Patterns of Past and Present Body Esteem: Do They Matter?

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ABSTRACT

The present study examined the relationship between patterns of perceptions of body image/esteem (past and present) and sexual behavior in young women during emerging adulthood. One hundred and forty-eight participants completed an online survey which measured body image perception and aspects of sexual behavior. Using past body perceptions (retrospective) and current body perceptions, participants were placed into four groups—those who were consistently positive in their body esteem, those who were consistently negative in their body esteem, and those who perceived a change in body esteem. These groups were then used as independent variables to compare women across sexual desire, sexual confidence, and body image perceptions. Change in perceptions of body esteem had significant effects on all of the study variables except sexual desire. Several patterns emerged from the results of this study. Among the most prevalent included: Women who were consistently positive in their body esteem had higher levels of body area satisfaction, appearance satisfaction, sexual desire, and sexual confidence; having had a positive body image perception at some point in the past seems to benefit women's body esteem in emerging adulthood; and women who had a consistently negative body image perception report lower body area satisfaction, sexual desire, and sexual confidence. The results indicate that perceived body esteem, both past and current, is related to higher levels of body satisfaction, more positive appearance evaluations, and lower self weight classification, all of which have not been explored in previous research. Therefore, those who have more positive body esteem and have always had positive body esteem are more also more likely to have a positive body image in emerging adulthood.

INTRODUCTION

The aim of the proposed research is to investigate whether a relationship exists between perceived past and current body esteem in young women and body image satisfaction, sexual desire, and sexual confidence during emerging adulthood. The proposed study fills a gap in the literature on the developmental implications of body esteem, as it relates to body image satisfaction and current sexual attitudes.

Body Image

Definitions of Body Image

In recent years, the topic of body image has received great deal of attention in the field of psychology. In the West, body image disorders have become so prevalent that many researchers describe having a negative body image as normative, especially among adolescents and as a result, there has been an influx of research conducted on body image (Swami, Airs, Chouhan, Leon, & Towell, 2009). In general, body image can be defined as how an individual views and assigns meaning to his or her own body; it has also been conceptualized as a social construct that differs based on contexts and experiences with gender socialization (Steinfeldt, Zakrajsek, Carter, & Steinfeldt, 2011). In psychology, most researchers refer to body image as an individual's self-perceived appearance, including body dissatisfaction (i.e., negative feelings about one's shape and weight) and body esteem (i.e., global feelings about body appreciation; Swami et al., 2009). One of the greatest challenges to studying body image is drawing sound conclusions from the large and growing literature on the topic. The challenge comes from interpreting results which may vary depending on the particular dimension of body image being studied.

Researchers have come to realize that body image concerns are multidimensional and include thoughts, feelings, and behavioral responses related to one's body (Grabe, Ward, & Hyde, 2008). Therefore, it is not uncommon for researchers to use several measures when studying body image.

Early Beginnings: Body Image in Childhood and Adolescence

Studies dealing with body image have focused primarily on the clinical implications associated with body image distortions, particularly in the development of eating disorders. Studies suggest that the prevalence of body dissatisfaction has reached normative levels among American girls and women. Approximately 50 percent of women report body dissatisfaction with perceptions developing fairly early, generally by the age of 7. Importantly, body image dissatisfaction has been found to persist throughout the lifespan, occurring across a range of body types and races (Grabe et al., 2008). These feelings of body dissatisfaction, or negative body image, have been linked to significant physical and mental health problems and have been shown to be one of the most predictive and robust risk factors for eating disorders and a significant factor in low self-esteem, depression, and obesity.

In order to better understand the predictors of body image attitudes, researchers have studied whether sociocultural and individual psychological characteristics are predictive of body image during childhood. In one study, Clark and Tiggeman (2008) attempted to determine whether individual psychological and sociocultural factors had any effect on the development of body image. The study investigated prospective predictors of body image in 9 to12 year olds. The participants, girls with a mean age of 10 years, completed questionnaires that measured media and peer influences (i.e.,

television/magazine exposure and peer appearance conversations), individual psychological variables (i.e., appearance schemas, internalization of appearance ideals, and autonomy), and body image (i.e., figure discrepancy and body esteem) at two different times, one year apart. After controlling for body image at Time 1, researchers found that none of the Time 1 sociocultural variables predicted body image variables at Time 2. However, body mass index and psychological variables did significantly predict body image variables at Time 2. The results of the study indicate that both biological and individual psychological variables play a role in the development of body image in children. Importantly, research suggests body image concerns in young children often serve as precursors to poor body image and possible disordered eating in adolescence and adult life (Clark & Tiggeman, 2008).

