52 items rated on a 5-point Likert scale. Factor analysis of these original 52 items was conducted using Principal Component Analysis as the extraction method. Five components were retained, which together accounted for 44.80% of the variance in the original correlation matrix. This was consistent with visual inspection of the scree plot, which also suggested retaining five components. Following the extraction of components, Varimax rotation with Kaiser Normalization was conducted and this rotation converged in ten iterations.

Factor 1 consisted of 13 items and accounted for 15.21% of the variance in the original correlation matrix with factor loadings ranging from .688 to .838. Factor 2 consisted of 7 items and accounted for 9.06% of the variance with factor loadings ranging from .761 to .832. Factor 3 consisted of 4 items and accounted for 6.99% of the variance with factor loadings ranging from .776 to .930. Factor 4 consisted of 5 items and accounted for 6.84% of the variance with factor loadings ranging from .788 to .843. Factor 5 consisted of 4 items and accounted for 6.70% of the variance with factor loadings ranging from .691 to .863.

Inspection of the items on each of the five factors suggested unique constructs related to aging. Factor 1 measured dissatisfaction with age-related changes in physical appearance. Factor 2 measured the negative impact of age-related changes on psychosocial functioning. Factor 3 measured the perceived importance of attractiveness when older (older was defined as

age 56+). Factor 4 measured general dissatisfaction with aging. Factor 5 measured the perceived likelihood of considering specific cosmetic procedures to reduce the physical signs of aging. The final EAQ scale consisted of a total of 33 items. Based on the five factors, five subscales were created and were labeled Age Changes (AC), Negative Psychosocial Impact (NPI), Importance of Attractiveness when Older (IAO), General Dissatisfaction with aging (GD), and Cosmetic Procedures (CP), respectively.

#### Correlations between Body Mass Index and Other Variables

Correlations between Body Mass Index (BMI) and all other variables were computed and when significant BMI was included as a covariate. BMI was positively correlated with age ( $r = .363, p < .001$ ). As expected, BMI was negatively correlated with measures of body image satisfaction (MBSRQ-AE:  $r = -.466, p < .001$ ; MBSRQ-BAS:  $r = -.485, p < .001$ ). BMI was negatively correlated with one form of self-objectification (habitual body monitoring) (OBC-S:  $r = -.161, p < .01$ ), but was not significantly correlated with self-objectification in general (SOQ). BMI was positively correlated with eating disturbance (EDI-DT:  $r = .205, p < .001$ ; EDI-B:  $r = .258, p < .001$ ). BMI was positively correlated with general dissatisfaction with aging and with perceived negative psychosocial impact of aging on psychosocial functioning. See Table 1 for a detailed list of all variables and their correlations with BMI.



**Table 1 Descriptives and Intercorrelations Among Body Mass Index and Measures of Media Influence, Sexual Objectification, Self-Objectification, Empowerment, Feminist Attitudes, Body Image, Eating Behavior, and Aging Satisfaction**

Variable	Mean	Standard Deviation	Range	BMI
Age	29.53	15.07	18-80	.363***
AAS-FOP	10.95	3.63	5-25	-.033
AAS-PC	11.14	3.48	5-25	.010
AAS-PA	14.71	3.23	5-25	-.169**
AAS-FL	15.13	3.32	5-25	.104*
ISOS-BE	31.73	8.23	11-55	-.149**
ISOS-UESA	7.01	2.53	4-20	.051
SOQ	3.32	19.58	-36-36	-.074
OBC-S	37.70	8.51	8-56	-.161**
ES-SESE	29.67	4.11	9-36	.037
ES-PP	16.35	3.24	8-32	-.074
ES-CAA	20.27	2.44	6-24	.021
ES-OCF	12.14	1.81	4-16	.024
ES-RA	10.65	2.00	4-16	.086
FIC-AC	32.74	6.00	9-45	.122*
FIC-SYN	20.49	2.93	5-25	.099
FIC-REV	20.30	5.83	8-40	-.006
FIC-EE	12.77	3.24	4-20	-.059
FIC-PA	19.23	5.26	7-35	-.161**
MBSRQ-AE	23.99	5.83	7-35	-.466***
MBSRQ-BAS	31.19	6.12	9-45	-.485***
SATAQ-I	23.63	7.99	9-45	-.045

Variable	Mean	Standard Deviation	Range	BMI
SATAQ-P	20.57	7.28	7-35	.131*
SATAQ-IG	25.99	8.87	9-45	-.081
SATAQ-IA	15.16	4.15	5-25	-.127*
EDI-DT	9.87	8.15	0-28	.205***
EDI-B	4.64	5.43	0-32	.258***
EAQ-GD	11.52	4.31	5-25	.219***
EAQ-AC	53.10	8.85	14-65	-.048
EAQ-NPI	20.37	5.71	7-35	.111*
EAQ-CP	6.19	3.06	4-20	-.020
EAQ-IAO	12.32	3.72	4-20	.005

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Age = Current Age of Participants. AAS = Anxiety about Aging Scale (FOP = Fear of Old People. PC = Psychological Concerns. PA = Physical Appearance. FL = Fear of Loss). ISOS = Interpersonal Sexual Objectification Scale (BE = Body Evaluation. UESA = Unwanted Explicit Sexual Advance). SOQ = Self-Objectification Questionnaire. OBC-S = Objectified Body Consciousness Scale (S = Surveillance). ES = Empowerment Scale (SESE = Self-Esteem/Self-Efficacy. PP = Power-Powerlessness. CAA = Community Activism and Autonomy. OCF = Optimism and Control over the Future. RA = Righteous Anger). FIC = Feminist Identity Composite (AC = Active Commitment. SYN = Synthesis. REV = Revelation. EE = Embeddedness-Emanation. PA = Passive Acceptance). MBSRQ = Multidimensional Body-Self Relations Questionnaire (AE = Physical Appearance Evaluation. BAS = Body Areas). SATAQ = Sociocultural Attitudes Towards Appearance Questionnaire-3 (I = Information. P = Pressures. IG = Internalization-General. IA = Internalization-Attitude). EDI = Eating Disorders Inventory-3 (DT = Drive for Thinness. B = Bulimia). EAQ = Experiences with Aging Questionnaire (GD = General Dissatisfaction with aging. AC = Aging Changes. NPI = Negative Psychosocial Impact. CP = Cosmetic Procedures. IAO = Importance of Attractiveness when Older).

### Relationship between Age and Body Image Measures

To test the hypothesis that the relationship between age and body image will be non-significant indicating that women of all ages are equally likely to report body image satisfaction or dissatisfaction, Pearson  $r$  two-tailed bivariate correlations were calculated between age and measures of body image. At first, it appeared that body image satisfaction was negatively

correlated with age (MBSRQ-AE:  $r = -.139, p < .01$ ; MBSRQ-BAS:  $r = -.135, p < .05$ ) (See Table 2). However, since BMI was significantly correlated with age and body image measures (See Table 1), Pearson  $r$  two-tailed partial correlations were run to include BMI as a covariate. After including BMI as a covariate, body image satisfaction was no longer significantly correlated with age (See Table 3). Therefore, the hypothesis that women of all ages are just as likely to report either body image satisfaction or body image dissatisfaction was supported.

**Table 2 Descriptives and Intercorrelations Among Age and Measures of Body Image and Self-Objectification**

Variable	1	2	3	4	5
1. Age					
2. MBSRQ-AE	-.139**				
3. MBSRQ-BAS	-.135*	.833***			
4. SOQ	-.358***	-.003	-.077		
5. OBC-S	-.381***	-.126*	-.141**	.456***	
Mean	29.53	23.99	31.19	3.32	37.70
Standard Deviation	15.07	5.83	6.12	19.58	8.51

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Age = Current Age of Participants, range = 18-80. MBSRQ = Multidimensional Body-Self Relations Questionnaire (AE = Physical Appearance Evaluation, range = 7-35. BAS = Body Areas, range = 9-45). SOQ = Self-Objectification Questionnaire, range = -36-36. OBC-S = Objectified Body Consciousness Scale (S = Surveillance, range = 8-56).

**Table 3 Descriptives and Intercorrelations Among Age and Measures of Body Image and Self-Objectification with Body Mass Index as a Covariate**

Variable	1	2	3	4	5
1. Age					
2. MBSRQ-AE	.036				
3. MBSRQ-BAS	.050	.784***			
4. SOQ	-.357***	-.043	-.129*		
5. OBC-S	-.351***	-.231***	-.253***	.452***	
Mean	29.53	23.99	31.19	3.32	37.70
Standard Deviation	15.07	5.83	6.12	19.58	8.51

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Age = Current Age of Participants, range = 18-80. MBSRQ = Multidimensional Body-Self Relations Questionnaire (AE = Physical Appearance Evaluation, range = 7-35. BAS = Body Areas, range = 9-45). SOQ = Self-Objectification Questionnaire, range = -36-36. OBC-S = Objectified Body Consciousness Scale (S = Surveillance, range = 8-56).

#### Relationship between Age and Self-Objectification Measures

To test the hypothesis that the relationship between age and self-objectification will be non-significant indicating that women of all ages are equally likely to report high or low levels of self-objectification, Pearson  $r$  two-tailed bivariate correlations were calculated between age and measures of self-objectification. The relationship between age and self-objectification was negatively correlated (SOQ:  $r = -.358$ ,  $p < .001$ ; OBC-S:  $r = -.381$ ,  $p < .001$ ) (See Table 2). When Pearson  $r$  two-tailed partial correlations were calculated to include BMI as a covariate because it was significantly correlated with age and one form of self-objectification (habitual body monitoring) (See Table 1), both measures of self-objectification remained significantly negatively correlated with age (SOQ:  $r = -.357$ ,  $p < .001$ ; OBC-S:  $r = -.351$ ,  $p < .001$ ) (See Table 3). Therefore, the hypothesis that women of all ages are equally likely to report high or low levels of self-objectification was not supported.

