A TEST AND EXTENSION OF AN ACCEPTANCE MODEL OF INTUITIVE EATING WITH YOUNGER AND OLDER WOMEN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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An acceptance model of intuitive eating has been empirically supported with traditionally-aged female undergraduates (Avalos & Tylka, 2006). The present study extends this research by testing its tenets with women aged 18-24 (n=307) and women aged 25-79 (n=381). Latent variable structural equation modeling (SEM) with multiple group analysis was used to test model invariance and evaluate the proposed pathways among this model's core constructs (general unconditional acceptance, body acceptance from others, body function, body appreciation, intuitive eating). Findings were consistent for both groups of women. After controlling for body mass, general unconditional acceptance (i.e., perceived social support) directly predicted body appreciation by others. Body appreciation by others predicted body function and body appreciation. Body function, then, predicted body appreciation and intuitive eating. Finally, body appreciation predicted intuitive eating for participants of the present study. Analyses also indicated model invariance. These results replicated and extend findings of Avalos and Tylka (2006), suggesting that the acceptance model extended to women older than traditionally-aged undergraduates; however, the core constructs may be associated at somewhat different strengths for older and younger women.
Dedicated to my amazing blessings- my family, friends, mentors, and especially my husband
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Scholars have garnered considerable evidence suggesting that the incidence of body image and eating disorder concerns has significantly and dramatically risen in Western society over the past few decades (Feingold & Mazella, 1998; Garner, 1997; Muth & Cash, 1998). The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) includes diagnostic criteria for the following three eating disorders: Anorexia Nervosa, Bulimia Nervosa, and Eating Disorder Not Otherwise Specified. According to the DSM-IV (American Psychiatric Association, 1994), a diagnosis of Anorexia Nervosa includes the following diagnostic criteria: a) refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85% of that expected or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected), b) intense fear of gaining weight or becoming fat, even though underweight, c) disturbance in the way one’s body weight or shape is experienced, undue influence of body weight or shape on self evaluation, or denial of the seriousness of the current low body weight, d) in postmenarchal females,
amenorrhea (i.e., the absence of at least three consecutive cycles, periods that only occur following hormone administration such as estrogen). The DSM-IV further specifies two types of Anorexia Nervosa, which include restricting type and binge-eating/purging type (American Psychiatric Association, 1994). A restricting type of Anorexia Nervosa may be specified if the person has not regularly engaged in binge-eating or purging behavior during the current episode of Anorexia Nervosa (American Psychiatric Association, 1994). A binge-eating/purging type of Anorexia Nervosa may be specified if the person has regularly engaged in binge-eating or purging behavior during the current episode of Anorexia Nervosa (American Psychiatric Association, 1994).

A diagnosis of Bulimia Nervosa includes the following diagnostic criteria: a) recurrent episodes of binge eating characterized by eating an amount of food that is larger than most people would eat during a similar discrete period of time under similar circumstances, and feeling out of control of the eating during the episode, b) recurrent compensatory behavior in order to prevent weight gain (e.g., self-induced vomiting, laxative misuse, diuretics, enemas, fasting, excessive exercise), c) the binge-eating and compensatory behaviors occur on average at least twice weekly for three months, self-evaluation unduly influenced by body shape and weight, d) the binge-eating and compensatory behaviors do not occur exclusively during episode of Anorexia Nervosa (American Psychiatric Association, 1994). In addition, the DSM-IV specifies the following two types of Bulimia Nervosa: purging type and nonpurging type. To meet criteria for the purging type of Bulimia Nervosa, one must have regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas during the current
episode of Bulimia Nervosa (American Psychiatric Association, 1994). To meet criteria for the nonpurging type of Bulimia Nervosa, one must have regularly used inappropriate compensatory behaviors, such as fasting or excessive exercise, but have not regularly engaged in self-induced vomiting, or the misuse of laxatives, diuretics, or enemas during the current episode of Bulimia Nervosa (American Psychiatric Association, 1994).

A diagnosis of Eating Disorder Not Otherwise Specified encompasses disorders of eating that do not meet full criteria for any specific eating disorder, such as the following instances: a) for females, all of the criteria for Anorexia Nervosa are met except that the female has regular menses, b) all of the criteria for Anorexia Nervosa are met except that the individual is still within a normal weight range, c) all of the criteria for Bulimia Nervosa are met except that the individual does not meet the frequency requirement for the binge-eating and compensatory behaviors, d) regular use of inappropriate compensatory behaviors by a person in a normal weight range (e.g., self-induced vomiting after the consumption of two cookies), or e) repeatedly chewing and spitting out, but not swallowing, large amounts of food (American Psychiatric Association, 1994). Finally, one’s eating experiences may be described by a specified subtype of an Eating Disorder Not Otherwise Specified called Binge-eating Disorder, which is categorized by recurrent binge-eating episodes in the absence of regular use of inappropriate compensatory behaviors (American Psychiatric Association, 1994). Many professionals have criticized these classification systems for eating disorders as too extreme or severe.
While the percentages of women meeting criteria for bona-fide, full-syndrome clinical eating disorders are relatively small (i.e., .5% for AN, 1-3% for BN, and 2-5% for EDNOS; American Psychiatric Association, 1994), the prevalence of eating disordered behaviors appears to be reaching alarmingly high levels in Western society (Mintz & Betz, 1988; Tylka & Subich, 2004). Eating disordered behavior has been associated with health-related problems, interpersonal difficulties, high relapse rates, increased risk for death, and impairment in health and psychosocial functioning, even if the eating disordered symptomatology is sub-threshold and does not warrant a diagnosis of a full-syndrome eating disorder (Herzog Dorer, Keel, Selwyn, Ekeblad, Flores, Greenwood, Burwell, Keler, 1999; Pearson Goldklang, & Striegel-Moore, 2002). A study by Mintz and Betz (1988) found that only thirty-three percent of women in their sample could be classified as normal eaters, with sixty-seven percent falling somewhere between normal and bulimic. Fortunately, researchers have recognized the need to establish a firm foundation of theoretical and empirical literature to accompany the growing everyday salience of body image and eating disorder concerns for women. Kashubeck-West and Mintz (2001) identified more than 2,000 articles published on eating disorders just between the years of 1995 and 2000. While this relatively fast-paced accumulation of literature addressing eating disorders is promising and encouraging, the vast majority of such research has maintained an almost exclusive pathology-based focus and relied on convenience samples (Avalos & Tylka, 2006).

This pathology-based focus of extant literature entails examining negative components of body image (e.g., body dissatisfaction), and eating disorder
symptomatology, while a more growth-based approach would shift the focus to studying components of positive body image and adaptive eating behaviors. Such a growth-oriented focus would be consistent with the approach of positive psychology, which examines positive subjective experiences and individual traits associated with improved quality of life and prevention of pathology (Seligman & Csikszentmihalyi, 2000).

Utilizing a growth-based approach to study body image and eating behaviors is also consistent with the mission of counseling psychology, which focuses on growth, assets, strengths, and prevention (Gelso & Fretz, 2001).

In addition, scholars such as Kashubeck-West and Mintz (2001) urged counseling psychologists to capitalize upon the unique strength-based perspective of counseling psychology while undertaking the study of body image and eating behaviors. Kashubeck-West and Mintz (2001) underscored the fresh perspective that counseling psychologists can offer to extant knowledge of eating and body image concerns. Therefore, it is of utmost importance that counseling psychologists capitalize upon the unique strengths of their field in order to integrate, apply, and extend existing knowledge of eating and body image concerns.

Because the philosophical tenets of counseling psychology seem to nicely position counseling psychologists for the study of eating behaviors and body image in general, many researchers (e.g., Hotelling, 2001) continue to press for counseling psychologists to call upon strengths of their training (e.g., focus on hygiology, emphasis on multiculturalism, diversity and cultural influences, use of holistic and strength-based approaches) in pursuit of the study of eating behaviors and body image concerns. Among
other strengths, counseling psychology’s growth-based focus and emphasis on cultural influences and diversity excellently equip counseling psychologists to explore sociocultural influences on eating behaviors as experienced by diverse populations. Their holistic approach further aids counseling psychologists in identifying the need for, and means by which to integrate and apply, supported models of body image and eating behaviors with diverse populations.

Again, perhaps most pertinent to the present study are the tenets of counseling psychology which focus on health, growth, and prevention (Gelso & Fretz, 2001) and highlight by contrast the dearth of literature addressing adaptive eating behaviors and positive body image. Although many researchers (e.g., Fredrickson & Roberts, 1997; Hund & Espelage, 2005; Mazzeo & Espelage, 2002; Stice, Nemeroff, & Shaw, 1996; Tylka & Subich, 2004) have offered theoretical frameworks for understanding how negative constructs interact to predict eating disorder symptomatology, researchers (Avalos, Tylka, & Wood-Barcalow, 2005; Tylka, 2006) have only recently begun to infuse a focus of hygiology into research on body image and eating behaviors. Such groundbreaking scholarly work is essential in order to garner a more holistic and complete knowledge of eating disorders and body image within a larger context by examining constructs associated with positive body image and more varied eating behaviors.

Yet another prime opportunity and need for expanding extant research on body image and eating behaviors is the incorporation of more diverse samples into research paradigms. Research suggests that body image and eating disorder concerns may affect a
wide variety of individuals differing in age (e.g., Pliner, Chaiken, & Flett, 1990), racial/ethnic background (e.g., Wilcox, 2006), and sexual orientation (e.g., Striegel-Moore, Tucker, & Hsu, 1990); however, the majority of extant research on eating disorders has relied on convenience samples drawn from college populations of predominantly White, heterosexual young women aged 18-24 years old (Grogan, 1999; Wonderlich, Joiner, Keel, Williamson, & Crosby, 2007).

Therefore, in addition to the dire need for research addressing positive eating behaviors and body image, research is greatly needed to address the concerns of women older than the traditionally-aged undergraduate (i.e., 18-24 years old). Extant literature addressing mental health experiences of women older than the traditionally-aged undergraduate seems to demonstrate a lack of consensus regarding potential risk and protective factors for older women as compared to younger women (Fredrickson & Roberts, 1997). Traditional and sociobiological theories have suggested that women may experience a decline in well-being and an associated increase in risk for experiencing mental health concerns around the age of 40, which such theorists attributed to the passing of a woman’s biological usefulness (for a review, see Gergen, 1990). Feminist theories, however, challenge the perspective that menopause is associated with negative psychological consequences and instead posit that midlife may be a time of enhanced well-being and protection from mental health concerns (e.g., Fodor & Franks, 1990; Mitchell & Helson, 1990; Neugarten, Wood, Kraines, & Loomis, 1963; Parlee, 1984). Certainly, empirical studies aiming to include women older than the traditionally-aged
undergraduate would complement and potentially clarify theoretical research examining the role of aging in women’s mental health experiences.

The present study is an attempt to examine the potential role age may play in women’s mental health experiences by exploring positive body image constructs and adaptive eating behaviors with older and younger women. Specifically, the present study will test posited pathways of a model based on acceptance in which certain core constructs (i.e., general unconditional acceptance, body acceptance from others, body function, body appreciation) are theorized to predict adaptive eating behaviors (i.e., intuitive eating). This acceptance model of intuitive eating was created by Avalos and Tylka (2006) and supported in their sample of college women, but the present study aims to test how well the model fits with a sample of older women in comparison to a sample of younger women. It seems that at present, no study has aimed to investigate such adaptive eating behaviors and positive body image constructs with women older than traditionally-aged undergraduate students.

Because extant literature does not offer insight as to the generalizability of such a predictive model incorporating positive aspects of body image and eating behaviors with female participants aged across the adult life span, the next chapter will offer a review of available research pertaining to: (a) age in relation to body image, (b) age in relation to eating disorder concerns, and (c) a model of adaptive (i.e., intuitive) eating behaviors and attitudes as applied to young college women. It is hoped that such a review will provide a context in which to recognize the import of the present study as an attempt to apply,
integrate, and extend extant literature in order to provide a more comprehensive and holistic understanding of the eating experiences of women aged across the adult lifespan.
CHAPTER 2

REVIEW OF THE LITERATURE

2.1 Overview

As will be discussed in more detail in this chapter, extant literature has yet to reach agreement as to the role of age in relation to eating behaviors, attitudes, and body image. The few studies (e.g., Greenleaf, 2005; Hill, 2003; Tiggemann & Lynch, 2001) incorporating samples of older women have also remained pathology-focused by applying theoretical frameworks predicting negative body image and eating disorder symptomatology. Again, it appears that no existing study has explored models or constructs of adaptive eating behaviors and positive body image with substantive samples of women aged older than the traditional undergraduate. As such, the ensuing chapter will offer a review of: (a) research addressing age in relation to body image concerns of women, (b) research addressing age in relation to eating disorder concerns of women, and (c) research exploring a model of positive eating behaviors and body image (i.e., an acceptance model of intuitive eating) with female, young, traditionally-aged undergraduates.
2.2 **Age in Relation to Body Image Concerns of Women**

Varied and rather preliminary findings have been identified within the literature addressing age in relation to body image-related concerns. One line of research has provided support for the notion that middle-aged and older women tend to report fewer negative body image concerns than young women (e.g., Deeks & McCabe, 2001; Greenleaf, 2005; McKinley, 1999; Pliner, Chaiken, & Flett, 1990; Tiggemann & Lynch, 2001). In contrast, another line of research has failed to provide support for age-related differences in women’s body image-related concerns (e.g., Altabe & Thompson, 1993; Ben-Tovim & Walker, 1994; Davis & Cowles, 1991; Garner, 1997; Rozin & Fallon, 1988; Tiggemann & Lynch, 2001). Both lines of research will be reviewed below.

Findings by McKinley (1999) provided support for the notion that middle-aged women tend to report fewer body image concerns than younger women. In this study, the body image-related constructs of body surveillance and body shame were measured in 151 undergraduate women and their middle-aged mothers (aged 38-58). Body surveillance was measured using the Body Surveillance subscale of the Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996), whereas body shame was measured using the Body Shame subscale of the OBC. Results suggested lower levels of body surveillance and body shame for middle-aged women than for younger women of the sample, elucidating an important age-related finding in the study of body image concerns. McKinley (1999) suggested that this finding may mean that older women objectify their bodies to a lesser extent than younger women.
A study by Greenleaf (2005) also garnered evidence in support of the notion that older women may experience fewer negative body image concerns than younger women. In this study, 394 women aged 18-64 were administered the Body Surveillance subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) to measure self-objectification, as well as the Body Shame subscale of the Objectified Body Consciousness Scale (McKinley & Hyde, 1996) to measure body shame. Results suggested that older participants (aged 39-64) reported significantly lower levels of self-objectification and body shame in comparison to younger participants (aged 18-30). Greenleaf (2005) urged researchers to further examine the experiences of various body concerns among older women.