Given the factors associated with negative body image, it is not surprising that adolescence is often the most common time for body image concerns to emerge. Adolescence is characterized by rapid, unexpected, and novel experiences in social, cognitive, physical, emotional, and psychological domains. These developmental changes afford individual opportunities for growth but, at the same time, are antecedents for stress. Family and peer relationships, for example, undergo changes during the adolescent period that are associated with heightened stress. Importantly, studies have established a relationship between body image and stress in general (e.g., Murray, Byrne, & Rieger, 2011), further supporting the idea that adolescents are particularly vulnerable to body image problems. Research indicates that the relationship between body image and adolescent stress is an important area to understand and rightly so; stress and body

image are both risk factors for poor mental health disorders such as anxiety and depression (Grabe et al., 2008; Swami et al., 2009; Murray et al. 2011).

Prospective risk factors for the development of body dissatisfaction during adolescence have received increasing attention as the prevalence and negative consequences of body dissatisfaction have become more widely recognized (Paxton, Eisenberg, & Neumark-Sztainer, 2006). In addition to the media, parental, and peer messages, other factors found to influence body image (generally in a negative way) were physical characteristics, social environments, and psychological factors including self-esteem, depression, and importance of appearance (Paxton et al., 2006). The major theories of the development of body dissatisfaction suggest that its development is multi-faceted. Specifically, the physical characteristics of larger body size, social and cultural environments that emphasize appearance and thin ideals, and psychological factors such as low self-esteem, depression, and beliefs about the importance of thinness all interact to create a higher risk of developing body dissatisfaction (Paxton et al., 2006).

Continuity of Body Image Across the Lifespan

Although adolescence appears to be a vulnerable time for the development of body image problems, it is unclear if the development of a negative (or positive) body image "sets the stage" for life long body image perceptions. Retrospective research has shown that obese women with child-onset obesity report more body dissatisfaction than those with adult-onset obesity and body image researchers have established a link between early maturation and poorer body image that is explained by the heavier body weight of early maturing girls (McLaren et al., 2003). This suggests that body image, especially negative body image and body dissatisfaction, can have lasting effects on an

individual's self-esteem and self-concept; however, more research needs to explore the continuity or discontinuity of body image as these are the only studies found which explore this concept.

While not the focus of this study, one theory that helps explain why and how negative body image affects women throughout their life cycle is objectification theory (Frederickson & Roberts, 1997). Objectification theory posits that girls and women are typically socialized or acculturated to internalize an observer's perspective as the primary view of one's physical self. This view of one's self as little more than a body can lead to habitual body monitoring and can therefore increase the likelihood that women feel more anxiety and shame, reduce opportunities for peak motivational states, and experience diminished awareness of internal bodily states. Frederickson and Roberts (1997) further theorize that the accumulations of such experiences may help to explain the variety of mental health risks that disproportionately affect women such as unipolar depression, sexual dysfunction, and eating disorders.

As Frederickson and Roberts (1997) point out, the field of psychology has underemphasized the fact that the body is constructed from more than just biology. Bodies exist within sociocultural contexts and are therefore also constructed through a culture's practices. Unfortunately, another cultural practice that exists is sexual objectification of women. A form of sexual oppression, as well as the common link between all forms of sexual oppression, is the experience of being treated as a body or a collection of body parts, which is predominately valued for its use to others. In other words, in our particular society when women are objectified they are treated as bodies, specifically, as bodies which exist for the use and pleasure of others (Frederickson &

Roberts, 1997). While all women may not experience and respond to sexual objectification in the same way or to the same degree, the heterogeneity among women suggests that having a reproductively mature female body may create a shared social experience. This can be seen as a vulnerability to sexual objectification and may then create a shared set of psychological experiences.

As previous research has reviewed, our culture is saturated with heterosexuality and thus images of popular sexual culture swamp the media (Goldenberg et al., 2000; Murray et al., 2011; and Paxton et al., 2006). Generally, these ideal images are young, thin, white women with similar features. The mass media's portrayal and magnitude of sexualized images is vast and thorough and portrays women as though their bodies were capable of representing them (Frederickson & Roberts, 1997). Perhaps the most evident effect of objectifying treatment is that it leads girls and women to adopt a thwarted view of self. Objectification theory then suggests that girls and women begin to view themselves as objects to be looked at and evaluated. This is an important point in relation to body image as empirical data has indicated that women's body image satisfaction is positively related to their sense of self (Frederickson & Roberts, 1997). Therefore a critical repercussion of being viewed by others in sexually objectifying ways is that over time, women may be coerced into internalizing an outsider's perspective of themselves, or become self-objectifying. Self-objectification is thought to have profound effects on body image by inducing more body dissatisfaction and anxiety and thus affecting other aspects of a woman's life.