## Structural Equation Modeling (SEM) Analysis Procedure

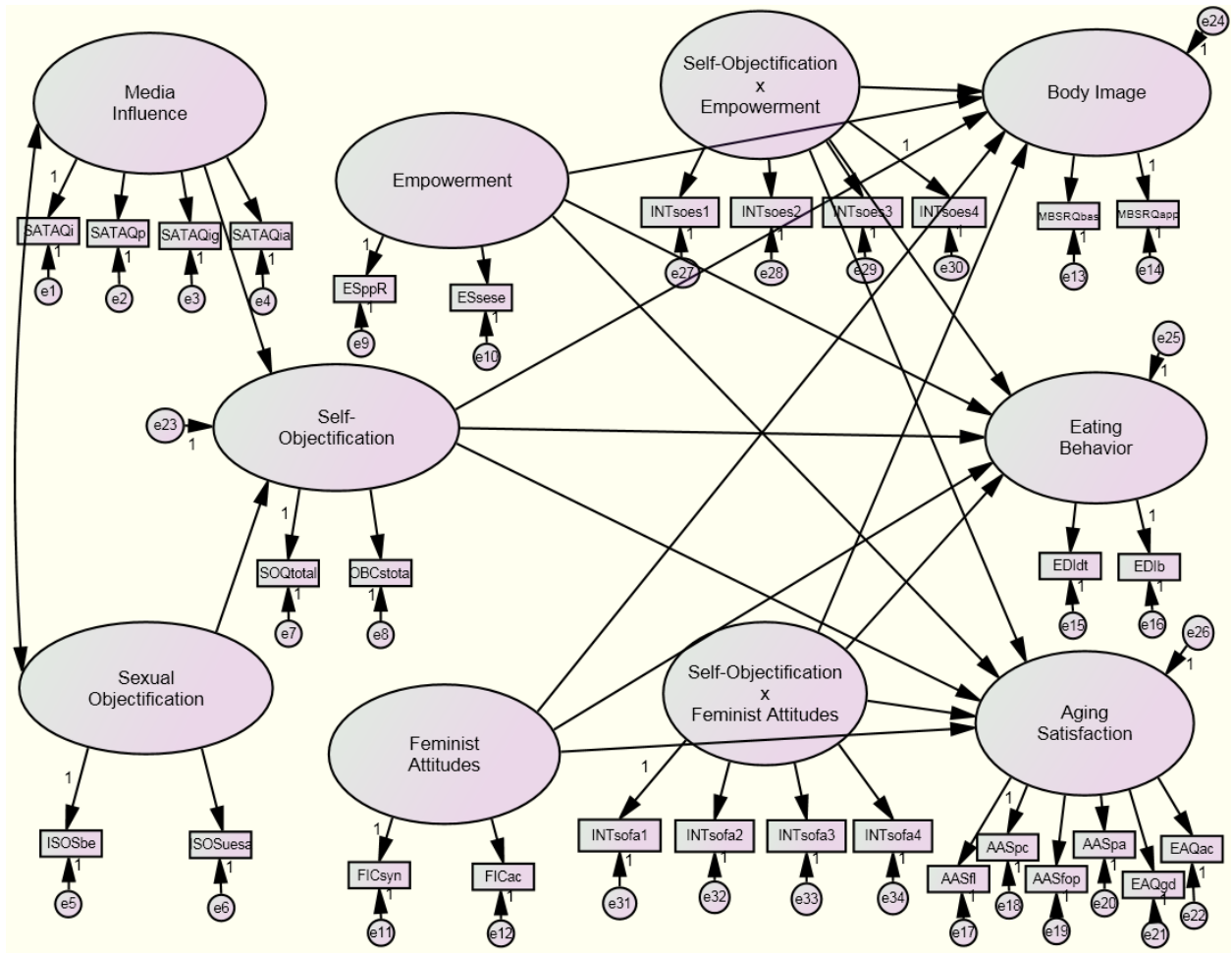
All SEM analyses were calculated using Analysis of Moment Structures (AMOS) Version 18 (Arbuckle, 2009). Covariance structure was analyzed using the Generalized Least Squares to Maximum Likelihood (GLS-ML) which uses simultaneous variable estimation (Kline, 1998). To examine overall model fit, the Root-Mean-Square Error of Approximation (RMSEA) was used with RMSEA values less than or equal to .10 (Kline, 1998) indicating acceptable fit of the model. Model fit was also examined by the Comparative Fit Index (CFI) with CFI values greater than or equal to .90 indicating acceptable fit of the model (Bentler, 1992). Overall model fit was further examined using the Parsimonious Fit Index (PFI (PRATIO)) with PFI (PRATIO) values greater than or equal to .60 indicating a parsimonious fit for the model (James, Mulaik, & Brett, 1982). Relative model fit comparisons were examined using the Akaike's Information Criterion (AIC) with parsimony increasing with decreasing AIC values (Tabachnick & Fidell, 2007). Due to sample size sensitivity and biases, Chi-square tests were not used to assess overall fit of the model (James et al., 1982).

SEM procedures were implemented by way of a two stage process. In the first stage, Exploratory Factor Analysis (EFA) procedures were used to create a measurement model. This measurement model allowed all latent constructs to correlate freely thus ensuring adequate measurement of the latent constructs (Anderson & Gerbing, 1988). Following the determination the measurement model consisted of adequately measured latent constructs, a second stage of analyses was examined using Confirmatory Factor Analysis (CFA) procedures. The CFA examined predetermined relationships among latent constructs that were hypothesized based

upon theory and previous research in this subject area. These confirmatory procedures were used to test overall fit of the hypothesized model (see Figure 1) and confirm hypotheses 1 through 3 below. This hypothesized model depicted in Figure 1 was tested by estimating the model's parameters using the sample data, and then using those parameters to produce the estimated population covariance matrix. Lastly, the sample covariance matrix was compared directly with the estimated population covariance matrix using CFA procedures. (Tabachnick & Fidell, 2001)

The following hypotheses were examined using SEM:

1. Sexual objectification experiences will be correlated with internalization of societal ideals of beauty/media influences.
2. Sexual objectification experiences and internalization of societal ideals of beauty/media influences will predict self-objectification.
3. Empowerment and feminist attitudes will moderate the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction, such that those women who have higher levels of empowerment and feminist attitudes will have more positive body image, less eating disturbance, and greater satisfaction with aging. Empowerment will account for a greater percentage of variance in these constructs compared to feminist attitudes.



**Figure 1 Hypothesized Full Structural Model with Moderations**

## The Measurement Model

The measurement model allows all latent constructs to correlate freely. The current study hypothesized a measurement model (Figure 2) with eight latent constructs each of which began with a range from two to six indicators in the initial measurement model. The latent construct of Sexual Objectification was indicated by two subscales from the Interpersonal Sexual Objectification Scale (ISOS), which were the Body Evaluation (BE) and Unwanted Explicit Sexual Advances (UESA) subscales. The latent construct of Media Influence was indicated by four subscales from the Sociocultural Attitudes Toward Appearance Questionnaire-3 (SATAQ-3), which were the Information (I), Pressures (P), Internalization-General (I-G), and the Internalization-Athlete (I-A) subscales. The latent construct Self-Objectification was indicated by the Self-Objectification Questionnaire (SOQ) and the Surveillance subscale of the Objectified Body Consciousness scale (OBC-S). The latent construct of Empowerment was indicated by two subscales of the Empowerment Scale (ES), which were the Power/Powerlessness (PP-R) and Self-Esteem/Self-Efficacy (SESE) subscales. The latent construct of Feminist Attitudes was indicated by two subscales of the Feminist Identity Composite (FIC), which were the Synthesis (SYN) and Active Commitment (AC) subscales. The latent construct of Body Image was indicated by the two subscales of the Multidimensional Body-Self Relations Questionnaire (MBSRQ), which were the Appearance Evaluation (AE) and the Body Areas Satisfaction (BAS) subscales. The latent construct Eating Behavior was indicated by two subscales of the Eating Disorder Inventory 3 (EDI-3), which were the Drive for Thinness (DT) and the Bulimia (B) subscales. Finally, the latent construct of Aging Satisfaction was indicated by four subscales



from the Anxiety about Aging Scale (AAS), which were the Fear of Old People (FOP), Psychological Concern (PC), Physical Appearance (PA), and Fear of Losses (FL) subscales and also indicated by two subscales from the Experiences with Aging Questionnaire (EAQ), which were the General Dissatisfaction with aging (GD) and Aging Changes (AC) subscales.

The hypothesized measurement model (Figure 2), did not demonstrate adequate fit with the data as indicated by one of the fit indices (CFI = .751; CFI  $\geq$  .90 = adequate fit). However, the other two fit indices (RMSEA = .052; RMSEA  $\leq$  .10 = adequate fit and PFI (PRATIO) = .784; PFI (PRATIO)  $\geq$  .60 = adequate fit) did indicate adequate fit of the initial measurement model. Due to discrepancies in the fit indices, the initial measurement model was respecified in order to achieve a better fitting measurement model.