Deeks and McCabe (2001) also found evidence to suggest that older women may experience body image related concerns to a lesser degree than younger women. The investigators drew from a community sample of 304 women, ranging in age from 35-65 years old, in an attempt to investigate the relationship between menopausal stage, age, and women’s perceptions of their body image. The questionnaire completed by participants contained the Stunkard Body Shape Figure Scale (Stunkard, Sorenson, Schulsinger, 1980) to identify participants’ ratings of their current, ideal, and societal body shape.

Results suggested that older perimenopausal (age range 35-54) and postmenopausal (age range 40-65) women selected larger figures as ratings of the current, ideal, and
societal body shape more often than the younger premenopausal women in the sample. In their discussion, the authors stated:

Postmenopausal women seem to expect society will accept that they are not as thin as the premenopausal women (who are also likely to be younger). However, it is not known how this makes them feel. It is not known whether having a slightly larger body shape is a positive or negative experience (Deeks & McCabe, 2001; p. 378).

Clearly, research needs to address the affective component (e.g., body appreciation, body shame) related to potential age differences in women’s experiences with body image.

Yet another study by Pliner, Chaiken, and Flett (1990) found evidence to suggest that older women may experience fewer body image-related concerns than younger women. The authors examined the body image-related construct of appearance importance in a community sample of 639 Canadian participants aged 10-79 years. The construct of appearance importance was measured with the 7-item Importance of Physical Appearance scale (Pliner, Chaiken, & Flett, 1990). Analyses suggested a significant age effect on appearance importance, indicating that the importance of physical appearance was found to decrease with age.

Tiggemann and Lynch (2001) also provided empirical support indicating that older women may endorse a lower level of negative body-image concerns in comparison to their sample of younger women. The construct of self-objectification was measured
using the Self-objectification Questionnaire (Noll & Fredrickson, 1998) while the
construct of habitual body monitoring was measured with the Body Surveillance subscale
of the Objectified Consciousness Scale (McKinley & Hyde, 1996), and the construct of
appearance anxiety was measured using the short form of the Appearance Anxiety Scale
(Dion, Dion, & Keelan, 1990). Results from a sample of 322 women (aged 20-84)
indicated that all three of the aforementioned constructs significantly decreased as
participants’ age increased.

In contrast to the aforementioned findings, another line of research has failed to
provide support for age-related differences in body image constructs (e.g., Altabe &
Thompson, 1993; Ben-Tovim & Walker, 1994; Davis & Cowles, 1991; Garner, 1997;
Rozin & Fallon, 1988; Tiggemann & Lynch, 2001). One such finding comes from a
administered the Figure Rating Scale (Strunkard, Sorenson, & Schulsinger, 1983) to
measure body dissatisfaction in a sample of 283 female undergraduates aged 17-40 years
old. Findings failed to indicate any significant differences in body dissatisfaction in
relation to age.

Another study that did not produce evidence of age-related effects in relation to body
image constructs is a study conducted by Webster and Tiggemann (2003). The authors
measured the body image-related constructs of body dissatisfaction and body importance
with a modified, 17-item version of the Body Cathexis Scale (Secord & Hourard, 1953).
Participants were asked to rate body dissatisfaction and then body importance on a 5-
point Likert-type scale (1 = very dissatisfied to 5 = very satisfied). The community
sample included 106 women aged 20-65 years. Results indicated that body
dissatisfaction remained constant across the lifespan of participants, as did body
importance; therefore, no significant age effects were found in relation to the body
image-related constructs of body dissatisfaction and body importance for this study
(Webster & Tiggemann, 2003).

Yet another study (i.e., Tiggemann & Lynch, 2001) did not uncover significant age-
related differences in body dissatisfaction. In a sample of 322 women ranging in age
from 20-84 years old, the construct of body dissatisfaction was measured using the Figure
Rating Scale (Fallon & Rozin, 1985), as well as the Body Esteem Scale (Franzoi &
Shields, 1984). The construct of body shame was measured using the Body Shame
subscale of the OBC (McKinley & Hyde, 1996). Results failed to find significant age
effects in relation to body dissatisfaction or in relation to body shame. These findings
suggested that body dissatisfaction and body shame may remain relatively stable across
the lifespan.

In addition, a study conducted by Ben-Tovim and Walker (1994) did not uncover
significant influences of age on body-related attitudes (i.e., feeling fat, body
disparagement, lower body fatness). The aforementioned body-related attitudes were
measured by administering the 44-item self-report Body Attitudes Questionnaire (Ben-
Tovim & Walker, 1991) to a community sample of 1225 Australian females aged 13-65
years. Results were found not to vary significantly with age. Ben-Tovim and Walker
(1994) interpreted these results to suggest that some body-related attitudes may be
experienced on a consistent basis as women age.
2.3 **Age in Relation to Eating Disorder Symptomatology**

As with the literature addressing age in relation to body image-related concerns, varied findings constitute a beginning groundwork for the literature addressing age in relation to eating disorder symptomatology. Some studies have garnered evidence for age-related differences in eating disorder symptomatology, in that older women reported less eating disorder symptomatology (Tiggemann & Lynch, 2001; Rand & Kulda, 1991; Lewis & Cachelin, 2001). Other studies have failed to find significant age-related differences in eating disorder symptomatology (McKinley, 1999; Hetherington & Burnett, 1994; Stokes & Frederick-Recascino, 2003). Select seminal studies will be reviewed below.

Although a recently described study conducted by Tiggemann and Lynch (2001) failed to find significant age differences in relation to the constructs of body dissatisfaction or body shame, the study did produce significant age differences in measures of eating disorder symptomatology. The construct of disordered eating was measured using the three behavioral subscales of the EDI (Garner et al., 1983), and the construct of dietary restraint was measured using the Revised Restraint Scale (Herman & Polivy, 1980). This study garnered support for age-related differences in eating disorder symptomatology by revealing that older women reported less disordered eating and dietary restraint than younger women in the study.

A study by Rand and Kulda in 1991 also yielded evidence for age-related differences in eating disorder symptomatology. The construct of dietary restraint was
measured using Herman and Polivy’s Restraint Scale (1980) in a sample of 1211 women, aged 18-75 years old. Significant age differences were found in women’s reported dietary restraint. Specifically, results indicated that older women (i.e., 65 and older) reported significantly less dietary restraint than younger women (i.e., younger than 65) in the sample.

Another study providing evidence for the argument that older women may experience less eating disorder concerns is a study by Lewis and Cachelin (2001). The authors measured eating disorder symptomatology (i.e., drive for thinness, bulimic symptomatology, poor interoceptive awareness) in a sample of 125 middle-aged women (aged 50-65) and a sample of 125 elderly women (aged 66 and older). The construct of drive for thinness was measured using the Drive for Thinness Scale of the EDI (Garner Olmstead, & Polivy, 1983), whereas the construct of bulimic symptomatology was measured using Bulimia Scale of the EDI, and poor interoceptive awareness was measured using the Interoceptive Awareness Scale of the EDI. Data indicated that the elderly sample (66 years and older) of women reported less drive for thinness, less bulimic symptomatology, and less poor interoceptive awareness as compared to the younger sample (50-65 years) of women. The authors elaborated that although findings suggested that older women may experience fewer eating disorder concerns, the older women of the sample still reported eating disorder symptomatology well within the normative range found in studies with traditional college-aged women. Lewis and Cachelin (2001) then underscored the need to apply and extend extant research paradigms
with samples of older women, in an attempt to further elucidate similarities and differences in experiences with eating disorder concerns.

While one line of research has suggested that older women may experience less eating disorder symptomatology (Tiggemann & Lynch, 2001; Rand & Kulda, 1991; Lewis & Cachelin, 2001), another line of research findings has failed to find significant age-related differences in eating disorder symptomatology (Hetherington & Burnett, 1994; McKinley, 1999; Stokes & Frederick-Recascino, 2003). As an example of a study that did not yield significant age-related findings in terms of eating disorder symptomatology, Stokes and Frederick-Recascino (2003) examined the constructs of body esteem and eating disorder symptomatology in a sample of 144 women, aged 18-87 years old. Body esteem was measured using the 35-item Body Esteem Scale (Franzoi & Shields, 1984), and eating disorder symptomatology was measured using the EAT (Garner & Garfinkel, 1979). There were no significant differences in body esteem or eating disorder symptomatology as reported by women of different ages.

A previously described study by McKinley (1999) also did not identify age-related differences in women’s experiences of eating disorder symptomatology. While findings did indicate age-related differences in body image-related concerns, the findings did not indicate age-related differences in body esteem or eating disorder symptomatology. Body esteem was measured using the Body Esteem Scale (Franzoi & Shields, 1984), and eating disorder symptomatology was measured by having participants indicate on a 5-point scale how often they diet and how often they engage in restrictive eating.
McKinley (1999) concluded that no significant differences were evidenced in the body esteem or the eating disorder symptomatology of women of different ages.

Another study undertaken by Hetherington and Burnett (1994) also did not identify age-related differences in women’s experiences of eating disorder symptomatology. Subjects of this study were fifty elderly (aged 60-78 years according to this study) and fifty young (aged 18-31 years according to this study) women. Eating disorder symptomatology was measured using the Eating Attitudes Test (Garner & Garfinkel, 1979), and no significant age-related differences in level of eating disorder symptomatology were identified.

2.4 Summary of age in relation to eating disorder and body image concerns

Clearly, the literature on the role of age in relation to eating disorder and body image concerns has produced varied findings. It is important to note that this literature includes many different constructs, measures and age groupings; therefore, it is somewhat disjointed and in need of integration. With regard to the literature addressing age in relation to body image concerns, some studies (e.g., Greenleaf, 2005; McKinley, 1999) suggested that older women may experience lower levels of body surveillance and body shame as measured by subscales of the OBC (McKinley & Hyde, 1996). In comparison to younger women, older women have been found to endorse: larger ideal body shapes (Deeks & McCabe, 2001); lower levels of appearance importance (Pliner, Chaiken, & Flett, 1990); lower levels of self-objectification (Tiggemann & Lynch, 2001); and lower levels of appearance anxiety (Tiggemann & Lynch, 2001). In contrast, another line of research has failed to provide support for age-related differences in women’s body
image-related concerns such as: body dissatisfaction (Altabe & Thompson, 1993; Tiggemann & Lynch, 2001; Webster & Tiggemann, 2003) as measured by three different scales; body importance (Webster & Tiggemann, 2003); body shame as measured by the OBC Body Shame subscale (McKinley & Hyde, 1996; Tiggemann & Lynch, 2001); and body related attitudes (Ben-Tovim & Walker, 1994).

With regard to the literature addressing age in relation to eating disorders, a couple of studies (Lewis & Cachelin, 2001; Tiggemann & Lynch, 2001) utilizing the EDI (Garner et al., 1983) revealed that older women appeared to experience fewer symptoms of disordered eating than younger women. In addition, a couple of studies (Rand & Kuldau, 1991; Tiggemann & Lynch, 2001) utilizing the Revised Restraint Scale (Herman & Polivy, 1980) identified lower levels of dietary restraint in older women as compared to younger women. Other studies (Hetherington & Burnett, 1994; Stokes & Frederick-Recascino, 2003) have failed to find significant age-related differences in eating disorder symptomatology measured by the EAT (Garner & Garfinkel, 1979). Again, extant research on body image and eating behaviors is rife with disjointed findings including various pathology-oriented constructs, diverse methodologies, and assorted age groupings.

The present study offers incremental value to extant literature by specifically examining body image and eating constructs with samples of women older than the traditionally-aged, young undergraduate. There are several theoretically plausible arguments regarding the importance of examining age effects associated with women's body image and eating concerns. From a developmental perspective, it is conceivable
that a woman's body image may become poorer as she ages and increases her distance from the youthful beauty ideal (Tiggemann & Lynch, 2001). As women age, they are likely to gain approximately ten pounds per decade, experience a change in body fat distribution, lose skin elasticity, and experience thinning and/or graying hair (Andres, 1989). Further, developmental milestones (e.g., puberty, pregnancy, menopause) in a woman's lifespan may predispose her to increased body fat (Rodin et al., 1985).

Researchers have also written about the "double standard of aging" in which older women are held to a higher standard of attractiveness as compared to the standard of attractiveness to which older men are held (Wilcox, 1997, p. 549). Research also suggests that older women are more concerned about the negative effects of aging on their appearance as compared to older men, and researchers associate this finding with the notion that attractiveness is central to women's identity (Gupta & Schork, 1993). Certainly, these lines of research underscore plausible reasons to investigate body image and eating constructs among women aged across the adult lifespan.

While a small number of studies (e.g., Greenleaf, 2005; Hill, 2003; Tiggemann & Lynch, 2001) have specifically applied more integrative frameworks of disordered eating with women of diverse ages, no present studies have investigated models or constructs of positive eating behaviors and body image with women of diverse ages. Due to the lack of integrated and consistent findings regarding the impact of age on body image and eating disorder concerns, it is unclear how constructs and a model of positive eating behaviors may differentially apply to older and younger women. Therefore, a review of extant literature exploring constructs and a model of positive eating behaviors and body
image (i.e., an acceptance model of intuitive eating) as applied with samples of predominantly young, traditionally-aged undergraduates will be provided below.

2.5 **A Model of Intuitive Eating**

Again, while many scholars have proposed conceptual frameworks in an attempt to further understanding of how certain variables meaningfully interact to predict eating disorder symptomatology and body image disturbance (e.g., Fredrickson & Roberts, 1997; Hund & Espelage, 2005; Mazzeo & Espelage, 2002; Stice, Nemeroff, & Shaw, 1996; Tylka & Subich, 2004), a paucity of research exists to further knowledge of how variables interact to predict adaptive eating behaviors and positive body image. Fortunately, scholars (Avalos et al., 2005; Tylka, 2006) have begun to address this paucity, as they have applied a strength-based approach to the study of eating behaviors and body image.

Avalos and Tylka (2006), Tylka (2006), and Tylka and Wilcox (2006) offer forth research on growth-oriented body image and eating concepts (i.e., general unconditional acceptance, body acceptance by others, emphasis on body function, body appreciation, intuitive eating), as well as a model framework (i.e., an acceptance model of intuitive eating) in an attempt to understand the relationships among such constructs. Such research is important, because it attempts to more clearly articulate whether adaptive eating is merely the absence of eating disorder symptomatology or whether it contains unique constructs not captured in a disordered eating continuum framework (Tylka & Wilcox, 2006). Again, this approach to studying body image and eating behaviors by exploring potential affirmative strengths (e.g., adaptive eating behaviors and attitudes)
rather than simply identifying the absence of pathological symptoms (e.g., dietary restraint, preoccupation with food, binge eating) is consistent with tenets of counseling psychology and positive psychology.