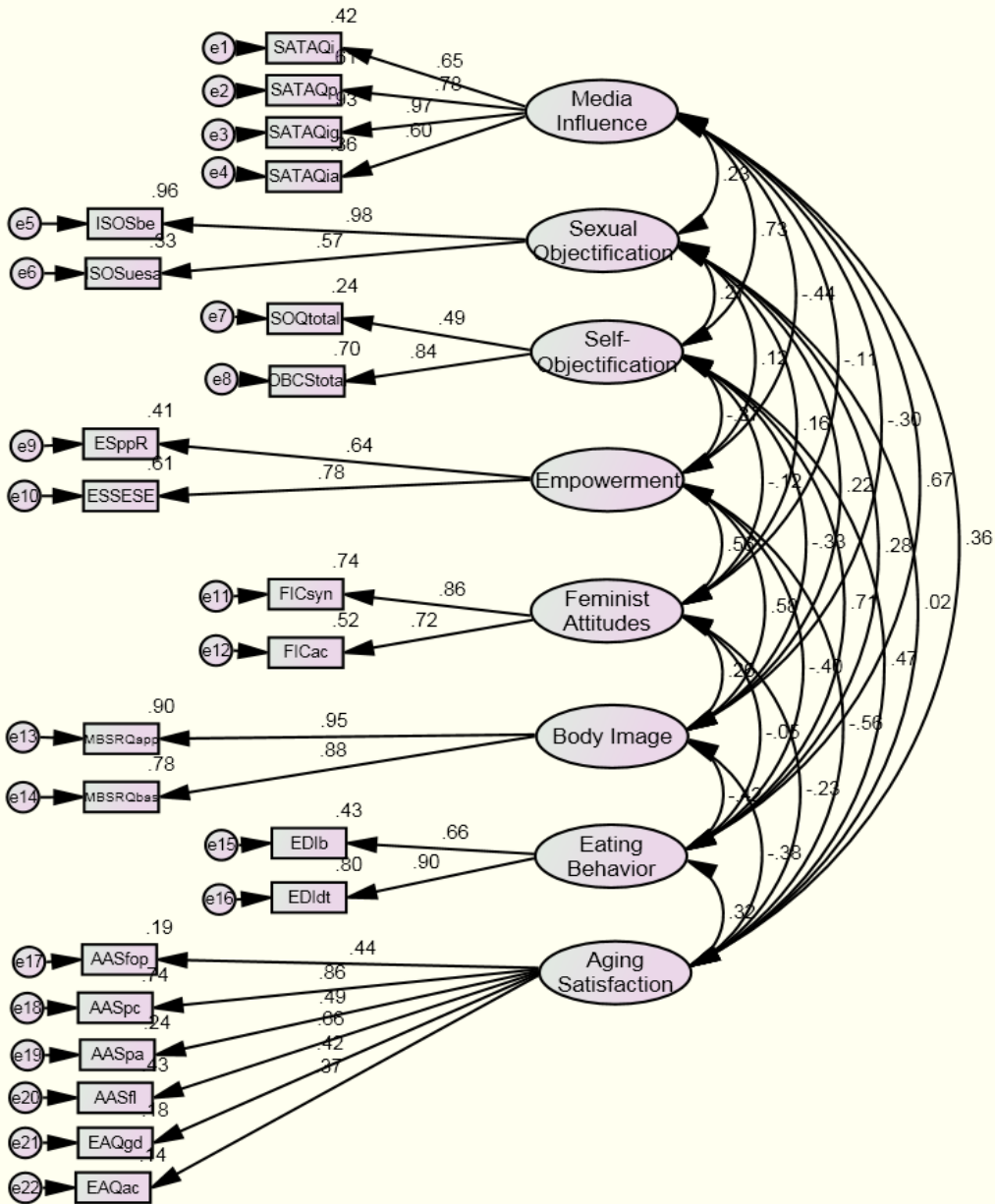


Figure 2 Hypothesized Measurement Model with Standardized Estimates

The measurement model was respecified (see Figure 3) based on analysis of the factor loadings and the modification indices. First, the factor loadings were examined to determine if each indicator loaded on the anticipated latent construct and that it did not load significantly on more than one latent construct. Manifest variables AASfop, AASpa, EAQgd, and EAQac were removed due to low or inconsistent factor loadings on the Aging Satisfaction latent construct. The ISOSbe manifest variable was also split into two manifest variables (ISOSbe1 = ISOS items 1-6 and ISOSbe2 = ISOS items 7-10) to improve the measurement of the latent construct.

Second, to further improve the fit of the measurement model during the respecification process, the modification indices were examined. The modification indices were used to determine if any of the error variances needed to be correlated (and if these possible correlations made sense theoretically) in order to better fit the data. Error variances e1 and e10, e1 and e17, e4 and e15, e8 and e13, e8 and e14, and e14 and e16 were each correlated with each other to achieve better model fit with the data.

The respecified measurement model (Figure 3) demonstrated adequate fit (RMSEA = .040; CFI = .906; PFI (PRATIO) = .690). Relative model fit comparisons were used to compare the initially hypothesized measurement model (AIC = 499.134) to the respecified measurement model (AIC = 330.435) with the decrease in the AIC value indicating a more parsimonious model had been created with the measurement model respecification process. As previously mentioned, Chi-square tests were not used to assess overall fit of the model due to sample size sensitivity and biases.

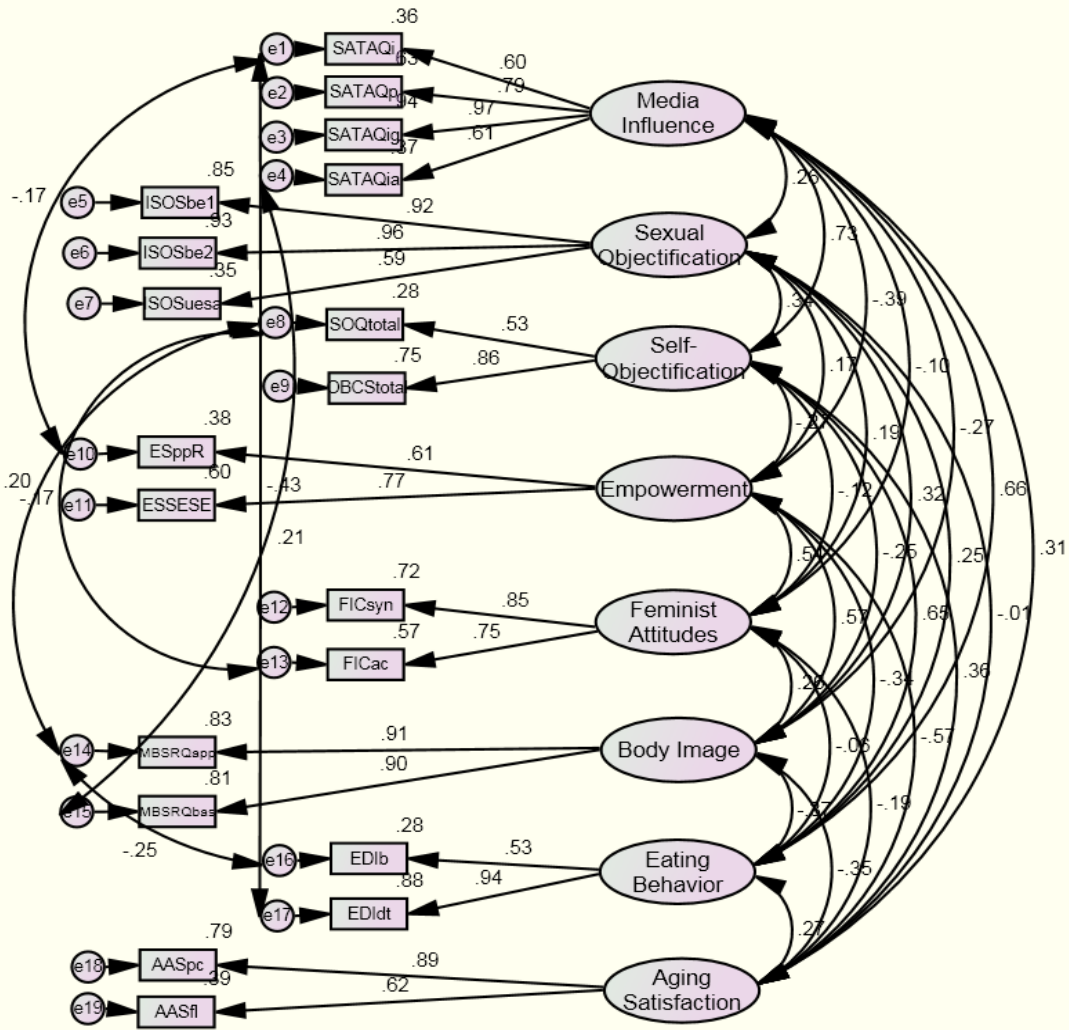
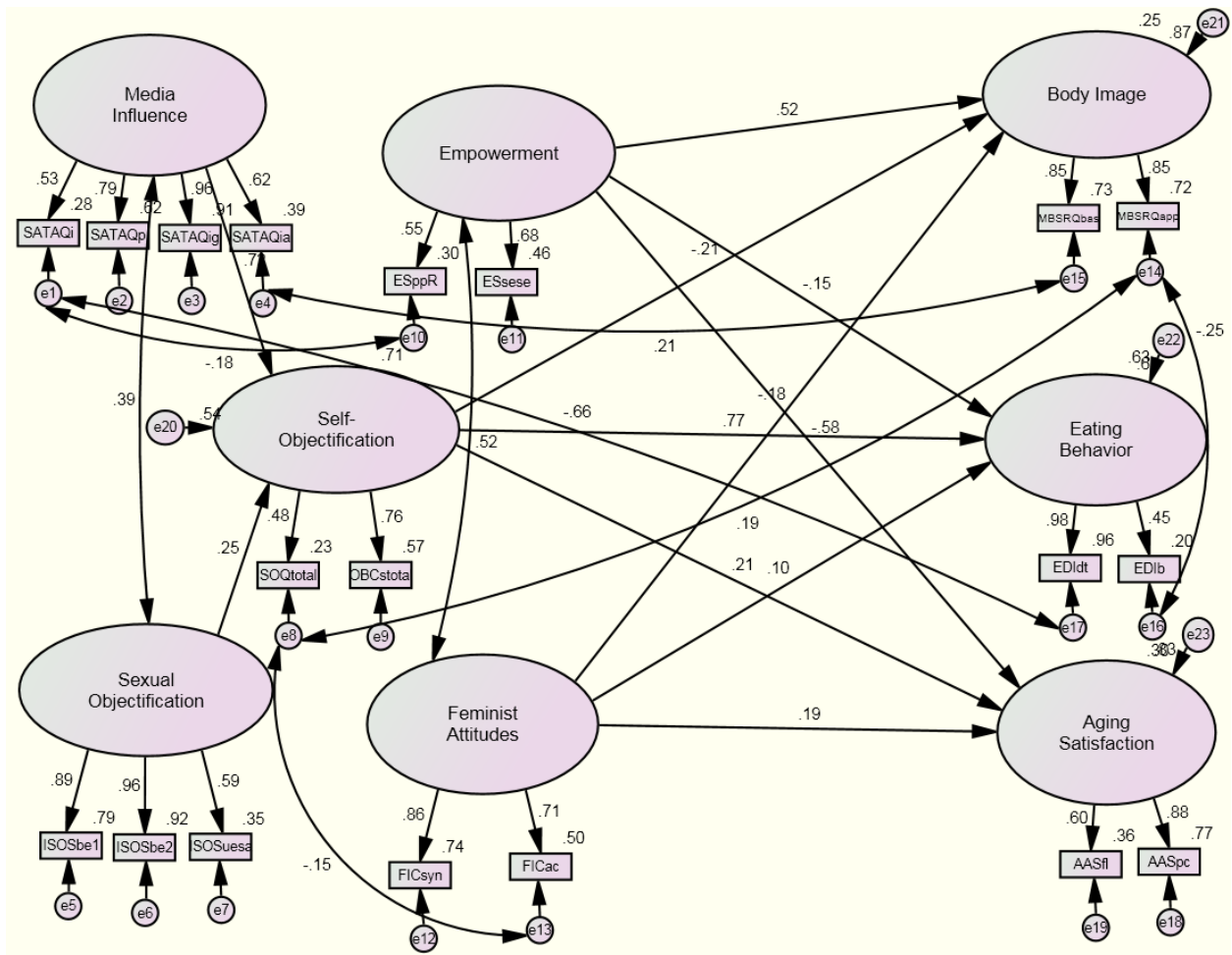


Figure 3 Respecified Measurement Model with Standardized Estimates

### The Structural Model

Upon determining that the respecified measurement model consisted of adequately measured latent constructs, a second stage of analyses was examined using Confirmatory Factor Analysis (CFA) procedures. The CFA examined predetermined relationships among latent constructs that were hypothesized based upon theory and previous research in this subject area. These confirmatory procedures were used to test overall fit of the hypothesized structural model (see Figure 4). The hypothesized structural model (Figure 4), demonstrated adequate fit with the data as indicated by two of the fit indices (RMSEA = .056; RMSEA  $\leq$  .10 = adequate fit; PFI (PRATIO) = .778; PFI (PRATIO)  $\geq$  .60 = adequate fit); however, one of the fit indices (CFI = .795; CFI  $\geq$  .90 = adequate fit) did not indicate adequate fit. Due to discrepancies in the fit indices, the hypothesized structural model was respecified in order to achieve a better fitting structural model.



**Figure 4 Hypothesized Structural Model with Standardized Estimates**

In order to respecify the hypothesized structural model (see Figure 5) to better fit the data and improve the model fit, both the modification indices and the unstandardized regression weight estimates were examined. First, the modification indices were inspected to determine if adding additional causal paths and/or correlational paths between latent constructs would improve the model fit. A new causal path was drawn from the latent construct Sexual-Objectification Experiences to the latent construct Body Image. Another causal path was drawn from the latent construct Body Image to the latent construct Eating Behavior. A correlational path was drawn between the latent construct Media Influences and the latent construct Empowerment. Another correlational path was drawn between the latent construct Sexual-Objectification Experiences and the latent construct Feminist Attitudes.

Second, to obtain better overall model fit during the respecification, the unstandardized regression weight estimates were examined and any non-significant causal and/or non-significant correlational paths were removed. The causal paths found to be non-significant and thus deleted from the model included the path from the latent construct Empowerment to the latent construct Eating Behavior, and the causal paths from the latent construct Feminist Attitudes to the latent constructs Eating Behavior, Body Image, and Aging Satisfaction.

The respecified structural model (Figure 5) demonstrated adequate fit (RMSEA = .042; CFI = .886; PFI (PRATIO) = .778). Relative model fit comparisons were used to compare the initially hypothesized structural model (AIC = 396.584) to the respecified structural model (AIC = 330.455) with the decrease in the AIC value indicating a more parsimonious model had been created with the structural model respecification process. As previously mentioned, Chi-square tests were not used to assess overall fit of the model due to sample size sensitivity and biases.

The respecified structural model now allows us to answer two of the SEM hypotheses. First and as hypothesized, sexual objectification experiences were positively correlated with internalization of societal ideals of beauty/media influences as noted by the significant path with a standardized estimate ( $\beta = .31, p < .001$ ) in Figure 5.

Second and as hypothesized, sexual objectification experiences and internalization of societal ideals of beauty/media influences both predicted self-objectification (see Figure 5). The path from Sexual-Objectification to Self-Objectification was significant ( $\beta = .20, p < .001$ ). The path from Media Influences to Self-Objectification was also significant ( $\beta = .77, p < .001$ ).



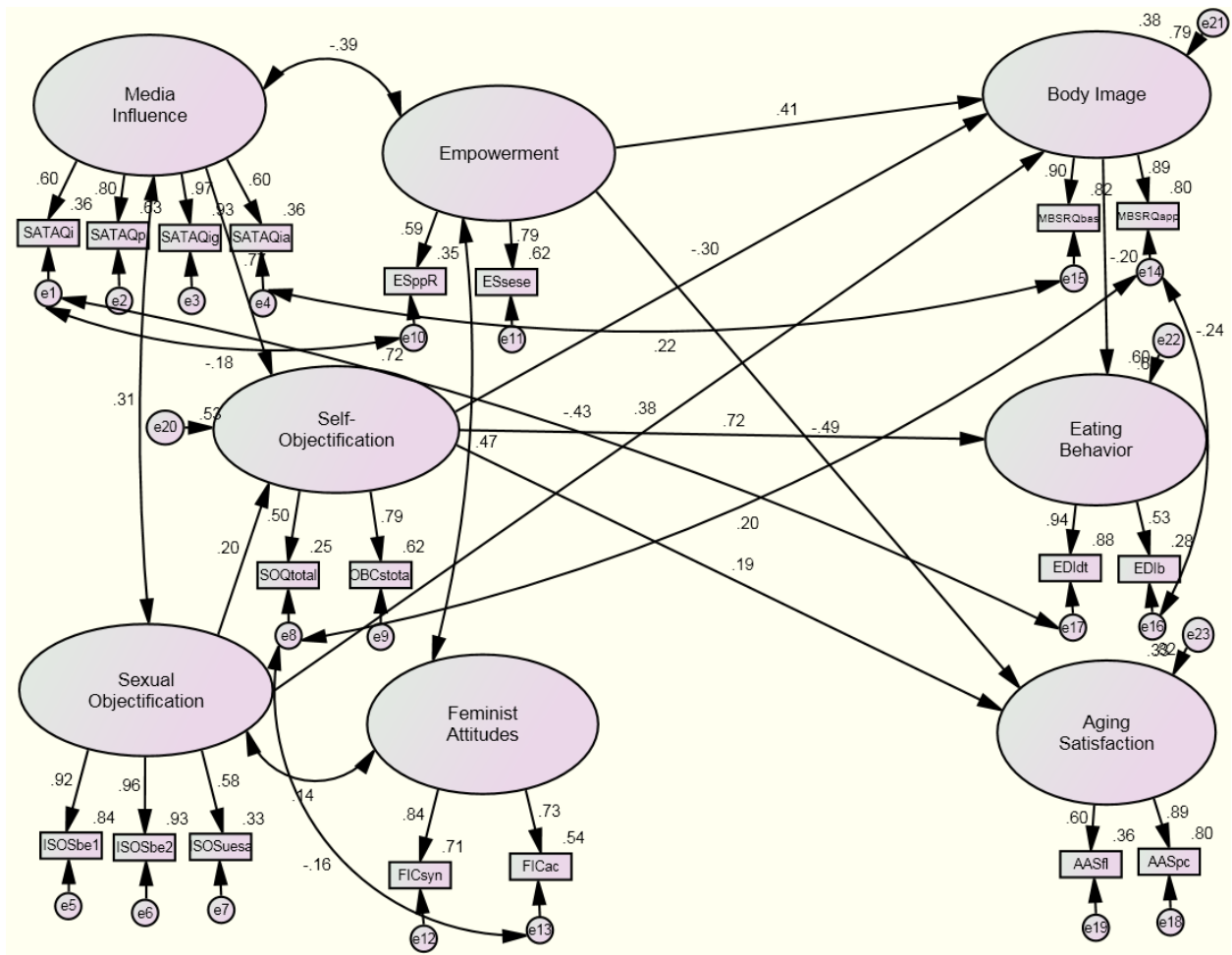


Figure 5 Respecified Structural Model with Standardized Estimates

### The Structural Model with Moderation

The final SEM hypotheses relate to the proposed moderators, which were empowerment and feminist attitudes. It was hypothesized that empowerment and feminist attitudes would moderate the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction, such that those women who had higher levels of empowerment and feminist attitudes would have more positive body image, less eating disturbance, and greater satisfaction with aging. It was further hypothesized that empowerment would account for a greater percentage of variance in these moderations compared to feminist attitudes.