Avalos and Tylka (2006) adopted such an approach when they developed and demonstrated empirical support for a model of a form of adaptive eating called intuitive eating. In creating this acceptance model of intuitive eating, Avalos and Tylka (2006) drew from theoretical writings about intuitive eating (i.e., Tribole & Resch, 1995), from work conducted by Avalos et al. (2005) and Tylka (2006), from Rogers’s (1961) theory of acceptance, and from the literature addressing predictors of eating disorder symptomatology and body image disturbance. Intuitive eating is a form of adaptive eating that has recently gained increased recognition. Intuitive eating is defined as a strong connection with, understanding of, and eating in response to, internal physiological hunger and satiety cues (Tribole & Resch, 1995). Tribole and Resch (1995) identified three central and interrelated components of intuitive eating, which are: (a) unconditional permission to eat what food is desired and when hungry, (b) eating for physical rather than emotional reasons, and (c) reliance on internal hunger and satiety cues to determine when and how much to eat (Tylka, 2006). Research by Tylka and Wilcoxon (2006) aided the conceptualization of the construct of intuitive eating as unique from low levels of eating disorder symptomatology, which provides justification for exploring potential contributors to this construct.

Indeed, findings from Tylka and Wilcoxon (2006) suggested that intuitive eating and eating disorder symptomatology are not merely opposite ends of the same construct, as
intuitive eating was found to predict variance in positive psychological well-being above and beyond that accounted for by eating disorder symptomatology (Tylka & Wilcox, 2006). In other words, the presence of low levels of eating disorder symptomatology is not synonymous with the presence of intuitive eating. Because some of the aforementioned research suggested that older women may have different experiences with body image, eating, and well-being as compared to younger women, the present study is a useful attempt to investigate and compare the applicability of a model of intuitive eating with older and younger women. Therefore, the constructs of the theory and predictive model of intuitive eating proposed by Avalos and Tylka (2006) will be discussed in more detail below within the context of any empirical support for pathways proposed by the model.

2.51 General Unconditional Acceptance

In the model proposed by Avalos and Tylka (2006), the authors describe the starting point of their framework as general unconditional acceptance. Figure 1 illustrates the pathways of the model proposed by Avalos and Tylka (2006). They conceptualize general unconditional acceptance as the degree to which a woman perceives that significant people in her life accept her internal self and external body shape and weight (Avalos & Tylka, 2006). This conceptualization of general unconditional acceptance is rooted in humanistic theory proposed by Rogers (1961), which highlights perceived unconditional acceptance from (an) influential other(s) in one’s life as the most important and often inadequate childhood experience.
Rogers (1961) theorized that, although humans are born with a proclivity towards growth and self-actualization, a lack of perceived general unconditional acceptance and other social influences can unfortunately deter an individual’s growth. Rogers (1961) posited that when an individual perceives general unconditional acceptance from significant others, that individual is then able to capitalize upon his/her actualizing potential and inborn tendency to expand, extend, and develop in a growth-enhancing manner. Conversely, if an individual does not perceive general unconditional acceptance from significant others, his/her growth would be restricted as he/she experiences difficulty aligning with and capitalizing upon his/her actualizing potential (Rogers, 1961).

Rogers (1964) also suggested that such incongruence as a result of a lack of perceived general unconditional acceptance may lead an individual to attempt to attain unrealistic societal ideals. It is theorized that when one does not perceive general unconditional acceptance, one is prone to deny one’s inner experiences and instead adopt external rules (Rogers, 1961).

Avalos and Tylka (2005) proposed that intuitive eating is one expression of the actualizing tendency, as it is a reflection of honoring one’s inner experiences (i.e., hunger and satiety cues) and valuing one’s bodily needs. Similarly, other researchers (Carper et al., 2000; Tribole & Resch, 1995) have suggested that the tendency to eat intuitively is innate, but that the likelihood of continuing this eating style is dependent upon an accepting environment. Hence, if one perceives an environment of general acceptance, one is more likely to honor one’s internal experiences and eat intuitively. Conversely, if
an environment of general acceptance is not perceived, one is more likely to deny one’s inner experiences (i.e., hunger and satiety cues) and instead adopt societal rules (e.g., dieting) regarding eating behaviors.

Theory proposed by Fredrickson & Roberts (1997) described a potentially similar process of adopting unrealistic societal ideals. Their theory of objectification theory (Fredrickson & Roberts, 1997) detailed a process of self-objectification, or internalization of the thin-ideal, which is characterized by habitual body monitoring and an emphasis on body appearance (as opposed to body function). Avalos and Tylka (2006) proposed then, that women who are less likely to perceive general unconditional acceptance may be more likely to identify with societal ideals through internalizing such thin-ideal stereotypes and habitually monitoring their body appearance (Fredrickson & Roberts, 1997). Figure 1 presents an illustration of this proposed pathway (Path b).

Keeping a focus on hygiology, Avalos and Tylka (2006) suggested that conversely, those who perceive that they are unconditionally accepted by influential others will not have a drive to abandon their real self and strive towards an ideal self; these individuals then will be likely to focus on how their body functions and feels rather than how it appears to others. Therefore, Avalos and Tylka (2006) proposed that perceived acceptance from others (i.e., the most influential person in a woman’s life when she was growing up) would predict her emphasis on body function. Additionally, Avalos and Tylka (2006) hypothesized that when a woman perceives general unconditional acceptance from her environment, then she will be likely to perceive that others accept her body. Accordingly, Avalos and Tylka (2006) formulated the hypothesis
that perceptions of general unconditional acceptance could lead to women feeling that their bodies are accepted by others (Path a in Figure 1). With a more pathological focus, research has demonstrated that low levels of unconditional acceptance from friends and family (i.e., low social support) have been associated with pressures to adopt the thin ideal and lose weight among college women (Tylka & Subich, 2004).

Results by Avalos and Tylka (2006) provided empirical support for the pathway from general unconditional acceptance to perceptions that others are accepting of one’s body; however, empirical evidence was not garnered to support the pathway from perceptions of general unconditional acceptance to an emphasis on body functionality over body appearance. This finding was contrary to their hypothesis, and they suggested that rather than general unconditional acceptance measured as perceived support from the most influential person in a woman’s life when she was growing up, perhaps a different, specific type of unconditional acceptance (i.e., perceived social support from their overall network of family and friends) may be a more powerful predictor of an emphasis on body function over appearance. Accordingly, the present study takes such suggestions into consideration, conceptualizing general unconditional acceptance as perceived social support.

This conceptualization of social support as a reflection of general unconditional acceptance remains consistent with the theoretical underpinnings of the acceptance model of intuitive eating. Scholars (Carper et al., 2000; Tribole & Resch, 1995) have suggested that although the proclivity for intuitive eating is innate, the actualization of this behavior depends on the level of acceptance perceived in the environment. It is conceivable that
women perceive social support as a manifestation of environmental acceptance. The instrument used to measure social support in the present study incorporates multiple provisions of social relationships, which could arguably be conceptualized as reflections of acceptance by significant others in one's life. It seems that perceived social support may suggest to a woman that others are accepting and supportive of who she is, which appears to be consistent with the humanistic theory underlying the model of intuitive eating examined in the present study (Avalos & Tylka, 2006; Rogers, 1964; Tribole & Resch, 1995).

Additionally, prior research suggests that perceived social support is a mental-health promoting factor, as it has been shown to predict positive self-appraisal (i.e., an indicator of well-being), as well as global self-esteem. Research with more of a pathological focus also lends credence to this conceptualization through findings that a lack of perceived social support has been associated with an emphasis on body appearance rather than body function (Fredrickson & Roberts, 1997). In sum, extant literature seems to support the plausibility of conceptualizing social support as a reflection of general unconditional acceptance.

2.52 **Body Acceptance by Others**

Avalos and Tylka (2006) reasoned that perceptions that others accept one’s body may lead one to be less preoccupied with changing one’s body, perhaps allowing one to instead focus on how one’s body feels and functions (Tribole & Resch, 1995). Conversely, research has demonstrated that pressures by significant others to be thin predicted an increase in women’s habitual body monitoring and a decrease in one’s
emphasis on body functionality (Tylka & Hill, 2004). Additionally, a study by Birch, Johnson, Andresen, Petersen, and Schulte (1991) demonstrated that children’s perceived pressure from caregivers to lose weight was significantly related in a positive direction to the emergence of dietary restraint and weight gain among young girls. Further, such pressure may also lead children to replace internal hunger and satiety cues with external cues to dictate where, when, and how much to eat (Birch, Fisher, & Davison, 2003; Carper, Fisher, & Birch, 2000). Therefore, Avalos and Tylka (2006) proposed that perceived body acceptance by others would predict an emphasis on body function (Path c in Figure 1). This pathway was empirically supported in their study (Avalos & Tylka, 2006).

Avalos and Tylka (2006) further proposed that perceived body acceptance by others would also predict one’s positive feelings toward one’s body, demonstrated through a construct such as body appreciation. Research by Tantleff-Dunn and Gokee (2002) suggested that others’ opinions have a profound effect on how one feels about one’s body. Similarly, Fredrickson and Roberts (1997) proposed that body dissatisfaction/shame occurs when one recognizes that one’s body falls short of the cultural ideal. Accordingly, women who perceive body acceptance from others may not be receiving messages to alter one’s bodies. Therefore, Avalos and Tylka (2006) proposed that such women may be less likely to experience this discrepancy, and therefore their body appreciation will not be negatively impacted. In a similar vein, research (Stice et al., 1996; Tylka & Hill, 2004) suggested that perceived pressure for thinness from a significant other and from the media predicted body dissatisfaction.
among girls and women, above and beyond that accounted for by habitual body monitoring. Therefore, Avalos and Tylka (2006) hypothesized that perceived body acceptance by others would predict body appreciation in the model (Path d in Figure 1). Findings supported this pathway in the model of intuitive eating (Avalos & Tylka, 2006).

Another hypothesis proposed by Avalos and Tylka (2006) is that both body appreciation and body function would offer explanatory value for the relationship between body acceptance by others and intuitive eating. This hypothesis was founded on the proposition that the extent to which body acceptance by others influences whether women engage in intuitive eating is dependent on their adoption of a positive body orientation (Tribole & Resch, 1995). Similarly, research has found that a negative body orientation accounts for the relationship between pressure for thinness and disordered eating (Tylka & Hill, 2004; Tylka & Subich, 2004). Indeed, findings by Avalos and Tylka (2006) provide empirical support for the pathway from emphasis on body function to intuitive eating (Path e in Figure 1), as well as the pathway from body appreciation to intuitive eating (Path g in Figure 1).

2.53 **Body Function**

Avalos and Tylka (2006) proposed that a focus on body function as opposed to external bodily appearance may lead one to be more appreciative of one’s body. Conversely, a focus on body appearance and associated habitual body monitoring (i.e., body surveillance) has been found to be negatively related to body appreciation (Avalos et al., 2005). In a similar vein, body surveillance has been demonstrated to predict body shame (Moradi et al., 2005; Tylka & Hill, 2004). Therefore, Avalos and Tylka (2006)
hypothesized, and found support for, the proposition that an emphasis on body function would predict body appreciation (Path f in Figure 1).

Additionally, an emphasis on body function was hypothesized to predict intuitive eating behaviors, with the rationale that an emphasis on function may encourage one to eat with the purpose of aiding one’s body functioning, as well as according to one’s internal hunger and satiety signals (Tribole & Resch, 1995; Tylka, 2006). Conversely, research has shown that habitual body monitoring of appearance predicted disordered eating among college women, even after accounting for the variance in disordered eating explained by body shame (Moradi, Dirks, & Matteson, 2005). Accordingly, Avalos and Tylka (2006) found support for the pathway from emphasis on body function to intuitive eating (Path e in Figure 1).

2.54 **Body Appreciation**

A study conducted by Avalos et al. (2005) first introduced the variable of body appreciation, as well as an instrument called Body Appreciation Scale (BAS) which was designed to measure body appreciation. Avalos et al. (2005) proposed that body appreciation is a component of positive body image. Indeed, Avalos et al. (2005) conceptualize body appreciation as involving unconditional approval and respect of the body. Further, body appreciation is characterized by the following four components: (a) favorable evaluations of one’s body regardless of perceived congruence with the societal ideal appearance, (b) body acceptance in spite of weight, body shape, and imperfections, (c) respecting one’s body by attending to its needs and engaging in healthy behaviors, and (d) protection of one’s body by rejecting unrealistic images of the thin-ideal
prototype portrayed in the media. Body appreciation was found to be positively associated with adaptive personality characteristics (i.e., self-esteem, life satisfaction, proactive coping and optimism) and negatively associated with body image disturbance and disordered eating (Avalos et al., 2005).

The authors also underscored that notion that the majority of research on body image and eating disorder concerns has been primarily pathology-focused (Avalos et al., 2005). They also drew attention to studies (e.g., Striegel-Moore & Cachelin, 1999) in which authors implored future psychologists to investigate predictors and outcomes of positive body image. Striegel-Moore and Cachelin (1999) posited that while such predictors of positive body image may be the reverse of predictors of negative body image (e.g., positive self-esteem as opposed to negative self-esteem), predictors of positive body image may also be unique and distinct concepts from predictors of negative body image. Building upon this research and recognizing that body image has been conceptualized and assessed almost exclusively in terms of its negative characteristics, Avalos et al. (2005) chose to extend existing literature by developing and evaluating their measure of body appreciation.

The BAS was developed and evaluated via four independent samples of college women (aged 17-55). In the first study, participants were 181 female college students (Avalos et al., 2005). Results garnered from the administration of the BAS provided evidence in support of unidimensionality and construct validity. In particular, scores on the BAS were strongly positively associated with higher body esteem, perceptions of sexual attractiveness, physical condition, and lower weight concern, lower body
surveillance, and lower body shame. These findings provide initial support for the BAS’s convergent validity. Also as predicted, BAS scores were strongly related to self-esteem and moderately-to-strongly related to optimism and proactive coping, supporting its association with several indices of psychological well-being. Further, the study yielded evidence of internal consistency reliability.

In the second study conducted by Avalos et al. (2005), participants were 327 undergraduate women (aged 17-30). This study provided evidence of cross-validation for the unidimensionality of the BAS. The third study provided additional evidence for the construct validity of the BAS, as scores were: (a) strongly associated in a positive direction with a greater tendency to evaluate one’s appearance favorably (b) strongly associated in a negative direction with body preoccupation, (c) strongly associated in a negative direction with body dissatisfaction and (d) strongly related in a negative direction to eating disorder symptomatology. Additionally, a significant relation between scores on the BAS and scores on a scale of impression management was not supported. An additional finding of interest was that the BAS predicted unique variance in psychological well-being above and beyond extant measures of body image.

In the fourth study, which involved 177 female college undergraduates (aged 17-20), demonstrated adequate temporal stability over a 3-week period. The authors concluded that the BAS should prove useful for researchers and clinicians interested in positive body image assessment. Accordingly, the BAS will be incorporated into the present study.
Researchers (Avalos et al., 2005; Tribole & Resch, 1995) have asserted that women who respect and appreciate their bodies may be more aware of their bodily needs, including their internal hunger and satiety cues. Therefore, such individuals who appreciate their bodies may also be more likely to respect their hunger and satiety cues when eating. Research has clearly demonstrated that women who do not demonstrate body appreciation (i.e., have high levels of body dissatisfaction/shame) tend to have higher levels of disordered eating (e.g., Moradi et al., 2005; Stice et al., 1996; Tylka & Hill, 2004; Tylka & Subich, 2004). Hence, body appreciation was proposed to predict intuitive eating, and support for this pathway was ascertained (Avalos & Tylka, 2006).