As seen in Figure 5, contrary to initial predictions, once the structural model was respecified, the latent construct Feminist Attitudes no longer had significant causal paths with the latent constructs of Body Image, Eating Behavior, or Aging Satisfaction. Also contrary to initial prediction, the latent construct Empowerment no longer had a significant causal path with the latent construct Eating Behavior. However, the latent construct Empowerment was retained as a significant predictor of the latent constructs of Body Image ( $\beta = .41, p < .001$ ) and Aging Satisfaction ( $\beta = .49, p < .001$ ). Therefore, empowerment was the only moderator that could be examined in relation to any of these constructs. The hypothesis that empowerment would account for significantly more variance in these predicted relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction compared to feminist attitudes was not examined due to feminist attitudes not being retained as a moderator.

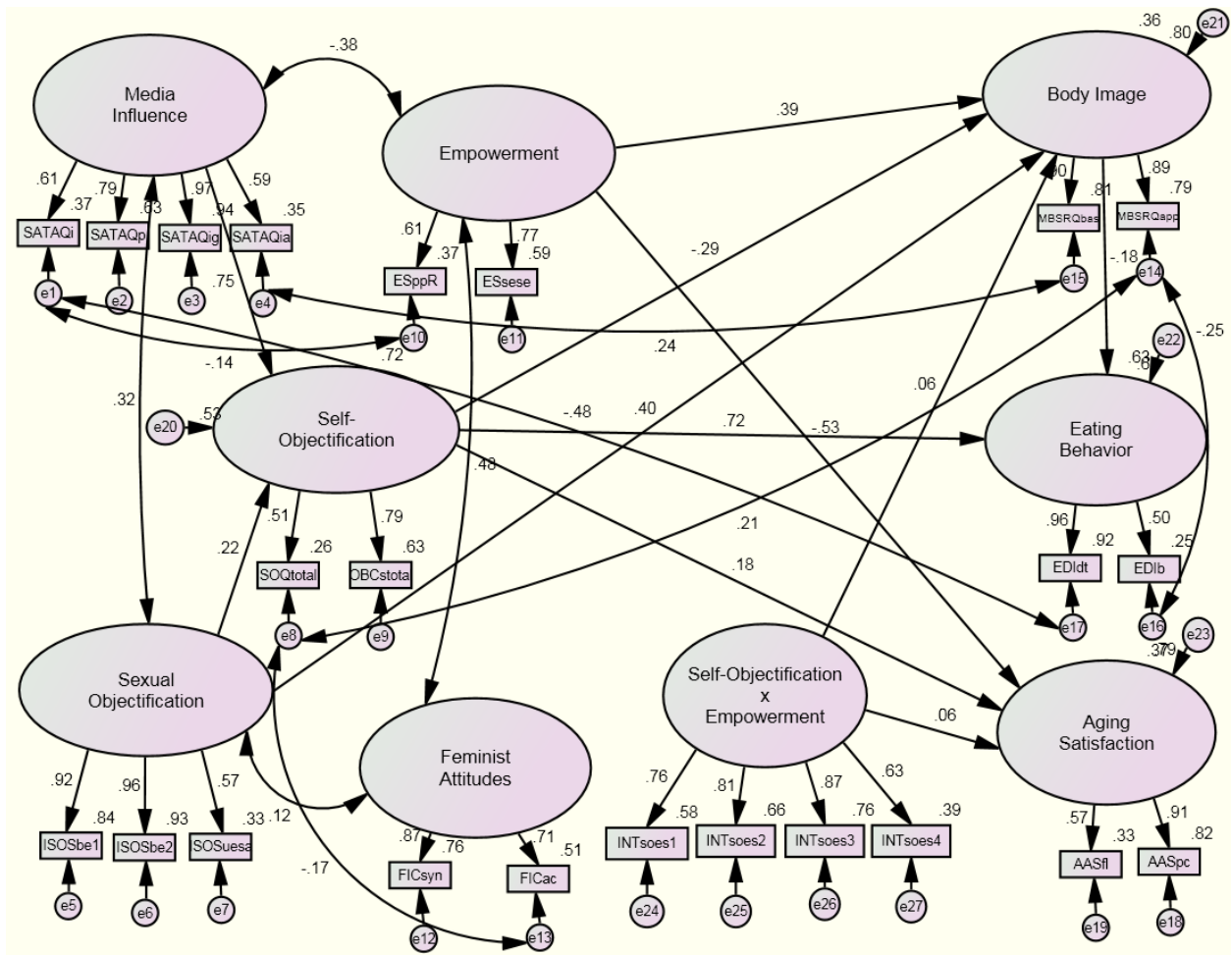
To examine empowerment as a potential moderator between self-objectification and body image and between self-objectification and aging satisfaction, a latent interaction construct was required. Marsh, Wen, and Hau (2004) recommended an unconstrained mean-centered method of calculating interaction terms for moderations in SEM models. These researchers suggest that both latent indicators be mean-centered prior to calculating the interaction terms. First, the latent construct of Self-Objectification was mean-centered by subtracting the mean separately for each of the manifest variables (SOQtotal and OBSstotal) from each participant's score on that variable to create new mean-centered variables for each of the manifest variables. Second, the latent moderator Empowerment was mean-centered by subtracting the mean separately for each of the manifest variables (ESppR and ESsese) from each participant's score on that variable to create new mean-centered variables for each of the manifest variables. This process centered each manifest measure so that it now had a new mean equal to zero. Centering eliminates the effects of multicollinearity between the predictor, moderator, and the interaction variables (Marsh et al., 2004).

After each of the variables involved in the moderation interaction was individually mean-centered, manifest indicators for the interaction term were calculated. One of the methods examined by Marsh and colleagues (2004) created manifest indicators for the interaction term by pairing together all possible cross products of the manifest indicators for the predictor and the moderator latent constructs. Each possible combination was then multiplied within each pairing to create individual manifest indicators for the latent interaction term. In the current respecified structural model with the moderations (see Figure 6), the manifest indicators for the latent interaction of Self-Objectification x Empowerment were calculated as follows: OBSstotal x

ESsese = INTsoes1, SOQtotal x ESppR = INTsoes2, OBSstotal x ESppR = INTsoes3, and SOQtotal x ESsese = INTsoes4.

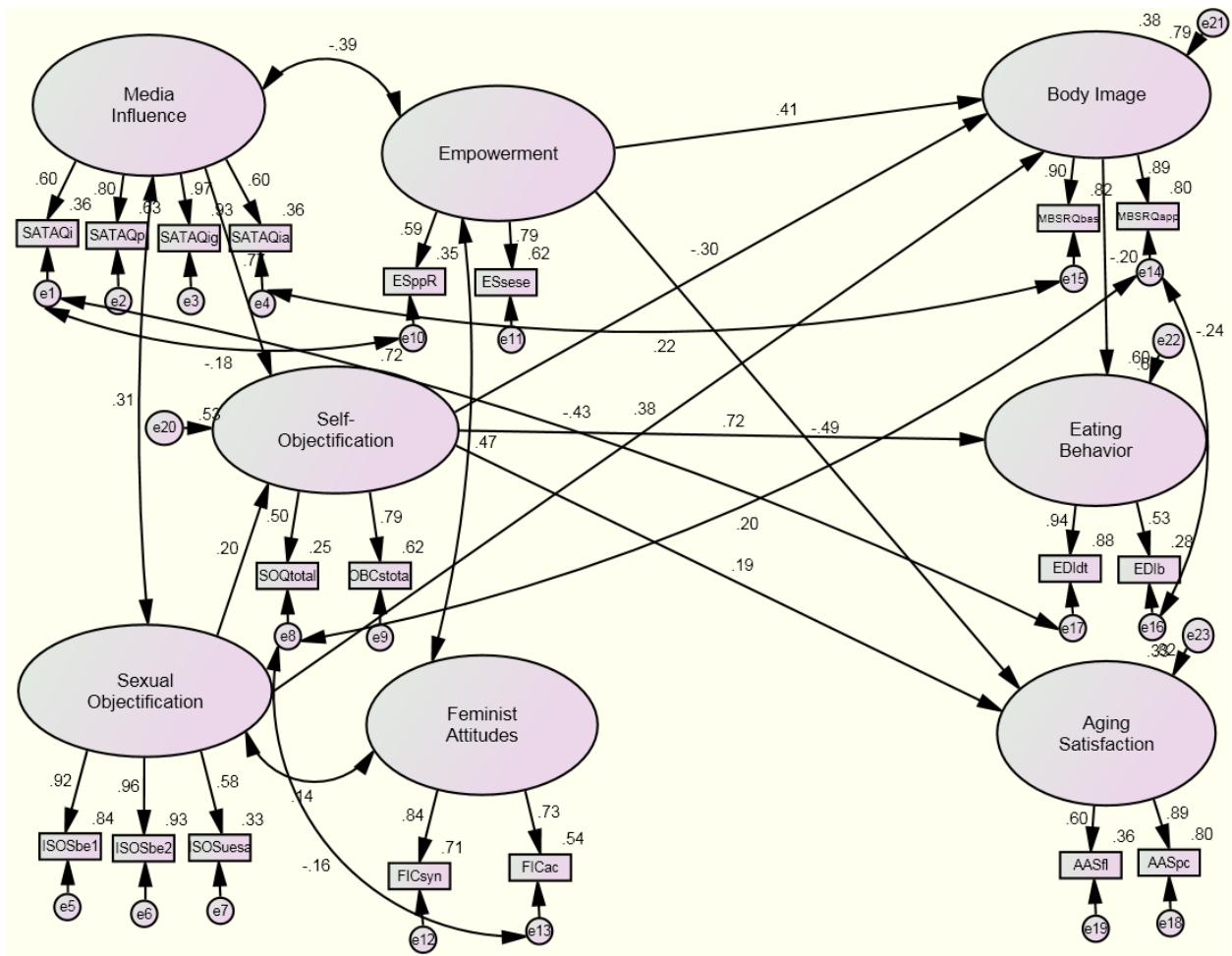
Once the latent interaction term Self-Objectification x Empowerment was created with the four manifest indicators, it was added to the structural model as an exogenous latent construct. A causal path was drawn between the latent interaction Self-Objectification x Empowerment and latent construct Body Image and a second causal path was drawn between the latent interaction Self-Objectification x Empowerment and latent construct Aging Satisfaction. Now the structural model depicted the moderations to be tested.