2.55 Intuitive Eating

Intuitive eating is defined as a strong connection with, understanding of, and eating in response to, internal physiological hunger and satiety cues coupled with low preoccupation with food (Hawks, Merrill, & Madanat, 2004; Tribole & Resch, 1995; Tylka, 2006). Scholars posit that intuitive eating is comprised of three central and interrelated components of intuitive eating: unconditional permission to eat when hungry and what food is desired, eating for physical rather than emotional reasons, and reliance on internal hunger and satiety cues to determine timing and amount of food to consume (Tribole & Resch, 1995; Tylka, 2006). Unconditional permission to eat is described as occurring when a woman does not ignore her hunger signals or classify food according to acceptable and non-acceptable categories (Faith, Scanlon, Birch, Francis, & Sherry, 2004; Polivy & Herman, 1999). Eating for physical rather than emotional reasons entails eating in an attempt to satisfy a physical hunger drive, as opposed to using eating
behaviors in an attempt to cope with emotional fluctuations and/or distress (Tribole & Resch, 1995). Reliance on internal hunger and satiety cues involves women being both aware and trusting of these signals to guide their eating behavior (Carper et al., 2000; Tribole & Resch, 1995).

Research has supported the positive aspects and notion of intuitive eating as an adaptive behavior. For example, intuitive eating has been shown to be positively associated with many adaptive personality characteristics (e.g., self-esteem, life satisfaction, proactive coping, and optimism) and negatively associated with body image disturbance and disordered eating among college women (Tylka, 2006). Again, as mentioned previously, intuitive eating and eating disorder symptomatology do not seem to be merely opposite ends of the same construct, as intuitive eating was found to predict variance in positive psychological well-being above and beyond that accounted for by eating disorder symptomatology (Tylka & Wilcox, 2006). Further research with the construct of intuitive eating would certainly be desirable.

2.6 Summary

Figure 1 presents a conceptual framework integrating contextual and intrapersonal variables hypothesized to predict body appreciation and intuitive eating. This model was originally proposed by Avalos and Tylka (2006) and provided an adequate overall fit to the data for two samples of undergraduate women; however, this model has yet to be tested with samples other than convenience samples of mostly young (i.e., aged 18-22) women. It is hoped that a framework such as the model proposed by Avalos and Tylka
(2006) may further elucidate how certain variables interact meaningfully to contribute to a positive body orientation and adaptive intuitive eating behaviors in women of diverse ages.

Accordingly, the purpose of the present study is to test a model of intuitive eating with one group of women aged 18-24 years and with a second group of women aged 25-79 years. In particular, the present study will use the method of latent variable SEM to determine whether the specified pathways of a model of intuitive eating apply to a sample of older women (i.e., 25-79 years old) as well as to a comparison sample of younger women (i.e., 18-24 years old) of a more traditional undergraduate age. These age divisions have been used frequently within the literature to delineate the age ranges of traditional versus nontraditional undergraduates (e.g., Bean & Metzner, 1985; Butler, 1998; Chartrand, 1992; Hirschorn, 1988; Metzner & Bean, 1987). The present study attempts to integrate, apply, and extend existing literature on women’s eating and body image concerns by exploring a model of intuitive eating with women of diverse ages. As previous research has not applied pathways of a model of intuitive eating with women older than the traditional undergraduate, it is therefore unknown whether the pathways proposed by such a model will extend beyond women aged 18-24 years old.

2.7 Purpose of the Study

The purpose of the present study is to conduct an examination of the fit of the model presented in Figure 1 and to evaluate whether its hypothesized pathways are upheld with a sample of women aged 25-79, as well as with a sample of women aged 18-24. The present study will add incrementally to the general body of literature addressing
eating and body image concerns by providing further empirical investigation regarding
the concept of intuitive eating. Additionally, this study constitutes an attempt to further
elucidate a conceptual framework for understanding the interaction of eating-related
constructs for women of diverse ages.

2.8 **Hypotheses of Study**

The present study seeks to test the applicability of a model of intuitive eating (see
Figure 1) as applied to groups of younger (i.e., 18-24) and older (i.e., 25-79) women.
Accordingly, the following hypotheses will be tested with a group of women aged 18-24
years and with a group of women aged 25-79 years:

Hypothesis 1: Perceptions of general unconditional acceptance will predict
perceptions of body acceptance by others.

Hypothesis 2: Perceptions of general unconditional acceptance will predict
emphasis on body function (rather than body appearance).

Hypothesis 3: Perceptions of body acceptance by others will predict emphasis on
body function (rather than body appearance).

Hypothesis 4: Perceptions of body acceptance by others will predict body
appreciation.

Hypothesis 5: Emphasis on body function (rather than body appearance) will
predict body appreciation.
Hypothesis 6: Emphasis on body function (rather than body appearance) will predict intuitive eating.

Hypothesis 7: Body appreciation will predict intuitive eating

If the model implied by these aforementioned hypotheses is not upheld for an age group(s), a preliminary model will be proposed as needed for the age group(s).
CHAPTER 3

METHOD

3.1 Participants

A total sample size of 688 women, ranging in age from 18 to 79 years ($M = 31.55$, $SD = 13.95$), was obtained using Internet data collection and analyzed. Five hundred seventy-nine women (84.2%) identified as Caucasian/Euro American, 39 women (5.7%) identified as African American, 16 (2.3%) women identified as Latina/Hispanic, 25 (3.6%) women identified as Asian American, 6 (0.9%) women identified as Native American, 7 women (1.0%) identified as International, 5 (0.7%) identified as biracial, and 6 women (0.9%) identified as multiracial. Five women (0.7%) chose not to reply to this item.

In classifying their socioeconomic status, 65 (9.4%) participants identified as upper class, 547 (79.5%) participants identified as middle class, 69 (10.0%) participants identified as working class/lower class, and 7 (1.0%) participants did not reply to this item. Most women (33.4%) were married, while 30.7% were single, 23.0% were in a long-term relationship, 3.5% were divorced or separated, 4.8% were partnered, 0.9% was widowed, and 0.4% did not reply to the question.
In terms of highest education level attained, most women (40.8%) had some college education, while 33.0% completed graduate or professional school, 10.0% completed college, 7.1% had some graduate school, 7.6% completed high school, 1.3% did not reply, and 0.1% completed some high school. In terms of participants’ identified college rank, 26.6% were first-year students, 7.3% were second-year students, 5.4% were third-year students, 4.8% were fourth-year students, 2.0% were fifth-year students, and 2.6% were continuing education students. Most (47.7%) participants reported engaging in approximately 30 minutes of exercise 2-4 days per week, 37.6% reported engaging in such exercise 1 or less days per week, and 14.7% reported 5-7 days per week.

For the overall sample, reported weights and heights of participants resulted in a range of body mass indices from 16.1 to 54.8, with a mean BMI of 25.64, which is categorized into the overweight weight range (BMI = 25-30) as defined by Garrow and Webster (1985). Following guidelines for weight ranges defined by Garrow and Webster (1985), most women (55.2 %) fell within the normal weight range (BMI = 18.5-24.9), followed by 21.5 % classified as overweight (BMI = 25-29.9), 20.2% classified as obese (BMI ≥30), and 3.1% classified as underweight (BMI < 18.5).

For the purposes of this study (i.e., to explore a model of intuitive eating applied to women of traditional undergraduate age and to women older than the traditional undergraduate age), the overall sample was divided into two age groups. These age groups were established based on classifications used by many organizations and different scholars (e.g., Bean & Metzner, 1985; Butler, 1998; Chartrand, 1992; Hirschorn,
1988; Metzner & Bean, 1987) to differentiate traditionally-aged undergraduates from nontraditionally-aged undergraduates. The next sections discuss the demographics of both subgroups of women.

3.11 **Women aged 18 to 24 years old**

The younger group of women of traditional undergraduate age was comprised of 307 women, ranging in age from 18 to 24 years ($M = 19.28, SD = 1.61$). Two hundred forty-six women (80.1%) identified as Caucasian/Euro American, 21 women (6.8%) identified as African American, 9 (2.9%) women identified as Latina/Hispanic, 19 (6.2%) women identified as Asian American, 1 (0.3%) women identified as Native American, 2 (0.7%) identified as International, 3 women (1.0%) identified as biracial, and 3 women (1.0%) identified as multiracial. Three (1.0%) women chose not to reply to this item.

In classifying their socioeconomic status, 23 (7.5%) participants identified as upper class, 243 (79.2%) participants identified as middle class, 37 (12.1%) participants identified as lower/working class, and 4 (1.3%) participants did not reply to this item. Most women (50.5%) were single, while 39.1% were in a long-term relationship, 2.6% were partnered, 1.0% was married, 0.3% was divorced, and 6.6% did not reply to the question.

In terms of highest education level attained, most women (76.5%) had some college education, whereas 16.0% completed high school, 3.9% completed college, and 2.6% completed some graduate school, and 1.0% did not reply. For those women indicating college rank, if applicable, 58.0% were first-year students, 15.3% were second-year students, 9.8% were third-year students, 8.1% were fourth-year students, 3.3% were
fifth-year students, 0.3% was a continuing education student, and 5.2% did not reply. Most (46.3%) participants reported engaging in approximately 30 minutes of exercise 2-4 days per week, 39.7% reported engaging in such exercise 1 or less days per week, and 14.0% reported 5-7 days per week.

For women aged 18-24, reported weights and heights of participants resulted in a range of body mass indices from 16.10 to 54.8, with a mean BMI of 23.79, which is categorized into the normal weight range (BMI = 20-24.9) as defined by Garrow and Webster (1985). Following guidelines for weight ranges defined by Garrow and Webster (1985), most women (67.1 %) fell within the normal weight range (BMI = 18.5-24.9), followed by 16 % classified as overweight (BMI = 25-29.9), 10.7% classified as obese (BMI ≥30), and 6.2% classified as underweight (BMI < 18.5).

3.12 Women aged 25 to 79 years old

The second age group of older women was comprised of 381 women, ranging in age from 25 to 79 years (M = 41.43, SD = 11.39). Of this age group, 333 women (87.4%) identified as Caucasian/Euro American, while 6 women (1.6%) identified as Asian American. Further, 7 (1.8%) women identified as Latina/Hispanic, while 3 (0.8%) women identified as multiracial, 2 (0.5%) identified as biracial, 5 (1.3%) women identified as Native American, 5 (1.3%) women identified as International, and 18 (4.7%) women identified as African American. Two (0.5%) women chose not to reply to this item.

In classifying their socioeconomic status, 42 (11.0%) participants identified as upper class, 304 (79.8%) participants identified as middle class, 32 (8.4%) participants
identified as working/lower class, and 3 (0.8%) participants did not reply to this item. Most women (59.6%) were married; however, 10.0% were in a long-term relationship, 14.7% were single, 6.6% were partnered, and 6.0% were divorced or separated, 1.6% were widowed, and 1.6% did not reply to the question.

In terms of highest education level obtained, most women (59.6%) had completed graduate school, followed by 15.0% who had completed college, 23.7% who had completed some graduate school, and 12.1% who had some college education, 10.8% completed some graduate school, 0.8% who had completed high school, and 0.3% who had completed some high school. Six women (1.6%) did not reply. Of the women indicating that they were in college, 1.3% were first-year students, 0.8% were second-year students, 1.8% were third-year students, and 2.1% were fourth-year students, and 1.0% fifth-year students, and 4.5% were continuing education students. Most (48.8%) participants reported engaging in approximately 30 minutes of exercise 2-4 days per week, followed by 36.0% who reported engaging in such exercise 1 or less days per week, and 15.2% who reported 5-7 days per week.

Reported weights and heights of participants aged 25-79 resulted in a range of body mass indices from 17.8 to 54.8, with a mean BMI of 27.1 which is categorized into the overweight weight range (BMI = 25-30) as defined by Garrow and Webster (1985). Following guidelines for weight ranges defined by Garrow and Webster (1985), most women (45.2 %) fell within the normal weight range (BMI = 18.5-24.9), followed by 27.3% classified as obese (BMI ≥30), 26% classified as overweight (BMI = 25-29.9), and 1.0% classified as underweight (BMI < 18.5).
3.2 Procedure

Participants in both groups were recruited via introductory psychology classes at a large Midwestern university and electronic mail and listservs, relying on snowball sampling methods. Electronic mail messages were sent to students of these classes and nationwide to friends, family, colleagues, professors, professional listservs (e.g., The Women’s Place, The Women’s Fund of Central Ohio), and campus organizations (e.g., multicultural centers, GLBT student services, Women in Engineering, student affairs). Efforts were made to recruit more diverse samples by targeting organizations and listservs comprised of historically underrepresented and/or marginalized populations. The emailed messages contained a brief description of the study, a request for participation especially from “women aged 30 and older,” and an entreaty for the recipient to forward the message to other women (see Appendix B). The electronic mail message also provided a direct link with the URL address of the survey. Interested participants were directed to a webpage that provided details regarding informed consent, efforts taken to ensure anonymity, and reassurance that participants could exit their web browsers and withdraw from participation at any time (see Appendix A). After indicating their consent, they were immediately redirected to the survey webpage, where the measures and a demographic information form (see Appendix H) were hosted. Two different survey forms (containing opposite sequences of the measures) were administered in an attempt to offset possible ordering effects. Women enrolled in introductory psychology classes at the authors’ university were given course credit for their participation.
No identifying information was collected from participants. Participants were informed that although all standard precautions were taken, the complete security of the data could not be guaranteed since the transmission of survey data via the Internet is not completely secure. Additionally, the last webpage of the survey listed contact information for various psychological services, as well as a statement urging participants to use such information in the event that they felt distressed. Finally, upon completion of the survey, participants were redirected to a website containing information on body image and eating disorder concerns.

Several strategies were employed in an attempt to reduce the likelihood of erroneous data. In accordance with suggestions by Schmidt (1997), date and time of submission were screened in an attempt to decrease the likelihood of duplicate surveys. Per recommendations by Dillon and Worthington (2003), three validity check questions were integrated within the survey. These questions asked participants to choose certain responses (e.g., “Please choose Strongly Agree for this item”) to control for inattentiveness and random or careless responding. Participants who failed the validity checks were not included in the data set. Also, ninety-eight women had a significant amount of missing data (i.e., 15% or more of data points missing from at least one measure) and were not included into the data set. Scores on measures were checked for normal distribution, which indicated that the results were not detrimentally affected by selection bias.
3.3 Measures

3.31 Perceived social support

The 24-item Social Provisions Scale (SPS; Cutrona & Russell, 1987, 1990; see Appendix C) was used to measure women’s perceived general unconditional regard as conceptualized as perceived social support. The instructions ask each participant to think about her relationships with friends, family members, co-workers, community members, and so on in answering items. An example of an item is “I have close relationships that provide me with a sense of emotional security and well-being,” and responses are scored on a 4-point scale ranging from 1 (strongly disagree) to 4 (strongly agree). The SPS offers six subscales, comprised of four items each: (a) Attachment, or feelings of safety and security in a close emotional bond, (b) Social Integration, or having one’s interests and concerns shared by others, (c) Reassurance of Worth, or having one’s skills and abilities acknowledged, (d) Reliable Alliance, or assurance that one can count on assistance being available if needed, (e) Guidance, or the availability of confidants or authoritative others to provide advice; and (f) Opportunity for Nurturance, or the sense of contributing to the well-being of another person.