Finally, the structural model was run one last time with the moderator of empowerment included (see Figure 6). The standardized estimates for each of the paths of interest in the model were examined for the main effects and interaction effects of the moderation. First, the causal paths/main effects from latent construct Self-Objectification to latent constructs Body Image ( $\beta = -.29, p = .001$ ), Aging Satisfaction ( $\beta = .18, p = .011$ ), and Eating Behavior ( $\beta = .72, p < .001$ ) were all significant. Second, the causal paths/main effects from latent construct Empowerment to latent constructs Body Image ( $\beta = .39, p < .001$ ) and Aging Satisfaction ( $\beta = -.53, p < .001$ ) were also significant. Third, the causal paths from the latent interaction term/moderation Self-Objectification x Empowerment to the latent constructs Body Image ( $\beta = .06, p = .296$ ) and Aging Satisfaction ( $\beta = .06, p = .363$ ) were not significant. Therefore, empowerment was not a significant moderator in the relationships between self-objectification and body image, self-objectification and eating behavior, or self-objectification and aging satisfaction in the current study.



**Figure 6 Structural Model with Moderation and Standardized Estimates**

Furthermore, comparisons between the respecified structural model without the moderation (see Figure 5) and the structural model with the moderation (see Figure 6) indicated that the model with the moderation was a poorer fit to the data. The fit indices for the model without the moderation demonstrated adequate fit (RMSEA = .042; CFI = .886; PFI (PRATIO) = .778). In comparison, the fit indices for the model with the moderation demonstrated poorer fit as indicated by higher RMSEA (.055), lower CFI (.768), and lower PFI (PRATIO) (.826). Relative model fit comparisons were also used to compare the two models with the significantly lower AIC value for the model without the moderation (330.455) indicating a more parsimonious model compared to the higher AIC value for the model with the moderation (567.807). Once again, Chi-square tests were not used to assess overall fit of the model due to sample size sensitivity and biases. In conclusion, the model depicted in Figure 7 (which was the same model as Figure 5) was retained as the final structural model as it was the best fit for the data overall.



**Figure 7 Final Structural Model**

### The Hypothesized Full Model Compared with the Final Structural Model

Last, the initially hypothesized full structural model was compared to the final accepted structural model. Importantly, many components of the initially hypothesized overall model structure were retained. All eight of the initially hypothesized latent constructs (not including the additional two modification interaction terms) were retained by the model and these latent constructs notably remained in their hypothesized positions in the model. Most of the manifest variables that served as indicators of these eight latent construct were retained with the exception of four of the aging satisfaction manifest variables that were dropped during the measurement model respecification process. A few of the error terms for the manifest variables were correlated with each other error terms during the measurement model phase as well. As hypothesized, sexual objectification experiences were correlated with internalization of societal ideals of beauty/media influences. Consistent with hypotheses, sexual objectification experiences and internalization of societal ideals of beauty/media influences predicted self-objectification. Self-objectification predicted body image, eating behavior, and aging satisfaction as expected. Empowerment predicted body image and aging satisfaction as anticipated, but contrary to expectations empowerment did not predict eating behavior. Also contrary to hypotheses, feminist attitudes did not significantly predict body image, eating behavior, or aging satisfaction in the current study. A few new paths were added during the respecification of the structural model including: a causal path from sexual-objectification experiences to body image, a causal path from body image to eating behavior, a correlation path from media influences to empowerment, a correlation path from sexual-objectification



experiences to feminist attitudes, and a correlation path from empowerment to feminist attitudes. Contrary to hypotheses, the construct of feminist attitudes could not be tested as a moderator because none of the paths that it was predicted to moderate were retained in the model due to non-significance. It was possible to test empowerment as a moderator for two of the proposed paths (body image and aging satisfaction), but not for one other (eating behavior) originally proposed path. Ultimately, empowerment was not a significant moderator for any of these relationships in the current study. Therefore, the final structural model did not include any moderations, but did retain many of the originally hypothesized constructs and paths. Overall, the initially hypothesized structural model required minimal modifications during the respecification process, resulting in a final structural model that adequately represented the data.

## CHAPTER 4: DISCUSSION

The findings of the current study contribute to previous research in the areas of body image, eating behavior, and aging utilizing the theoretical framework of Objectification Theory (Fredrickson & Roberts, 1997). This discussion section breaks down the plethora of information that can be gleaned from the results in a systematic fashion that was derived by using both the original hypotheses and the important implications of the final structural model as guidelines. Clinical and research implications will be highlighted throughout.

First, the impact of Body Mass Index (BMI) is discussed in relation to the measured variables. Second, the relationship between age and body image and the relationship between age and self-objectification is addressed. Third, the lack of support for the proposed moderators (feminist attitudes and empowerment) as potential protective factors in the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction is discussed. Fourth, the hypothesized structural model is compared to the final structural model, and the support that the current study provides for Objectification Theory is described. Specifically, the predictive value of sexual-objectification experiences and media influences for the development of self-objectification, and then the predictive value of self-objectification for negative consequences related to body image, eating behavior, and aging satisfaction is examined. The final structural model that was created in this study is utilized to suggest clinical implications that can incorporate this knowledge into empirically supported prevention and intervention programs aimed at reducing body image and eating disturbance and promoting healthy aging across the adult lifespan. Finally, limitations of the current study and future research directions are delineated.

## The Impact of Body Mass Index

Previous research has clearly demonstrated that weight is one important part of body image for women (e.g., Cash & Henry, 1995; Fey-Yensan et al., 2002; Stevens & Tiggemann, 1998; Tiggemann & Lynch, 2001). Because of the importance of weight to body image and related constructs, the current study examined the relationships between Body Mass Index (BMI) and all measured variables. As anticipated, many of these relationships were significant providing further support regarding the importance of measuring BMI in body image research. Of particular interest were the relationships between BMI and aging satisfaction, BMI and self-objectification/habitual body monitoring, and BMI and eating behavior. See Table 1 for a detailed list of all variables and their correlations with BMI.

First, BMI was significantly related to ageing satisfaction. Women with higher BMIs were more likely to report dissatisfaction with aging in general compared to women with lower BMIs. Women with higher BMIs were also more likely to perceive aging as having a negative impact on their psychosocial functioning. This combination of both high BMI and older age is particularly difficult for women in Western society. Western society idealizes both youth and thinness, which may result in many aging women experiencing normative discontent (Rodin, Silberstein, & Striegel-Moore, 1984). Women who are classified as both “old” and “overweight/obese” are even further marginalized due to their inability to satisfy societal ideals in multiple domains (Fredrickson & Robert, 1997).

Second, BMI was examined in relation to self-objectification and habitual body monitoring. BMI was not significantly related to self-objectification indicating that women of all

BMI was equally prone to viewing their bodies as objects to be evaluated. However, BMI was negatively correlated with one specific form of self-objectification, namely habitual body monitoring. Interestingly, women with lower BMIs were more likely to engage in habitual body monitoring, involving the scanning of the outward appearance of their bodies, compared to women with higher BMIs. One possible explanation is that continuous monitoring may contribute to maintaining a lower BMI because any small change in weight would be noticed quickly, resulting in an increased likelihood of success with maintaining a lower weight and also a higher risk of disordered eating (e.g., Calogero et al., 2005; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tylka & Hill, 2004). On the other hand, it is also possible that women who weigh more may avoid scrutinizing the outward appearance of their bodies by covering themselves with clothing and/or focusing on exploring qualities other than their weight (e.g., relationships, hobbies, and personal achievements) due to a shift in values (Fredrickson and Roberts, 1997). This shift in values may occur as these women “relinquish the internalized observer’s perspective as her primary view of physical self” (Fredrickson & Roberts, 1997, p. 195) and no longer strive to meet societal ideals of beauty with regard to thinness.

Finally, BMI was significantly related to eating behavior. Women with higher BMIs were more likely to report both increased drive for thinness and increased bulimic behaviors. It is important to note that this was a non-clinical sample (Mean BMI = 24.34). In this non-clinical population, women with higher BMIs were more likely to report a desire to be thinner and also were more prone to engage in compensatory weight-loss strategies. These findings support previous research on the negative health and psychological consequences of body image and

weight dissatisfaction, including the development of unhealthy eating behaviors and eating disorders (e.g., Calogero, Davis, & Thompson, 2005; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tylka & Hill, 2004).

### Relationship between Age and Body Image Measures

One of the hypotheses of the current study was that the relationship between age and body image would be non-significant. A non-significant finding would indicate that women of all ages were equally likely to report body image satisfaction or dissatisfaction. In other words, neither older nor younger women would report higher (or lower) levels of body image dissatisfaction based solely on their age. This hypothesis was supported after including BMI as a covariate. The notion that body image dissatisfaction is equally present across age cohorts, as opposed to just being problematic for young women, has garnered significant support in the literature (e.g., Grippo & Hill, 2008; Hetherington & Burnett, 1994; Tiggemann, 2004; Tiggemann & Lynch, 2001). Therefore, the current finding serves as a consistent addition to the research on aging and body image.