Total scores were averaged to reflect overall perceived social support, with higher scores reflecting greater perceived social support from influential others. Research has provided evidence of internal consistency reliability for the total social support score, as Alpha coefficient estimates have ranged from .82-.92 across a wide variety of samples including post-partum women, spouses of cancer patients, the elderly, individuals working in stressful job situations, and college undergraduates (see Cutrona & Russell,
Research with this scale has also produced evidence of internal consistency reliability for the subscale scores, ranging from $\alpha = .76$ to $\alpha = .84$ (Cutrona & Russell, 1987, 1990). In addition, Cutrona & Russell (1987, 1990) reported psychometric evidence from a confirmatory factor analysis of a six factor structure corresponding to the six social provisions of the scale (i.e., GFI = .86).

Further, total social support scores from the SPS were found to predict 66% of the variance in scores on a measure of loneliness as completed by first-year undergraduate students (Russell & Cutrona, 1984). With a sample of elderly participants in which the average age was 70 years (range = 60-88 years), total scores on the SPS were significantly negatively correlated with scores on a measure of depression, but positively correlated with scores on a measure of life satisfaction (Cutrona, Russell, & Rose, 1986). Research with samples of nurses and public school teachers has also revealed evidence of validity through similar significant negative correlations between SPS total scores and scores on a measure of depression, as well as similar significant positive correlations between SPS total scores and scores on a measure of life satisfaction (Russell & Cutrona, 1984). Finally, evidence of discriminant validity has been gathered for the SPS from research in which it was not significantly correlated with scores on a measure of neuroticism, with scores on a measure of introversion-extroversion, or scores on a measure of social desirability in a sample of college students (Cutrona & Russell, 1987). Research investigating test-retest reliability over a period of two weeks has produced an estimate of $r = .66$ in a sample of elderly community residents (Cutrona, Russell, & Rose, 1986).
3.32 **Body acceptance by others**

The Body Acceptance by Others Scale (BAOS; Tylka et al., 2006; see Appendix E) was designed to assess specific forms of environmental acceptance regarding body shape/weight. The BAOS contains a total of 10 items assessing perceived support and acceptance for one’s body shape/weight. Sample items include “I’ve felt acceptance from _______ regarding my body shape and/or weight” and “_______ have/has sent me the message that my body shape and weight are fine.” Participants were asked to complete items by first filling in the blank with specified sources of environmental acceptance (i.e., friends, family, people they have dated, interactions with society, and media). Then, for each item, participants ranked the perceived body acceptance from the specified source. Specifically, the two aforementioned sample items were presented five times, once for each environmental source to be evaluated. Items were rated on a 5-point scale ranging from 1 (*never*) to 5 (*always*), and item scores were averaged to arrive at a total score, with higher scores indicating greater perceived acceptance of body shape/weight. Avalos and Tylka (2006) conducted a pilot study of this measure with a sample of 66 college women (*M* age = 22.03, *SD* age = 5.67; 78.8% European American), which garnered evidence of internal consistency reliability (*α* = .91) and stability over a 3-week period (*r* = .85). Further evidence was yielded by Avalos and Tylka (2006), with a reported alpha of .90.

3.33 **Body function**

Body function was assessed by the Body Surveillance subscale of the Objectified Body Consciousness Scale (OBC; McKinley & Hyde, 1996; see Appendix D). The
subscale consists of eight items, which are rated on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). While this subscale was designed to assess the degree to which one thinks of one’s body in terms of appearance rather than function, it is notable that six items are framed in the direction of body function (e.g., “I think more about how my body feels than how my body looks”). In the original scoring procedure, these six items are reverse scored and added to the two items that are framed in the direction of body surveillance (e.g., “During the day, I think about how I look many times”) to determine women’s levels of body surveillance (McKinley & Hyde, 1996). However, in the present study, these six items framed in the direction of body function were not reverse scored; rather, the two items framed in the direction of body surveillance were reverse scored.

Therefore, all items were scored in the direction of body function and then averaged to form a total score, with higher scores reflecting greater emphasis on body function over body surveillance/appearance. Scores on this subscale have been found to yield evidence of internal consistency reliability (α = .89), stability over a 2-week period (r = .79), and construct validity, as demonstrated by its relationship to public self-consciousness (r = .73) in samples of mostly-traditionally-aged female undergraduates (McKinley & Hyde, 1996). In addition, McKinley (1999) reported an internal consistency reliability alpha of .76 for her sample of middle-aged women. Finally, Avalos and Tylka (2006) reported an internal consistency reliability alpha coefficient estimate of .86 for their sample of college women in which items were scored in the direction of body function.
3.34 **Body appreciation**

The 13-item Body Appreciation Scale (BAS; Avalos et al., 2005; see Appendix F) was used to measure the construct of body appreciation. A sample item is “Despite its flaws, I accept my body for what it is,”), and items were rated on a 5-point scale ranging from 1 (never) to 5 (always). Responses were then averaged, with higher scores reflecting greater body appreciation. Research has provided support for the BAS’s unidimensional factor structure, its internal consistency reliability ($\alpha$ estimates ranging from .91 to .94), and its stability over a 3-week period ($r = .90$) in samples of college women (Avalos et al., 2005). With regard to evidence of construct validity, scores on the BAS were significantly positively correlated with scores on a measure of positive appearance evaluation ($r = .68$), significantly negatively correlated with scores on a measure of body preoccupation ($r = -.79$), significantly negatively correlated with scores on a measure of body dissatisfaction ($r = -.73$), significantly positively related to scores on a measure of self-esteem ($r = .65$) and negligibly correlated with scores on a measure of impression management ($r = .14$) with college women (Avalos et al., 2005).

3.35 **Intuitive eating**

The construct of intuitive eating was measured using the Intuitive Eating Scale (IES; Tylka, 2006; see Appendix G). The IES contains 21 items designed to assess the three components of intuitive eating identified within the literature. The three components are: unconditional permission to eat (e.g., “If I am craving a certain food, I allow myself to have it”), eating for physical rather than emotional reasons (e.g., “I stop
eating when I feel full [not overstuff[ed]), and reliance on internal hunger and satiety
cues (e.g., “I trust my body to tell me how much to eat”). Each item was rated on a 5-
point scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

For the IES total score, research has supported its internal consistency reliability
(α estimates ranging from .85 to .89), its stability over a 3-week period (r = .90), and its
construct validity through its significant negative correlation with eating disorder
symptomatology (r = -.69) and poor interoceptive awareness (r = -.49) and through its
negligible relation with impression management (r = .12) in samples of college women
(Tylka, 2006).

3.4 Design

3.4.1 Latent Variable Structural Equation Modeling

The method of latent variable structural equation modeling (SEM) was used to
evaluate the acceptance model of intuitive eating and its pathways, as SEM provides a
more stringent evaluation of a model than path analysis. Latent variable SEM uses
multiple indicators to estimate a latent factor and can therefore attempt to control for
measurement error within the model (Kelloway, 1998). Mplus version 4.1 (Muthén &
Muthén, 2006) with ML estimation and covariance matrix as input was used to test the
model using multiple group analysis to test model invariance. Prior to evaluating the
structural model presented in Figure 1, the measurement model was tested for an
acceptable fit to the data through a confirmatory factor analysis, with parcels serving as
indicators for their respective latent variable. Results provided evidence as to the fit of
the model to the data by relying on consensus among indices: the χ²/df test, the
comparative fit index (CFI), the Tucker-Lewis index (TLI), the standardized root-mean-square residual (SRMR), and the root-mean-square error of approximation (RMSEA) (but note that the goodness-of-fit index [GFI] and the adjusted goodness-of-fit index [AGFI] are not computed as part of the Mplus program). Specifically, models with CFI and TLI values at or above .95 and SRMR and RMSEA values at or below .05 indicate an excellent fit to the data, whereas models with CFI and TLI values between .90 and .94 and SRMR and RMSEA values between .06 and .10 indicate an adequate fit to the data (Browne & Cudeck, 1993; Hu & Bentler, 1999). Values outside of these ranges reflect a poor fit of the model to the data. If all parcels load significantly ($p < .001$) on their respective latent factor, this will indicate that all latent factors were adequately operationalized. Therefore, that measurement model would be used when testing the structural model using multiple group analysis to test model invariance.

3.4.11 **Creation of Measured/Observed Variables**

The recommendations of Russell, Kahn, Spoth, and Altmaier (1998) were followed in order to construct three measured indicators (parcels) for each latent variable (i.e., general unconditional acceptance, body acceptance by others, body function, body appreciation, and intuitive eating). First, for each measure, an exploratory factor analysis was conducted using the ML method of extraction, specifying a single factor to be extracted. Second, items were rank ordered according to the magnitude of the factor loadings. Third, items were successively assigned (from the highest to the lowest factor loading) to each of three parcels in order to equalize the average loadings of each parcel on its respective latent factor. Finally, for each parcel, items were averaged to arrive at a
total score. Parcels were then used to estimate their respective latent variable within the SEM analyses. For measures containing subscales, the procedure discussed above was used in lieu of using the individual subscales to estimate the respective latent variable, because using subscales has been shown to negatively impact the measurement and structural model by producing lower factor loadings than parcels.

3.4.12 Multiple Group Analysis and Test of Model Invariance

Once it was determined that all parcels loaded significantly ($p < .001$) on their respective latent factor and were adequately operationalized, the measurement model was used to test the structural model and model invariance using multiple group analysis. Specifically, a latent variable SEM multiple group analysis with test of model invariance was run in order to determine whether the factor structure identified in the structural model of Figure 1 would fit data from the older and younger groups equally well. Such an analysis not only provides fit indices and path coefficients for the structural model as applied to the two age groups, but it also compares the fit of the structural model across the two age groups in order to provide evidence as to whether the seven structural pathways illustrated in Figure 1 differed significantly between older and younger participants in the present study.

A test of model invariance requires that two multiple group analyses be conducted. In the first, less-restrictive multiple group analysis, the structural paths are not fixed to be equivalent (i.e., the values of the structural paths are allowed to vary, potentially suggesting different structural paths for the two groups). In the second, more restrictive multiple group analysis, the structural paths are constrained to be invariant
(i.e., the values of the structural paths are fixed to be equal for both groups). During both analyses, factor loadings are held invariant between the two groups so that constructs would be measured similarly for the older and younger groups. If the difference in fit between the less-restrictive and the more restrictive models is determined to be significant, evidence exists to indicate inequality of the factor structure across the two groups (i.e., that the structural coefficients do indeed differ between older and younger women; Kahn, 2006; Liao, Rounds, & Klein, 2005; Long, 1998; Nauta, Epperson & Kahn, 1998).
CHAPTER 4

RESULTS

4.1 Descriptive Statistics

Forty participants had a significant amount of missing data, and their responses were not entered into the data set. These participants had 15% or more of the data points missing from at least one measure. Twenty-seven participants failed more than one of the validity checks; thus, their responses were not entered into the data set. Thirty-one participants did not provide sufficient data to derive a BMI estimation; therefore, their responses were not entered into the data set, either. For the 688 participants in the final data set, missing data points were handled by substituting participants’ mean scale or subscale scores for the missing value. The final sample sizes of women aged 18-24 \((n = 307)\) and women aged 25-79 \((n = 381)\) exceeded the conservative cases-to-parameter ratio of 10:1 for estimating the model using path analysis, as suggested by Hu and Bentler (1995).

Measure scores were examined for evidence of skewness and kurtosis by visually inspecting frequency histograms with a super-imposed normal distribution, as well as by examining skewness and kurtosis statistic values produced from the data (Tabachnick & Fidell, 1996). It was determined (per Tabachnick & Fidell, 1996) that no substantial
violations existed to jeopardize the assumptions of the analyses. The data was also screened for outliers by using graphical methods applied to histograms as recommended by Tabachnick and Fidell (1996). Because no outliers were identified, all 688 cases were analyzed.

Scale means, standard deviations, alpha levels, and intercorrelations were examined and are presented in Table 1 for the women aged 18-24 and Table 2 for the women aged 25-79. Table 3 presents scale means, standard deviations, alpha levels, and intercorrelations for all participants. Partial correlations (i.e., with body mass index controlled) among measures are presented in Table 4 for younger women, Table 5 for older women, and Table 6 for all women of the study. Consistent with past findings (e.g., Avalos & Tylka, 2006) the total scores for measures of social support, body acceptance by others, body function, body appreciation, and intuitive eating were mostly moderately-to-strongly positively correlated within both age groups, as well as within the total sample (Cohen, 1992). Further, the variables were not highly correlated (i.e., $r > .90$; Tabachnick & Fidel, 1996), providing support for the distinctiveness of each variable and lending credibility to the latent variable SEM analyses.

A multivariate analysis of variance (MANOVA) was conducted with age group placement (18-24 years, 25-79 years) as the independent variable and total scores of the measures and BMI as the dependent variables in order to determine whether BMI and/or measure scores of perceived social support, body acceptance by others, body function, body appreciation, and intuitive eating differed with regard to age group placement. Age group placement could be differentiated in terms of BMI and measure scores of perceived
social support, body acceptance by others, body function, and intuitive eating, \( F(6, 681) = 19.46, p < .001, \text{ Wilks’s } \Lambda = .85 \). Results of univariate tests revealed that age group placement had statistically significant \( p < .05 \) unique effects on BMI, \( F(6, 681) = 42.88 \), as well as on measure scores for perceived social support, \( F(1, 686) = 18.68 \); body acceptance by others, \( F(1, 686) = 29.82 \); body function, \( F(1, 686) = 7.10 \); and intuitive eating, \( F(1, 686) = 4.13 \). The only variable for which a significant univariate effect was not found was that of body appreciation, \( F(1, 686) = 2.18, p > .05 \).

Further examination attempted to identify how BMI and measure scores behaved across age groups. In terms of BMI, women aged 25-79 reported significantly higher scores as compared to women aged 18-24 \( (p < .05) \). In terms of mean scores for perceived social support, the older group of women aged 25-79 evidenced significantly higher scores as compared to those evidenced by the younger women aged 18-24 \( (p < .05) \). With regard to mean scores of body function, the older group of women aged 25-79 again differed by evidencing a higher mean as compared to the younger group of women \( (p < .05) \). In terms of mean scores of body acceptance by others, the younger group of women aged 18-24 reported significantly higher scores as compared to the older group of women aged 25-79 \( (p < .05) \). Finally, the mean scores of intuitive eating for the younger group of women were also significantly higher than that of the older group of women \( (p < .05) \).

4.2 **Latent Variable SEM**

Latent variable SEM, which uses multiple indicators to estimate a latent factor and therefore attempts to control for measurement error (Kelloway, 1998), was used to
evaluate the measurement model (i.e., parcel-factor loadings and relationships among latent variables) and the hypothesized structural model (i.e., including the hypothesized paths between the latent variables, as presented in Figure 1). *Mplus* version 4.1 (Muthén & Muthén, 2006) with ML estimation (using the covariance matrix as input) was used to test these models. Adequacy of model fit to the data was determined by four indices recommended by Hu and Bentler (1999) and provided by the *Mplus* program: \( \chi^2/df \), the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the standardized root-mean square residual (SRMR), and the root-mean square error of approximation (RMSEA). Again, models with CFI and TLI values at or above .95 and SRMR and RMSEA values at or below .05 indicate an excellent fit to the data, whereas models with CFI and TLI values between .90 and .94, SRMR and RMSEA values between .06 and .10 indicate an adequate fit to the data (Browne & Cudeck, 1993; Hu & Bentler, 1999). A \( \chi^2/df \) estimate below 3.0 may be considered adequate or ideal (Browne & Cudeck, 1993; Hu & Bentler, 1999). Values outside of these ranges reflect a poor fit of the model to the data.

The measurement model was first examined through a confirmatory factor analysis, with parcels serving as indicators for their respective latent variable. All parcels loaded significantly (\( p < .001 \)) on their respective latent factor, indicating that all latent factors were adequately operationalized. Means, standard deviations, and partial correlations among the fifteen observed measure parcels are presented in Table 7 for women aged 18-24 and in Table 8 for women aged 25-79. For the younger group of women aged 18-24, results indicated that the measurement model provided an adequate (RMSEA=.07) to excellent (\( \chi^2/df = 2.65, \) CFI=.97, TLI=.96, SRMR=.05) fit to the data.
For the older group of women aged 25-79, results indicated that the measurement model also provided an adequate (RMSEA=.06) to excellent ($\chi^2$/df = 2.20, CFI=.98, TLI=.98, SRMR=.04) fit to the data. Once again, significant parcel-factor loadings ($p < .001$) indicated that all latent factors were adequately operationalized. When the measurement model was analyzed with both groups combined into one dataset, results indicated that the measurement model provided an overall acceptable fit to the data ($\chi^2$/df = 8.24, RMSEA=.10, CFI=.93, TLI=.91, SRMR=.05); although, consensus among fit indices was not as clear in the combined dataset as compared to the separated younger and older datasets. The $\chi^2$/df and RMSEA fit indices were higher than the standard cut off values suggested by Hu and Bentler (1995) to indicate adequate fit. However, all parcels did load significantly ($p < .01$) on their respective latent factors for the dataset combined to include both age groups, indicating that all latent factors had been adequately operationalized.

On the basis of the measurement model, parcel loadings and standard errors are presented for the younger group of women aged 18-24 in Figure 2 and for the older group of women aged 25-79 in Figure 3. The relationships among latent variables based on the measurement model are presented in Table 9 for the younger group and in Table 10 for the older group. Because results indicated an acceptable fit to the data and adequate operationalization of latent factors for both age groups, the measurement model was used to run a multiple group analysis testing the structural model.

The hypothesized structural model presented in Figure 1 was evaluated with BMI being controlled as a covariate in this model. For women aged 18-24, this structural
model provided an adequate (RMSEA = .07) to excellent ($\chi^2$/df= 2.42, CFI = .97, TLI = .96, SRMR= .05) fit to the data. Similarly, for women aged 25-79, this model provided an adequate (RMSEA = .06) to excellent ($\chi^2$/df= 2.23, CFI = .98, TLI = .97, SRMR= .05) fit to the data. Path coefficients are presented in Figure 2 for women aged 18-24 and in Figure 3 for women aged 25-79. For both age groups, all hypothesized paths were significant except for the path from general unconditional acceptance (i.e., conceptualized and measured as social support) to emphasis on body function. Therefore, in order to obtain a more parsimonious and potentially better fitting model, this nonsignificant path was deleted in the model for both age groups.

For women aged 18-24, this revised, more parsimonious model provided an adequate (RMSEA = .07, SRMR = .06) to excellent ($\chi^2$/df= 2.53, CFI = .97, TLI = .96) fit to the data. The version of the structural model containing the path from general unconditional acceptance conceptualized as social support to emphasis on body function did not provide a better fit to the data than the trimmed model, $\chi^2$ difference (1, $N= 307$) = 0.947, ns. Thus, this trimmed model was interpreted. Interpretation of this revised and trimmed model suggested that approximately 10.7% of the variance in body function was explained by perceived body acceptance by others, 25.1% of the variance in perceived body acceptance by others was explained by general unconditional acceptance conceptualized as social support, 68.5% of the variance in body appreciation was explained by body function and perceived body acceptance by others, and 40.1% of the variance in intuitive eating was explained by body appreciation and body function.

For women aged 25-79, the revised, more parsimonious model (i.e., without the
path from general unconditional acceptance to body function) provided an adequate
(RMSEA = .06) to excellent ($\chi^2/df= 2.21$, CFI = .98, TLI = .97, SRMR = .05) fit to the
data. The version of the structural model containing the path from general unconditional
acceptance conceptualized as social support to emphasis on body function did not provide
a better fit to the data than the trimmed model, $\chi^2$ difference (1, $N= 381$) = 0.052, ns. Thus,
this trimmed model was interpreted. Interpretation of this revised and trimmed model
suggested that approximately 8.2% of the variance in body function was explained by
perceived body acceptance by others, 52.5% of the variance in perceived body
acceptance by others was explained by general unconditional acceptance conceptualized
as social support, and 66.6% of the variance in body appreciation was explained by body
function and perceived body acceptance by others, and 46.7% of the variance in intuitive
eating was explained by body appreciation and body function.

4.3 Multiple Group Analysis and Test of Model Invariance

A latent variable SEM multiple group analysis was also run in order to determine
whether the factor structure identified in the structural model of Figure 1 would fit data
from the older and younger groups equally well. This multiple group analysis of model
invariance compared the fit of the model factor structure across the two age groups;
thereby garnering evidence as to whether the seven structural pathways illustrated in
Figure 1 differed significantly between older and younger participants. In the first, less-
restrictive multiple group analysis, the values of the structural paths were allowed to vary
the structural paths. In other words, the values of the structural paths were not fixed to be
equivalent so as to potentially suggest different structural paths for the two groups. In the
second, more restrictive multiple group analysis, the structural paths were constrained to be invariant, meaning that the values of the structural paths were fixed to be equal for both groups. During both analyses, factor loadings were held invariant between the two groups so that constructs would be measured similarly for the older and younger groups.

The test of the first, less-restrictive model in which the structural paths are not fixed to be equivalent (i.e., are allowed to vary) revealed that the model provided an adequate (RMSEA=.07, SRMR=.06) to excellent ($\chi^2$/df =2.55, CFI=.97, TLI=.96) fit to the data. The test of the second, more restrictive model in which the structural paths are constrained to be equivalent suggested that the model did not provide an adequate fit to the data ($\chi^2$/df =8.05, SRMR =.31, RMSEA=.14, CFI=.84, TLI=.82) to fit to the data. Further, results indicated that the less restrictive model provided a significantly better fit to the data than the restricted model, $\chi^2$ difference (23, N= 688) = 54.99, $p<.01$. These results provide evidence to suggest that model invariance exists in the present study and that the structural coefficients differ between older and younger women.
CHAPTER 5

DISCUSSION

5.1 Overview

The present study adds to extant literature on women’s body image and eating disorder concerns by testing the posited pathways of an acceptance model of intuitive eating (Avalos & Tylka, 2006) with a sample of women aged 25-79 and a comparison sample of women aged 18-24. This model of intuitive eating has garnered support with samples of predominantly traditionally-aged undergraduate women (Avalos & Tylka, 2006); however, the model of intuitive eating has not been examined with studies specifically aiming to incorporate women older than the traditionally-aged college student. Applications of this framework (including its hypothesized directional pathways) with women aged across the adult lifespan is clearly needed. The present study adds incrementally to existing research by attempting to further elucidate how certain variables interact meaningfully to contribute to a positive body orientation and adaptive intuitive eating behaviors in older and younger women.

5.2 Discussion of Findings from Latent Variable SEM

Upon initial analyses, the present study provided empirical evidence in support of
the acceptance model of intuitive eating as described by Avalos and Tylka (2006) among women aged 18-24, as well as among women aged 25-79. Specifically, when the proposed model of intuitive eating (see Figure 1) was tested independently with the sample of younger women and the sample of older women, fit indices indicated that the model provided an overall good fit to the data for both age groups of women. In addition, all of the hypothesized pathways were significant except for the path from general unconditional acceptance (i.e., conceptualized and measured as social support) to emphasis on body function for both age groups. Therefore, in order to obtain a more parsimonious and potentially better fitting model, this nonsignificant path was deleted from the model before re-analyzing its fit with data from the younger sample and from the older sample.

Once this nonsignificant pathway was removed from the model estimation, fit statistics indicated an excellent fit of the revised model to the data for both age groups of women (see Figure 2 for women 18-24; see Figure 3 for women 25-79). For women aged 18-24 in the present study, this revised, more parsimonious model accounted for 40.1% of the variance in intuitive eating. For women aged 25-79 in the present study, this revised, more parsimonious model accounted for 46.7% of the variance in intuitive eating. For both older and younger women in the present study, these results indicate that the basic model of intuitive eating fit the data, and that this model fit was significantly improved with the deletion of the pathway from general unconditional acceptance to body function. These findings provide further evidence to support the pathways of the intuitive eating framework as posited by Avalos and Tylka (2006) as applied to samples
of predominantly young (i.e., 18-24) women. In addition, findings from older women in
the present study add incrementally to extant research by suggesting that the model of
intuitive eating may be generalized and extended to apply to women older than the
traditionally-aged undergraduate. Certainly though, continued research is needed to
determine whether such results are attributed as sample-specific. Therefore, the
importance of research attempting to replicate findings of the present study is
underscored. Findings and implications for both age groups of women from the present
study are discussed in more detail below.

5.21 General Unconditional Acceptance

In the present study, general unconditional acceptance (i.e., social support) was
found to predict perceived body acceptance by others in women aged 18-24 and in
women aged 25-79. These findings are consistent with theoretical assertions of the model
of intuitive eating and also offer empirical support for the pathway from general
unconditional acceptance to perceived body acceptance by others. Such results are also
consistent with, and add incrementally to, extant research findings linking general
unconditional acceptance to perceived body acceptance by others in samples of women
predominantly comprised of traditionally-aged undergraduates (i.e., Avalos & Tylka,
2006). Results from the present study lend support to the notion that when an older or
younger woman perceives general unconditional acceptance from her environment, she
may be more likely to perceive that others accept her body. Indeed, in the present study,
general unconditional acceptance was found to account for 25.1% of the variance in
perceived body acceptance by others for younger women. For older women of the
present study, general unconditional acceptance by others was found to account for 52.5% of the variance in perceived body acceptance by others. While both percentages are significant, these findings also indicate the need to explore other variables that may also be predicting perceived body acceptance by others and thereby accounting for some of the remaining variance in this construct.

In comparing measured levels of general unconditional acceptance (i.e., social support) for older and younger women in the present study, it is interesting to note that women aged 25-79 years reported a significantly higher ($p<.05$) level of general unconditional acceptance than younger women aged 18-24 years. It may be of value to determine if such a finding may be replicated in other studies comparing older and younger samples of women. Although this finding may be sample-specific, it may be that older women of the present study have been better able to perceive a more accepting environment and create more accepting social support networks with age and increased distance from the pressures associated with remaining in the objectification limelight (Fredrickson & Roberts, 1997).

It is also worth noting that while the significance of the pathway from general unconditional acceptance to body acceptance by others for both groups of women in the present study offers further support to that garnered by Tylka and Avalos (2006) for this pathway, the present study utilized a different conceptualization and scale to measure general unconditional acceptance than that employed by Avalos and Tylka (2006). The scale used to measure general unconditional acceptance in the present study was designed
to measure the construct of perceived social support from influential others, while Avalos and Tylka used a measure of women's perceptions of unconditional relational support from the person they recognized as most important while growing up. It may be interesting and useful for future studies to incorporate measures of several forms of general unconditional acceptance (e.g., perceived social support from influential others, perceived unconditional support from the most influential person while growing up), as such different forms of general unconditional acceptance may each account for unique variance in perceived body acceptance by others and further existing knowledge of this link.

Another finding of interest garnered from the present study and related to the construct of general unconditional acceptance (i.e., conceptualized and measured as social support) was that it was not found to predict body function in women aged 18-24 or in women aged 25-79. This result is inconsistent with the theoretical underpinnings of the model of intuitive eating and contrary to the hypothesis of the present study, both of which posit that perceptions of general unconditional acceptance would allow women to be more likely to focus on body function and inner experiences rather than adopting external rules of eating (e.g., dieting) associated an emphasis on body appearance rather than body function. The finding that general unconditional acceptance did not predict body function in the present study is consistent, however, with past findings reported by Avalos and Tylka (2006) from their sample of mostly traditionally-aged undergraduate females.
In attempting to explain the unexpected nonsignificance of the path from general unconditional acceptance to body function, Avalos and Tylka (2006) suggested that perhaps rather than general unconditional acceptance, a more specific form (i.e., body acceptance by others) of unconditional acceptance is the more powerful predictor of emphasis on body function. This potentially viable explanation seems to be consistent with findings that perceived body acceptance by others predicted emphasis on body function in the present study as well as in previous research (i.e., Avalos & Tylka, 2006). It is also conceivable that the conceptualization and/or measurement utilized in extant literature have/has not sufficiently paralleled the theoretical construct of general unconditional acceptance. Further research could help to provide more support for either of these potentially plausible explanations for the unexpected finding that perceived general unconditional acceptance did not predict emphasis on body function for either age group of women.

5.22 Body Acceptance by Others

For women aged 18-24 in the present study, body appreciation by others was found to predict a significant amount of unique variance (i.e., 10.7%) in emphasis on body function. Body appreciation by others was also found to predict a significant amount of variance (i.e., 8.2%) in body function for women aged 25-79 in the present study. These findings are consistent with the hypothesis of the present study, as well as with past findings derived from samples of mostly traditionally-aged female undergraduates (Avalos & Tylka, 2006). Such results provide support for the supposition behind the acceptance model of intuitive eating theory (Avalos & Tylka, 2006) that
women who perceive that their bodies are appreciated by others may be less preoccupied with thoughts of attaining the thin ideal and may instead be better able to focus on the functioning and internal experiences of their body.

Analyses of the present study also revealed that younger women reported significantly higher ($p<.05$) levels of perceived body acceptance by others as compared to older women. Older women of the present study also endorsed significantly higher ($p<.05$) BMI reports, as well. In the present study it may be that younger women’s bodies are closer approximations of the thin ideal, which is associated with their perceptions of higher levels of body acceptance from others. If this is finding is replicated, it may be of interest to examine women’s thoughts and feelings about growing further from the thin ideal as they age. Further research could attempt to replicate and explore such potential associations.