The empirical research evidence establishes that women of all ages experience body image concerns (e.g., Grippo & Hill, 2008; Hetherington & Burnett, 1994; Tiggemann, 2004; Tiggemann & Lynch, 2001). Hence, it is essential that body image researchers make significant efforts to include middle-aged and older women in both research studies and clinical interventions. One of the strengths of the current study was the age diversity of the sample, which included participants ranging in age from 18- to 80-years-old. Many other research

studies use convenience sampling using primarily college undergraduates, but this only serves to further marginalize older women. Including middle-aged and older women (when appropriate to the research hypotheses) can provide meaningful knowledge for understanding body image in women across the lifespan. Longitudinal studies could uncover mechanisms that may explain how and why body image may change over time in the same individual. Cross-sectional research may shed light on the impact of societal and/or media trends that may have impacted particular cohorts or generations of women differentially. Taken together, a broader lifespan approach to body image research could uncover efficacious intervention techniques and programs to minimize the negative consequences of body image disturbance for future generations of women.

#### Relationship between Age and Self-Objectification/Habitual Body Monitoring

The current study hypothesized that the relationship between age and self-objectification/habitual body monitoring would be non-significant. A non-significant finding would indicate that women of all ages were equally likely to report high or low levels of self-objectification/habitual body monitoring. The relationships between age and self-objectification and age and habitual body monitoring were both negatively correlated. These relationships remained significant even after BMI was included as a covariate. Contrary to hypotheses, older women tended to self-objectify less compared to younger women. The research literature on the relationship between age and self-objectification/habitual body monitoring has been mixed, with some studies finding that self-objectification remains stable across age cohorts (Grippio & Hill,

2008; Hill, 2003) and other studies finding (as the current study found) that self-objectification/habitual body monitoring decreases with age (e.g., Cash et al., 1986; Clarke, 2001; McKinley, 1999; Tiggemann, 2004; Tiggemann & Lynch, 2001).

One possible explanation for the finding that younger women were more likely to view their bodies as objects compared to older women is the cohort effect. Younger cohorts of women have been inundated by various forms of media (e.g., television, magazines, and the internet) since a very early age, and these media influences have continuously promoted the thin ideal (Heinberg, Thompson, & Stormer, 1995). Internalization of societal ideals of beauty is linked to self-objectification (Fredrickson & Roberts, 1997) and the sheer volume of blatant media messages focusing on the female body as an object to be evaluated that younger generations of women have faced is unprecedented in previous generations of women. If less objectification in the media results in less self-objectification, then prevention and intervention programs (e.g., *Girl Talk*: McVey et al., 2003; *Go Girls*: Piran et al., 2000; *Every BODY is a Somebody*: Seaver et al., 1997; *Full of Ourselves: Advancing Girl Power, Health, and Leadership*: Sjostrom, 2005; Steiner-Adair et al., 2002) that include media literacy components may be useful in providing a buffering effect that may reduce internalization of societal ideals of beauty. These prevention and intervention programs may help to combat the deleterious impact of current media bombardment on girls and women.

A second potential reason for older women having lower levels of self-objectification compared to younger women is that as they have aged they are less likely to directly experience sexual objectification experiences. Older women are less likely to report “objectifying gazes” and personal objectification experiences of others looking at their body parts in an overtly

sexualized manner (McKinley, 1999; Tiggemann & Lynch, 2001). Since sexual-objectification experiences are linked to self-objectification (Fredrickson & Roberts, 1997), less objectification by others may translate to less self-objectification. Eliminating the objectification of women in Western society is a lofty goal; however, over time psychoeducation on the negative consequences of these experiences, along with the development of adaptive coping mechanisms for dealing with these experiences, may begin to make a noticeable impact on reducing self-objectification in women of all ages.

A third possibility is that as women age they begin to “relinquish the observer’s perspective” of their bodies and shift their focus away from their outward appearance (Affleck, 2000; Fredrickson & Robert, 1997; Grippo & Hill, 2008). Older women may gauge their self-worth from other things that do not involve their physical appearance and thus self-objectify their bodies less (Affleck, 2000; Orbach, 1978; Wolf, 1991). If this notion is accurate, prevention and intervention programs that develop and maintain positive self-esteem that is unrelated to appearance (e.g., *Girl Talk*: McVey et al., 2003; *Go Girls*: Piran et al., 2000; *Every BODY is a Somebody*: Seaver et al., 1997; *Full of Ourselves: Advancing Girl Power, Health, and Leadership*: Sjostrom, 2005; Steiner-Adair et al., 2002) are likely to be efficacious because they may move forward in time the natural coping response of letting go of the “observer’s perspective” that is more typically seen in older women as they age. This shift away from outward appearance that often occurs naturally as women age may also be important to evolution. An evolutionary perspective may explain the benefits to both middle-aged women and the human species of women shifting away from focusing on attracting a mate towards



activities that promote psychological and physical health for the woman herself, for her family, and for her children.

### Feminist Attitudes as a Moderator and Protective Factor

One of the potential moderators proposed in the current study was feminist attitudes. It was hypothesized that feminist attitudes would serve as a protective factor by decreasing the strength of the relationships between self-objectification and a few of the related negative psychological and physical health consequences for women in Western society. The hypothesis that feminist attitudes would moderate the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction, such that women with stronger feminist attitudes would have more positive body image, less eating disturbance, and greater satisfaction with aging was not supported in the current study. In fact, possessing feminist attitudes was not a statistically significant predictor of body image, eating behavior, or aging satisfaction in the structural model, and thus was not tested as a moderator.

Previous research has demonstrated mixed results regarding feminist attitudes as a protective factor in relation to body dissatisfaction (e.g., Cash et al., 1997; Grippo & Hill, 2008; Ojerholm & Rothblum, 1999; Peterson et al., 2008; Peterson et al., 2006; Rubin et al., 2004; Tiggemann and Stevens, 1999) and eating disturbance (e.g., Doninger, et al., 2003; Guille & Chrisler, 1999; Sabik & Tylka, 2006; Zone 1998). One possible explanation for these variable findings, and the likely explanation for the lack of support for feminist attitudes as a predictor or

moderator in the current study, can be understood from a developmental approach. In Western culture, girls are exposed to societal ideals of beauty and begin to self-objectify their bodies at a very early age (e.g., Anesbury & Tiggemann, 2000; Davidson et al., 2000; Tiggemann & Wilson-Barrett, 1998). Years later when these young girls develop the advanced cognitive capacities that are needed to fully recognize and comprehend societal messages regarding gender roles and stereotypes and their implications, the early messages regarding female beauty are already deeply internalized due to repeated reinforcement, and thus are extremely resistant to change (Cash et. al., 1997). As seen in various theoretical approaches to psychotherapy (e.g., Cognitive-Behavioral Therapy and Motivational Interviewing), change involves cognitive, behavioral, and emotional shifts and takes time, high motivation, and repeated reinforcement. Related to this point, Grippo and Hill (2008) received interesting informal comments following the completion of their study from female participants who self-identified as “feminists,” yet noted a disconcerting disconnect between the intellectual and emotional components of their own body image. More specifically, these women reported feeling dissatisfied with their bodies, yet simultaneously reported feeling that they should not feel dissatisfied with their bodies because of their strong feminist identity (Grippo & Hill, 2008). This dissonance highlights how ingrained and resistant to change societal ideals of beauty and self-objectification are for women.

Another possible explanation for the lack of support for feminist attitudes as a predictor or moderator in the current study was the how it was measured. The Synthesis and Active Commitment subscales of the Feminist Identity Composite (*FIC*; Fischer, Tokar, Mergl, Good, Hill, & Blum, 2000) were used because they represent the more advanced of the feminist identity developments stages (Fischer et al., 2000). Using this detailed measure that considers the stage

of feminist identity development was thought to be a more appropriate choice compared to other measures that only capture this construct unidimensionally. The FIC was also a much more thorough selection compared to some studies that simply ask the question “Are you a feminist?” and require only a yes/no response. The main issue related to the choice of the FIC that may have resulted in underestimating the possible influence of this construct, is the fact that it does not specifically measure feminist attitudes in relation to body image, eating behavior, and aging satisfaction. This general measure may be a good way of identifying women who subscribe to feminist attitudes in general; however, some women may take these attitudes a step further and translate them into a feminist view of their own body, whereas other women may not. Tapping into and measuring this “translation” may be where the protective nature of feminist attitudes lie.

Overall, feminist theory is useful in the conceptualization of how self-objectification may lead to the development and maintenance of body image dissatisfaction, eating disturbance, and aging dissatisfaction. However, it appears that feminist identity (measured as general feminist attitudes) does not consistently predict nor protect women from self-objectification and the associated negative psychological and physical consequences of viewing the female body as an object. Future research is needed regarding the measurement of feminist attitudes specifically in relation to body image and also on how to merge the intellectual and emotional disconnect for feminist women in relation to their bodies.

### Empowerment as a Moderator and Protective Factor

The second potential moderator that was proposed in the current study was empowerment. It was hypothesized that empowerment would serve as a protective factor by decreasing the strength of the relationships between self-objectification and a few of the related negative psychological and physical health consequences for women in Western society. The hypothesis that empowerment would moderate the relationships between self-objectification and body image, self-objectification and eating behavior, and self-objectification and aging satisfaction, such that those women who reported higher levels of empowerment would have more positive body image, less eating disturbance, and greater satisfaction with aging was tested, but ultimately was not supported in the current study. Although empowerment was not supported as a moderator variable, empowerment was retained as a significant predictor of both body image and aging satisfaction in the structural model.

Given that empowerment has been part of feminist interventions and conceptualizations, it is surprising that researchers have not examined this construct more frequently. In 2008, Peterson and colleagues demonstrated that empowerment was more predictive of body image and eating disturbance than feminism. Expanding that important research, the current study was the first study to empirically examine empowerment in relation to body image, eating behavior, and aging satisfaction. Possible reasons for the lack of support for empowerment as a moderator include the specific components utilized to represent this broad construct, the limitations of the Empowerment Scale (ES) itself, and once again the impact of early exposure to and internalization of societal ideals of beauty.