The present study’s empirical support of the pathway from body acceptance by others to emphasis on body function also lends credence to a similar, but more pathologically-focused vein of research findings in which a lack of body acceptance by others may lead women to engage in more frequent habitual body monitoring which is characteristic of an emphasis on body appearance rather than body function (Fredrickson & Roberts, 1997). Finally, the present study's support for the link between body acceptance by others and body function is consistent with extant research suggesting that perceived pressure for thinness from others has been associated with women's tendency to focus on outward body appearance rather than body function (e.g., Birch et al., 2003;
Carper et al., 2000; Tylka & Hill, 2004). Again, the significance of this pathway for both groups of women in the present study replicates extant findings from samples of mostly younger women (i.e., Avalos & Tylka, 2006) and also adds incrementally by offering tentative support of the generalizability of this pathway with women older than the traditionally-aged undergraduate.

Also consistent with hypothesized pathways of the present study is the finding that the construct of body acceptance by others predicted a significant portion of unique variance in body appreciation for women aged 18-24, as well as for women aged 25-79. These findings offer further empirical support for the underlying assertion of the model of intuitive eating that a woman who perceives that others are accepting of her body may herself be more likely to endorse positive feelings towards her body such as body appreciation. Again, this result is also congruent with past findings supporting the link between body acceptance by others and body appreciation in samples of predominantly traditionally-aged female undergraduates (i.e., Avalos & Tylka, 2006) and also provides preliminary evidence for the applicability of this link in samples of women aged older than the traditionally-aged undergraduate. In addition, the present study's support for the association between body acceptance by others and body appreciation also builds upon extant research underscoring the impact that others' opinions may have on feelings towards one's own body (Tantleff-Dunn & Gokee, 2002). Finally, this finding seems to offer a complimentary perspective to more pathologically-focused line of research indicating that perceived pressure from others for thinness (in lieu of perceived body
acceptance by others) predicts body dissatisfaction above and beyond that accounted for by habitual body monitoring.

5.23 Body Function

For both groups of women aged 18-24 and 25-79 in the present study, the construct of body function was also found to predict a significant amount of the variance in body appreciation. This finding is consistent with theory behind the model of intuitive eating which posits that a woman’s tendency to emphasize her body’s functionality over appearance may lead her to endorse higher levels of appreciation of her body. These findings are once again congruent with hypotheses of the present study, as well as with past research supporting the link between body function and body appreciation in samples of mostly traditionally-aged female undergraduates (Avalos & Tylka, 2006). It appears this link may be extended to apply to women aged older than the traditionally-aged undergraduate; however, future research should attempt to replicate such findings with other samples of older women.

In addition, the present study found that older women aged 25-79 years endorsed significantly higher ($p<.05$) levels of viewing their bodies in terms of functionality rather than appearance as compared to younger women aged 18-24 years. This finding seems consistent with previous research (e.g., Greenleaf, 2005; McKinley, 1999) in which older women reported significantly lower levels of body surveillance than younger women; however, the present study adds incrementally by utilizing a different measurement and conceptualization that stems from a more strength-based approach.
In the present study, the construct of body function was also found to predict a significant amount of unique variance in intuitive eating for both groups of older and younger women. This finding provides further support for similar findings in extant research with undergraduate women (i.e., Avalos & Tylka, 2006) and suggests that this pathway may be significant for older women, as well. This finding is also congruent with the theoretical contentions and the model of intuitive eating suggesting that women who emphasize body functionality over appearance may be more apt to eat for the purpose of aiding one’s body functioning by honoring one’s internal hunger and satiety signals (Tribole & Resch, 1995; Tylka, 2006). Finally, such results of the present study lend a complimentary perspective to extant research in which habitual body monitoring of appearance predicted disordered eating among women, above and beyond that explained for by body shame (Moradi, Dirks, & Matteson, 2005).

5.23 Body Appreciation

In the present study, body appreciation was found to predict a significant amount of unique variance in intuitive eating for women aged 18-24 and for women aged 25-79. This finding is consistent with previous research linking body appreciation to intuitive eating behavior in samples of predominantly traditionally-aged undergraduate women (Avalos & Tylka, 2006), as well as consistent with assertions underlying the model of intuitive eating (Avalos et al., 2005; Tribole & Resch, 1995) suggesting that women who respect and appreciate their bodies may be more aware and respectful of their bodily needs, including their internal hunger and satiety cues. In addition, such findings from the
present study enhance complimentary research demonstrating that women who do not
demonstrate body appreciation (i.e., have high levels of body dissatisfaction/shame) also
endorsed higher levels of disordered eating (e.g., Moradi et al., 2005; Stice et al., 1996;
Tylka & Hill, 2004; Tylka & Subich, 2004). Hence, body appreciation was hypothesized
predict intuitive eating, and support for this pathway was ascertained for both younger
and older women in the present study.

5.24 Summary

For both younger and older women in the present study, the model of intuitive
eating (Avalos & Tylka, 2006; see Figure 1) provided a good fit to the data. Support was
garnered in both younger and older samples for all of pathways of the model of intuitive
eating except for the pathway from general unconditional acceptance to body function.
Once this nonsignificant pathway was removed from the model, further analyses
indicated that this more parsimonious model provided a significantly better fit to the data
for older and younger women. These findings replicate results reported by Avalos and
Tylka (2006) for their sample of predominantly traditionally-aged female undergraduates.
Further, findings from the present study provide much needed evidence suggesting that
the model of intuitive eating also appears to hold for women aged older than the
traditionally-aged undergraduate. Certainly though, future research is needed to continue
exploration of this topic and provide empirical evidence regarding the revised model of
the present study.
5.3 Discussion of Multiple Group Analyses and Test of Model Invariance

Findings from a latent variable SEM multiple group analysis with a test of model invariance indicated that the factor structure identified in the structural model of Figure 1 did not fit data from the older and younger groups equally well. Indeed, findings offer empirical evidence suggesting that the seven structural pathways illustrated in Figure 1 differed significantly between older and younger participants. Findings from the test of the first, less-restrictive model in which the structural paths are not fixed to be equivalent (i.e., are allowed to vary) revealed that the model provided an adequate to excellent fit to the data, whereas findings from the test of the second, more restrictive model in which the structural paths are constrained to be equivalent suggested that the model did not provide an adequate fit to the data. Results also revealed that the less restrictive model provided a significantly better fit to the data than the restricted model. Taken together, results suggest that model invariance exists in the present study. In other words, the present study has garnered evidence to suggest that the structural coefficients and factor structure specified by the model of intuitive eating differ between older and younger women. Future research and follow-up analyses could be conducted in order to ascertain potential differences in construct means, to identify which pair or pairs of structural coefficients were significantly different from one another, or to examine mediation/indirect effects.
5.4 Limitations

Although the present study contributes incrementally to extant literature, several limitations should be addressed. First, participants were solicited through snowball sampling methods using electronic email and online survey completion. While Internet data collection may be helpful in recruiting a more diverse sample of women, it may also be prone to inattentive responding, duplicate surveys, and random responding. While several methods were employed to reduce erroneous data, such methods may not have been able to completely eliminate fallacious data.

Additionally, more research is needed to compare Internet data collection with other methods of data collection. Extant research (e.g., Koch & Emrey, 2001) has suggested that Internet data collection may be beneficial for recruiting from hard-to-reach populations. Research (Koch & Emrey, 2001) has also supported the demographic comparability of samples recruited via the Internet with samples recruited via other methods, as well as demographic similarities between those who chose to participate and those who did not participate in Internet surveys. However, until additional research provides more specific and repeated findings related to such issues, a limitation of the present study may be sample bias, missing data, and/or limited ability to generalize findings to the population of women across the lifespan.

An additional limitation is the self-report nature of all of the instruments of the present study. Self-report data may be prone to inaccurate memories of participants, influence of social desirability, and other related concerns that may result in erroneous data. Another limitation of the present study is that the method of latent variable SEM
chosen to analyze the data is embedded in correlational methodology. Accordingly, no firm causal conclusions may be made about the order of the variables. Although evidence from the present study suggested that the model should be revised to exclude the pathway from general unconditional acceptance to body function, this final model was data-derived as opposed to theory-based, and other variables may have fit within the model as well. For that matter, other models may have fit the data as well as the presented models. Hence, support for the fit of the revised model should not be taken as evidence that the model has been proven to be accurate. Rather, the models should be considered tentative until additional research can determine whether findings related to the models may be generalized to other samples. Future research should attempt to replicate findings of the present study with more diverse samples, instrumentation, and/or methodologies.

Another potential limitation of the present study is the cross-sectional design. A related limitation is the rather age group classification. With no clear suggestions for age group classifications apparent in extant literature on eating and body image concerns, the present study relied on previously-established age group cut-off delineating traditionally-aged undergraduates from those older than the traditionally-aged undergraduate. However, as much variance exists within both age groups, the present categorization may not be as sensitive to similarities and differences within groups. Also, due to the cross-sectional methodology, age effects could be attributed to cohort differences, or generational effects. For example, Grogan (1999) suggests that women aged 50 and older may have experienced less pressure for thinness, as the fuller figures of Marilyn Monroe and Jayne Mansfield were more representative of the cultural ideal of attractiveness.
Also, as research and educational programming related to body image and eating disorder concerns has only fairly recently begun to receive increasing attention by society at large, it is conceivable that younger women may have had more education about the etiology, treatment, and prevention of eating disorders. A longitudinal study would be a logical extension of the present study and an attempt to explore developmental changes with age.

Future research should extend the present study by drawing from samples that are more representative of the general population, especially with regard to education. Overall, the participants of the present study appeared to be highly educated, which may limit the appropriateness of generalizing findings and applicability to women with less education. Extensions of the present study should attempt to draw a sample of women more representative of the general population.

5.7 **Future Research**

Future research should attempt to replicate the present study’s findings with samples that are more representative of the general population (e.g., with regard to education). Future research should also examine the role of additional variables (e.g., personal, psychological, relational correlates) within the model. The inclusion of additional variables within the model may serve to elucidate factors that contribute to development of positive body image and more adaptive eating behaviors. Finally, it is imperative to continue examining the body image and eating behaviors of women aged across the adult lifespan. The present study offers evidence to suggest although the basic model of intuitive eating applies to older and younger women, these constructs interact differently for women across the adult lifespan. Although a solid foundation of literature
addressing age in relation to body image and eating disorder concerns has yet to be established, the present study adds incrementally by replicating the applicability of a model based on intuitive eating with a sample of traditionally-aged undergraduate women, as well as suggesting that this model may also be generalized to apply to women aged older than the traditional undergraduate. The present study offers a framework for understanding the body and eating experiences of women aged 18-79; however, it is essential to continue to apply, integrate, and extend findings of the present study in pursuit of a better understanding of women of all ages.
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APPENDIX A

DESCRIPTION OF STUDY (HOSTED ON WEBSITE)
Thoughts, feelings, and experiences concerning body image

Welcome!
WOMEN AGED 18 AND OLDER ONLY!

WOMEN AGED 30 AND OLDER ARE ESPECIALLY ENCOURAGED TO PARTICIPATE, although women aged 18-29 are also welcome.

This survey is part of a study examining women's relationships with others, body attitudes, and eating habits. If you choose to participate, this study will take you approximately 15 minutes. This study is anonymous; therefore, your responses will be confidential. Other than what you voluntarily submit in response to the survey, no information or software will be taken from or left on your computer, no tracking methods will be used to collect information, upload “cookies,” or do anything else that might compromise your privacy. By submitting responses you give your consent to participate.

I ask that you respond honestly to all questions as best you can, as the validity of the study will depend on your honest answers.

At any point during the experiment, you can withdraw your participation without penalty or repercussion by closing out of your browser. If you have questions or concerns about this research, feel free to contact me. My name is Casey Augustus-Horvath, and my email address is caseyaugustus@yahoo.com. My faculty advisor is Dr. Tracy Tylka. Please feel free to also contact her if you have questions about this study. She is an assistant professor at The Ohio State University at Marion. Her phone number is 740-389-6786 x 6384, and her email address is tylka.2@osu.edu.

Thank you for your time!

I am a woman aged 18 or older.________
I consent to participate and would like to begin the questionnaire now. __________
APPENDIX B

ELECTRONIC MAIL DESCRIPTION
Hello!

My name is Casey Augustus-Horvath, and I am a graduate student in the Counseling Psychology Ph.D. Program in the Department of Psychology at The Ohio State University. I am the principle investigator for a research study examining women's attitudes about women's relationships with others, body attitudes, and eating habits. Women aged 30 and older are especially encouraged to participate, but women aged 18-29 are also welcome.

If you choose to participate in this study, please click on the link at the bottom of the page. The survey will take approximately 15 minutes to complete. Due to the nature of Internet research, the security of the survey data during transmission cannot be guaranteed; however, no identifying information will be collected. Your responses are completely anonymous. Security is guaranteed once the researcher receives the data.

If you would like further information about this study, please do not hesitate to contact me at caseyaugustus@yahoo.com. You may also contact my advisor Dr. Tracy Tylka at tylka.2@osu.edu. The methods of this research and the plan for protection of rights of participants have been reviewed and approved by the Office of Responsible Research Practices, which oversees all research conducted at The Ohio State University. This plan received Institutional Review Board approval on day and time (Project # 2004####). Please feel free to forward this email to other women who may be interested in participating.

If you have read this email and would like to take the survey, please click on the URL below:

http://www.surveymonkey.com/s.asp?u=##########

Thank you for your time!

Casey L. Augustus-Horvath
APPENDIX C

SOCIAL PROVISIONS SCALE
Instructions: In answering the following questions, think about your current relationships with friends, family members, co-workers, community members, and so on. Please indicate to what extent each statement describes your current relationships with other people. Use the following scale to indicate your opinion.

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<th>1</th>
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<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly agree</td>
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So, for example, if you feel a statement is very true of your current relationships, you would respond with a 4 (strongly agree). If you feel a statement clearly does not describe your relationships, you would respond with a 1 (strongly disagree).

1. There are people I can depend on to help me if I really need it.
2. I feel that I do not have close personal relationships with other people.*
3. There is no one I can turn to for guidance in times of stress.*
4. There are people who depend on me for help.
5. There are people who enjoy the same social activities I do.
6. Other people do not view me as competent.*
7. I feel personally responsible for the well-being of another person.
8. I feel part of a group of people who share my attitudes and beliefs.
9. I do not think other people respect my skills and abilities.*
10. If something went wrong, no one would come to my assistance.*
11. I have close relationships that provide me with a sense of emotional security and well-being.
12. There is someone I could talk to about important decisions in my life.
13. I have relationships where my competence and skill are recognized.
14. There is no one who shares my interests and concerns.*
15. There is no one who really relies on me for their well-being.*
16. There is a trustworthy person I could turn to for advice if I were having problems.
17. I feel a strong emotional bond with at least one other person.
18. There is no one I can depend on for aid if I really need it.*
19. There is no one I feel comfortable talking about problems with.*
20. There are people who admire my talents and abilities.
21. I lack a feeling of intimacy with another person.*
22. There is no one who likes to do the things I do.*
23. There are people who I can count on in an emergency.
24. No one needs me to care for them.*

Scoring:
- Asterisked item “*” should be reversed.
APPENDIX D

OBJECTIFIED BODY CONSCIOUSNESS SCALE:
BODY SURVEILLANCE SUBSCALE
1.) I rarely think about how I look. (R)  

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<td>Strongly Disagree</td>
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2.) I think it is more important that my clothes are comfortable than whether they look good on me. (R)  

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<td>Strongly Disagree</td>
<td>Neither Agree Nor Disagree</td>
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3.) I think more about how my body feels than how my body looks. (R)  

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

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

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

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

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

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APPENDIX E

BODY ACCEPTANCE BY OTHERS SCALE
For each item, please circle the response that best captures your own experience.

1. I’ve felt acceptance from my friends regarding my body shape and/or weight.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

2. My friends have sent me the message that my body shape and weight are fine.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

3. I’ve felt acceptance from my family regarding my body shape and/or weight.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

4. My family has sent me the message that my body shape and weight are fine.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

5. I’ve felt acceptance from people I’ve dated regarding my body shape and/or weight.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

6. People I’ve dated have sent me the message that my body shape and weight are fine.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

7. I’ve felt acceptance from the media (e.g., TV, magazines) regarding my body shape and/or weight.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always

8. I feel that the media have sent me the message that my body shape and weight are fine.
   1  2  3  4  5
   Never   Rarely   Sometimes   Often   Always
9. I’ve felt acceptance from society (e.g., school, church, social settings) regarding my body shape and/or weight.

   1  2  3  4  5  
   Never Rarely Sometimes Often Always

10. I feel that society has sent me the message that my body shape and weight are fine.

   1  2  3  4  5  
   Never Rarely Sometimes Often Always
APPENDIX F

BODY APPRECIATION SCALE
Please indicate whether the question is true about you never, seldom, sometimes, often, or always.

1. I respect my body.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

2. I feel good about my body.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

3. On the whole, I am satisfied with my body.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

4. Despite its flaws, I accept my body for what it is.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

5. I feel that my body has at least some good qualities.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

6. I take a positive attitude towards my body.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

7. I am attentive to my body’s needs.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always

8. My self worth is independent of my body shape or weight.
   - 1 Never
   - 2 Seldom
   - 3 Sometimes
   - 4 Often
   - 5 Always
9. I do not focus a lot of energy being concerned with my body shape or weight.

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10. My feelings toward my body are positive, for the most part.

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11. I engage in healthy behaviors to take care of my body.

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12. I do not allow unrealistically thin images of women presented in the media to affect my attitudes toward my body.

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<td>Never</td>
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13. Despite its imperfections, I still like my body.

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APPENDIX G

INTUITIVE EATING SCALE
**Directions for participants:** For each item, please circle the answer that best characterizes your attitudes or behaviors.

1. **I try to avoid certain foods high in fat, carbohydrates, or calories.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

2. **I stop eating when I feel full (not overstuffed).**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

3. **I find myself eating when I’m feeling emotional (e.g., anxious, depressed, sad), even when I’m not physically hungry.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

4. **If I am craving a certain food, I allow myself to have it.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

5. **I follow eating rules or dieting plans that dictate what, when, how much to eat.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

6. **I find myself eating when I am bored, even when I’m not physically hungry.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

7. **I can tell when I’m slightly full.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

8. **I can tell when I’m slightly hungry.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

9. **I get mad at myself for eating something unhealthy.**
   - 1: Strongly Disagree
   - 2: Disagree
   - 3: Neutral
   - 4: Agree
   - 5: Strongly Agree

10. **I find myself eating when I am lonely, even when I’m not physically hungry.**
    - 1: Strongly Disagree
    - 2: Disagree
    - 3: Neutral
    - 4: Agree
    - 5: Strongly Agree

11. **I trust my body to tell me when to eat.**
    - 1: Strongly Disagree
    - 2: Disagree
    - 3: Neutral
    - 4: Agree
    - 5: Strongly Agree
12. I trust my body to tell me what to eat.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

13. I trust my body to tell me how much to eat.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

14. I have forbidden foods that I don’t allow myself to eat.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

15. When I’m eating, I can tell when I am getting full.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

16. I use food to help me soothe my negative emotions.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

17. I find myself eating when I am stressed out, even when I’m not physically hungry.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

18. I feel guilty if I eat a certain food that is high in calories, fat, or carbohydrates.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

19. I think of a certain food as “good” or “bad” depending on its nutritional content.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

20. I don’t trust myself around fattening foods.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree

21. I don’t keep certain foods in my house/apartment because I think that I may lose control and eat them.
   1                          2    3         4                       5
   Strongly Disagree       Disagree       Neutral       Agree       Strongly Agree
APPENDIX H

DEMOGRAPHIC INFORMATION
Age: _____ In what state do you live?_______

Your race/ethnicity:

_____ African American      _____ Asian American
_____ Caucasian/Euro American  _____ Native American
_____ Latina/Hispanic        _____ International
_____ Biracial              _____ Multiracial
_____ Other: please specify: __________________________

Your socio-economic status:

_____ Upper class          _____ Middle class
_____ Working class/Lower class
_____ Other: please specify: __________________________

Your Highest Education Level:

_____ Completed graduate school  _____ Completed high school
_____ Some graduate school      _____ Some high school
_____ Completed college         _____ Completed middle school
_____ Some college             _____ Some middle school
_____ Other: please specify: __________________________

Your rank, if currently in college:

_____ First Year           _____ Continuing Education
_____ Second Year
_____ Third Year
_____ Fourth Year
_____ Fifth Year

Relationship status:

_____ Single               _____ Married
_____ Long-term relationship  _____ Widowed
_____ Divorced              _____ Partnered
_____ Other: please specify: __________________________

How often you usually exercise for approximately 30 minutes of exercise per week:

_____ One day or less  _____ 5-7 days per week
_____ 2-4 days per week  _____ Other: if your exercise routine drastically differs from the options given, please specify: ___________

Weight: _____      Height_____

Thank you!
Table 1
Mean scores, standard deviations, alpha levels, and intercorrelations among measures of social support, body acceptance by others, body function, body appreciation, intuitive eating, and body mass for women aged 18-24. Note. SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale; BMI = Body Mass Index. n = 307. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).

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Table 2
Mean scores, standard deviations, alpha levels, and intercorrelations among measures of social support, body acceptance by others, body function, body appreciation, intuitive eating, and body mass for women aged 25-79. Note. SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale; BMI = Body Mass Index. n = 381. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).
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Table 3
Mean scores, standard deviations, alpha levels, and intercorrelations among measures of social support, body acceptance by others, body function, body appreciation, and intuitive eating for all women in the study. Note. SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale. n = 688. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).
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Table 4
Partial correlations with body mass index controlled among measures of social support, body acceptance by others, body function, body appreciation, and intuitive eating for women aged 18-24. *Note. SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale. n = 307. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).
Table 5
Partial correlations with body mass index controlled among measures of social support, body acceptance by others, body function, body appreciation, and intuitive eating for women aged 25-79. *Note.* SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale. *n* = 381. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).
<table>
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Table 6
Partial correlations with body mass index controlled among measures of social support, body acceptance by others, body function, body appreciation, and intuitive eating for all women in the study. Note. SPS = Social Provisions Scale; BAOS = Body Acceptance by Others Scale; BS = Body Surveillance subscale of the Objectified Body Consciousness Scale; BAS = Body Appreciation Scale; IES = Intuitive Eating Scale. $n = 688$. Absolute correlation values at or above .20 are interpreted as statistically and practically significant and denoted with an asterisk (Walsh & Betz, 2001).
| Variable | $M$  | $SD$ | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
|----------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. SPS1  | 3.34 | .38  | ---- | .81 | .83 | .04 | .02 | .06 | .36 | .40 | .34 | .26 | .35 | .25 | .09 | .13 | .15 |
| 2. SPS2  | 3.44 | .40  | ---- | .83 | .13 | .04 | .08 | .36 | .43 | .34 | .32 | .42 | .32 | .22 | .22 | .27 |
| 3. SPS3  | 3.41 | .42  | ---- | .07 | .02 | .05 | .32 | .39 | .35 | .25 | .33 | .26 | .17 | .19 | .18 |
| 4. BS1   | 3.42 | 1.27 | ---- | .63 | .61 | .22 | .29 | .29 | .50 | .44 | .54 | .43 | .46 | .44 |
| 5. BS2   | 3.15 | 1.19 | ---- | .60 | .18 | .19 | .21 | .44 | .34 | .42 | .29 | .33 | .28 |
| 6. BS3   | 3.51 | 1.30 | ---- | .19 | .24 | .24 | .38 | .38 | .47 | .29 | .33 | .27 |
| 7. BAOS1 | 3.96 | .81  | ---- | .90 | .77 | .54 | .61 | .58 | .31 | .36 | .38 |

Table 7
Means, standard deviations, and partial correlations (with body mass index controlled) among parcels for women aged 18-24

*Note. N = 307. Absolute correlation values greater than or equal to .20 indicates practical significance and statistical significance at $p < .001$. SPS (Social Support) 1, 2, 3 = three parcels from the Social Provisions Scale; BS (Body Function) 1, 2, 3 = three parcels from the Objectified Body Consciousness (OBC) Body Surveillance Scale; BAOS (Body Acceptance by Others) 1, 2, 3 = three parcels from the Body Acceptance by Others Scale; BAS (Body Appreciation) 1, 2, 3 = three parcels from the Body Appreciation Scale; IES (Intuitive Eating) 1, 2, 3 = three parcels from the Intuitive Eating Scale.*
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Table 7, continued
Means, standard deviations, and partial correlations (with body mass index controlled) among parcels for women aged 18-24

Note. $N = 307$. Absolute correlation values greater than or equal to .20 indicates practical significance and statistical significance at $p < .001$. SPS (Social Support) 1, 2, 3 = three parcels from the Social Provisions Scale; BS (Body Function) 1, 2, 3 = three parcels from the Objectified Body Consciousness (OBC) Body Surveillance Scale; BAOS (Body Acceptance by Others) 1, 2, 3 = three parcels from the Body Acceptance by Others Scale; BAS (Body Appreciation) 1, 2, 3 = three parcels from the Body Appreciation Scale; IES (Intuitive Eating) 1, 2, 3 = three parcels from the Intuitive Eating Scale.
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Table 8
Means, standard deviations, and partial correlations (with body mass index controlled) among parcels for women aged 25-79

*Note.* N = 381. Absolute correlation values greater than or equal to .20 indicates practical significance and statistical significance at *p* < .001. SPS (Social Support) 1, 2, 3 = three parcels from the Social Provisions Scale; BS (Body Function) 1, 2, 3 = three parcels from the Objectified Body Consciousness (OBC) Body Surveillance Scale; BAOS (Body Acceptance by Others) 1, 2, 3 = three parcels from the Body Acceptance by Others Scale; BAS (Body Appreciation) 1, 2, 3 = three parcels from the Body Appreciation Scale; IES (Intuitive Eating) 1, 2, 3 = three parcels from the Intuitive Eating Scale.
| Variable | $M$ | $SD$ | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   |
|----------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 8. BAOS2 | 3.02| .84  |      |      |      |      | .91  | .41  | .42  | .38  | .17  | .21  | .23  |
| 9. BAOS3 | 3.32| .77  |      |      |      |      |      | .41  | .43  | .39  | .15  | .20  | .25  |
| 10. BAS1 | 3.42| .74  |      |      |      |      |      | .79  | .72  | .48  | .48  | .48  |      |
| 11. BAS2 | 3.48| .77  |      |      |      |      |      |      | .78  | .40  | .42  | .45  |      |
| 12. BAS3 | 3.63| .74  |      |      |      |      |      |      |      | .35  | .36  | .34  |      |
| 13. IES1 | 3.15| .72  |      |      |      |      |      |      |      |      |      |      | .74  | .75  |      |
| 14. IES2 | 3.28| .60  |      |      |      |      |      |      |      |      |      |      |      |      | .74  |
| 15. IES3 | 3.02| .68  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Table 8, continued
Means, standard deviations, and partial correlations (with body mass index controlled) among parcels for women aged 25-79

Note. $N = 381$. Absolute correlation values greater than or equal to .20 indicates practical significance and statistical significance at $p < .001$. SPS (Social Support) 1, 2, 3 = three parcels from the Social Provisions Scale; BS (Body Function) 1, 2, 3 = three parcels from the Objectified Body Consciousness (OBC) Body Surveillance Scale; BAOS (Body Acceptance by Others) 1, 2, 3 = three parcels from the Body Acceptance by Others Scale; BAS (Body Appreciation) 1, 2, 3 = three parcels from the Body Appreciation Scale; IES (Intuitive Eating) 1, 2, 3 = three parcels from the Intuitive Eating Scale.
Table 9
Correlations among the latent variables on the basis of the measurement model for women aged 18-24 years.

Note. $N = 307$. Absolute correlation values denoted by an asterisk are greater than or equal to .20, which indicates practical significance and statistical significance at $p<.01$.

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<td>5. Intuitive Eating</td>
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Table 9
Correlations among the latent variables on the basis of the measurement model for women aged 18-24 years.

Note. $N = 307$. Absolute correlation values denoted by an asterisk are greater than or equal to .20, which indicates practical significance and statistical significance at $p<.01$. 
Table 10
Correlations among the latent variables on the basis of the measurement model for women aged 25-79 years.

*Note. N = 381. Absolute correlation values denoted by an asterisk are greater than or equal to .20, which indicates practical significance and statistical significance at p<.01.
Figure 1. Hypothesized model illustrating the prediction of intuitive eating (Avalos & Tylka, 2006).
Figure 2. Parcel loadings for the measurement model and path coefficients for the trimmed structural model obtained by analyzing the data from women aged 18-24 (n = 307) using latent variable structural equation modeling. Standard errors were .01, .05, and .05 for the general unconditional acceptance item parcels (SPS); .01, .03, and .04 for the body acceptance by others item parcels (BAOS); .01, .06, and .07 for the body function item parcels (BS); .01, .04, and .05 for the body appreciation item parcels (BAS); and .00, .05, and .05 for the intuitive eating item parcels (IES). *p <.05.
Figure 3. Parcel loadings for the measurement model and path coefficients for the trimmed structural model obtained by analyzing the data from women aged 25-79 (n = 381) using latent variable structural equation modeling. Standard errors were .01, .04, and .04 for the general unconditional acceptance item parcels (SPS); .01, .07, and .06 for the body acceptance by others item parcels (BAOS); .01, .06, and .06 for the body function item parcels (BS); .01, .04, and .04 for the body appreciation item parcels (BAS); and .01, .04, and .04 for the intuitive eating item parcels (IES). *p < .05.