The first potential explanation relates to the selection of the components to represent the broad construct of empowerment. Based on feminist theory, a decision was made to use the power/powerlessness and self-esteem/self-efficacy subscales of the Empowerment Scale as these components were thought to be most promising for serving as a moderator. When women experience pressure to conform to gendered societal expectations and unrealistic ideals of beauty, they may feel a sense of powerlessness (Anleu, 2006; Wolf, 1991). Taking on this observer's perspective of one's own body, along with the associated attempts to perfect one's physical appearance, may lead to an endless quest to achieve an unattainable goal. This process may contribute to an overall sense of psychological discomfort or depression, decreased self-esteem, and decreased self-efficacy as one continues to fight a losing battle with one's own body (Fredrickson & Roberts, 1997). Both power/powerlessness and self-esteem/self-efficacy still remain important components of empowerment since they were shown to significantly predict both body image and aging satisfaction in the current study. However, other components of empowerment may need to be added from a variety of possible sources, including the ES, other empowerment measures if available, or newly identified components that have not been previously measured in existing empowerment scales.

Along these same lines, the empowerment measure that was used in the current study (*ES*; Rogers, Chamberlin, Ellison, & Crean, 1997) was validated on people who were receiving mental health services and may not be as accurate in capturing this construct in a non-clinical sample. The *ES* looks at general thoughts and feelings of empowerment and is not specific to the domains of interest of the current study. To date, an empowerment scale that measures empowerment in relation to body image, eating behavior, and/or aging satisfaction is not

available. An empowerment scale that specifically targets these areas might find support for empowerment as a moderator.

Finally, a possible explanation for the lack of support for empowerment as a moderator in the current study is the impact of early exposure to and internalization of societal ideals of beauty. Similar to feminist attitudes, psychological empowerment is developed later in childhood or adolescence following years of exposure to and reinforcement of societal ideals that emphasize inordinate value of physical appearance. Many women may feel a strong sense of empowerment in non-appearance areas of their lives, yet due to the intractable nature of internalization of societal ideals, they may still be disturbed by the lack of control they have over their own bodies. Women who look towards their outward appearance for their sense of self-worth will also experience mounting levels of powerlessness as they age and their quest for youth and beauty becomes even further out of the realm of possibility (Morell, 2003). Even though empowerment was not supported as a moderator, this study took an important first step towards understanding how to use empowerment in predicting and possibly even reducing the impact of self-objectification on body image, eating behavior, and aging.

#### Model of Sexual Objectification, Media Influence, Self-Objectification, Body Image, Eating Behaviors, and Aging Satisfaction

The main purpose of the current study was to create and test a model, based on Objectification Theory (Fredrickson & Roberts, 1997), of the complex interrelationships between the constructs of sexual-objectification, media influences, self-objectification, body image, eating behavior, and aging satisfaction in women of all ages. One related goal was to include

both feminist attitudes and empowerment as moderators in this model; however, these moderations were not supported. Despite the fact that the moderators were not retained, the final model adequately fit the data and offers significant support for Objectification Theory. Therefore, the final model that was created in the current study is an important and very exciting step forward in the body image and aging research literature.

In order to fully comprehend the significance of the final model and how it supports and expands upon Objectification Theory, the process involved in creating and testing the model is reviewed and discussed in relation to the findings of the current study. As can be seen by looking back at the originally hypothesized full structural model with the moderations (Figure 1), the constructs of interest were put together into a complex structural model that depicted both causal and correlational pathways. These interconnections were based on Objectification Theory and previous research on body image. The next step involved ensuring that all the constructs were properly measured by creating and testing a measurement model. Then, this measurement model was turned into a structural model, which represented the hypothesized directions of the predictive relationships between the constructs. This structural model was then tested and respecified to create the final structural model (Figure 7), which adequately fit the data of the current study.

Given the high complexity level of the initially hypothesized structural model, it actually ended up being a very good overall model structure that was able to be respecified with relatively minimal modifications. In addition to the originally proposed paths, sexual-objectification experiences directly predicted body image. Objectification Theory describes how sexual-objectification experiences may lead to self-objectification, which in turn may lead to body

image dissatisfaction (Fredrickson & Roberts, 1997). Based on the model created in the current study, it now appears that self-objectification may not be an absolutely necessary step in all cases. It seems that some experiences of sexual-objectification may be so impactful that they predict a change in body image. These sexual-objectification experiences may include overt acts (e.g., inappropriate touching, sexual harassment) that may instantly change how a woman perceives her own body, even if these women do not self-objectify their bodies in general. Another causal path that was added to the original model during respecification showed that body image predicted eating behavior. This relationship has been well supported in previous research (e.g., Calogero et al., 2005; Fey-Yensan et al., 2002; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tiggemann & Lynch, 2001; Tylka & Hill, 2004) and it was an oversight that this path was not included in the original model. During the respecification process, hypothesized causal paths that were non-significant were deleted from the model. As discussed in detail previously, feminist attitudes were not supported as a significant predictor of eating behavior, body image, and aging satisfaction. Empowerment was also not supported as a significant predictor of eating behavior.

Using the final structural model (Figure 7), the remaining hypotheses of the current study are now discussed. As hypothesized, sexual objectification experiences were correlated with internalization of societal ideals of beauty/media influences. Women who reported higher levels of internalization of societal ideals of beauty in the media were more likely to report higher levels of sexual-objectification experiences. This is not surprising given that previous research has shown that the media in Western culture objectifies the female body (e.g., Fredrickson & Roberts, 1997; McKinley & Hyde, 1996; Thompson et al., 2004).



The final structural model begins with explaining how media influence/internalization of societal ideals of beauty and sexual-objectification predict self-objectification. Consistent with hypotheses, sexual-objectification experiences and internalization of societal ideals of beauty/media influences both predicted self-objectification. These findings are in line with and support the theory of how self-objectification develops (e.g., Hill, 2003; McKinley & Hyde, 1996; Moradi et al., 2005). Fredrickson and Roberts (1997) theorized that when women (from a very early age) continuously encounter objectification in both their everyday lives and in the media, they begin to take on a observer's perspective of their own bodies and thus perceive their bodies as an object to be looked at and evaluated. The current study found support for this developmental process as the first part of a larger model.

Next the final structural model illustrates what happens once self-objectification is developed. As hypothesized, self-objectification predicted body image, eating behavior, and aging satisfaction. These predictive relationships are consistent with previous research on the detrimental consequences of self-objectification for women including body dissatisfaction (e.g., Noll, 1997; Prichard & Tiggemann, 2005, Tiggemann & Lynch, 2001; Tiggemann & Slater, 2001), eating disturbance (Calogero et al., 2005; Greenleaf & McGreer, 2006; Prichard & Tiggemann, 2005; Tiggemann & Kuring, 2004; Tiggemann & Lynch, 2001; Tylka & Hill, 2004), and aging dissatisfaction (Clarke, 2001, Hurd, 2000). Therefore, the model that was created in the current study provides empirical evidence that further emphasizes the dire need to find prevention and intervention techniques and programs to intervene and alter these predictive paths. One logical intervention point involves preventing or reducing the development of self-objectification in the first place. A second intervention point, and the one examined

unsuccessfully in the current study, involves finding protective factors that intervene between self-objectification and the variety of negative health consequences it creates for women of all ages. In conclusion, the current study is important because it utilized Objectification Theory as a framework for testing a model, which resulted in findings that strengthened the empirical rationale for continued research towards creating evidence-based clinical prevention and intervention programs.

### Limitations and Directions for Future Research

The results of the current study must be interpreted within the context of its limitations. One limitation relates to diversity and generalizability. The participants were diverse with regard to age due to significant efforts to recruit women of all ages; however, the sample was more homogeneous with regard to other important characteristics. Participants were all women and the majority identified Caucasian (77.6%) and heterosexual (95%). Since participants were recruited at a large university campus in the Southeast, they are also more likely to have higher levels of education and higher socio-economic status. Testing of the model created in the current study on a more diverse sample is needed in future research.

A second limitation of this study is the cohort effect. Women of all ages participated, but none of these women were followed longitudinally. As with any cross sectional research, any age differences are impossible to separate from the generational effects of growing up during different time periods. This is particularly problematic for many of the constructs (e.g., media exposure influences/internalization, feminist attitudes, empowerment) that were measured in this

study that may be sensitive to generational differences. Future research should utilize longitudinal designs when feasible.

A third limitation has to do with measuring aging satisfaction in women of various ages. Satisfaction with aging may be a current issue for older women, yet is a future issue for younger women. Younger women report their perceptions related to how they think they may feel about aging, but they are unable to predict with certainty. Future research should develop and validate aging satisfaction measures that are applicable to a broad age spectrum and/or develop parallel measure of aging satisfaction for more direct comparison.

A fourth limitation is that this study collected data utilizing an online survey. Although online research has become commonplace in recent years, it still limits access to some participants. Women who are less technologically savvy may be less likely to want or even be able to participate. Another potential problem with online research is that there is no way to verify the identity or demographic characteristics of the participants and it must be assumed that they are who they say they are with regard to age, gender, etc. unless anonymity is compromised via webcam etc. (although this might be a possible solution). Future research should compare online survey formats (with and without the use of webcams) to traditional paper formats.

Additional limitations that were discussed in previous sections include the need for measuring the constructs of empowerment and feminist attitudes in relation to body image, and the difficulty with changing long-standing and strongly internalized societal ideals in an adult sample. Future research is needed in these areas to first find empirically supported protective factors that specifically relate to changing body image and to then discover ways to apply these protective factors to change thoughts and behaviors in an adult sample. In conclusion, it is

crucial that both researchers and clinicians combine their efforts towards these important goals so that future generations of women do not continue to struggle with both the physical and psychological consequences of objectification in Western society.

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