Perhaps one of the most salient points that objectification theory helps address is why adolescence and body image dissatisfaction often coincide. Adolescence marks a

particularly difficult passage for girls. Generally, many of the mental health risks that are seen in women first present in adolescence (Frederickson & Roberts, 1997). As is noted in past research, most adolescents, regardless of gender, experience drops in self-esteem. However, quantitative studies suggest that the decline among girls is particularly steep and long-lasting. Objectification theory posits that this decrease and long-lasting effect on body image are not due to the realization that adolescent girls do not like the size and shape of their new bodies but rather the realization that their bodies belong less to them and more to others (Frederickson & Roberts, 1997). Frederickson and Roberts (1997) suggest that this early experience with sexual objectification can trigger the self-conscious body monitoring that results from internalizing outsiders' perspectives and thus setting the stage for greater body dissatisfaction and mental health risks both at puberty and later in life.

Sexual Behavior

What is it?

Adolescence can be characterized as a time of growth and development, particularly in regards to sexuality. For example, it is during this period that adolescents usually have their first relationship and sexual experiences, learn what they like and dislike, learn to make sexual experiences mutually rewarding, and learn how to avoid the potentially negative side effects of being sexually active (Graaf, Vanwesenbeeck, Woertman, & Meeus, 2011). Although most individuals in Western societies usually have at least some sexual experience in adolescence, large individual variability exists within sexual development. The development and consolidation of an understanding of one's self as a sexual person, known as sexual self-concept, is a normative task of

adolescence (Hensel, Fortenberry, O'Sullivan, & Orr, 2010). Sexual self-concept helps individuals organize and make sense of sexual experience as well as provide structure and motivation for sexual behavior. One important dimension of sexual self-concept is sexual openness, which includes recognition of sexual pleasure or sexual arousal and a feeling of entitlement to pursue specific sexual activities (Hensel et al., 2010).

A second aspect of sexual self-concept is sexual esteem, which involves positive evaluations of one's sexuality, including appraisals of sexual thought, feelings, and behaviors as well as perceptions of the body in the sexual domain (Hensel et al., 2010). Usually, adolescents with greater sexual esteem feel more assured in sexual situations and more positive about sexual activity. Women aged 14 to 74 years reported that body image satisfaction was associated with greater comfort with one's body during sexual activity, higher frequency of sexual behavior (including increased initiation of sexual activity by the women), and increased orgasm frequency (Pujols, Meston, & Seal, 2009). These findings suggest that women with more body satisfaction have increased sexual confidence and sexual desire. Additionally, relationships between body image variables and sexuality have been shown to exist above and beyond effects of actual body size indicating that a woman's perceptions and cognitions about her body size, rather than her actual body size, have a unique influence on her experiences of sexuality (Pujols et al., 2009). Interestingly, among late adolescent women, higher sexual self-concept is associated with more sexual experience and higher sexual satisfaction but not related to early age of first intercourse or increased number of sexual partners (Hensel et al., 2010).

Lastly, the third dimension of sexual self-concept refers to sexual anxiety and is considered to be tension, discomfort, and other negative evaluations of one's life. Sexual

anxiety is associated with greater support of abstinence and lower sexual readiness (Hensel et al., 2010). Among nonclinical populations, several body image variables—specifically poor body image during sexual activity and body part dissatisfaction—have been linked to lower sexual efficacy, lower sexual assertiveness, and poorer sexual esteem among college-aged women (Pujols et al., 2009). Pujols et al. (2009) also report that negative body image has been shown to lead to sexual avoidance whereas positive body image has been associated with greater frequency of sexual activity, adventure, optimism, and functioning.

Knowing why adolescents and young adults have sex is crucial to understanding the sexual behavior of these groups. Research in youth and adults has shown that different types of reasons for sex are associated with a greater or lesser likelihood of sexual risk. Dawson, Shih, de Moor, and Shrier (2008), for example, found that having sex for pleasure is linked to sexual behaviors which increase the likelihood of contracting sexually transmitted infections or becoming pregnant. Adolescents' and young adults' reasons for having sex are important signals of mental health. For example, sexual behaviors which put an individual at more risk for contracting sexually transmitted infections are also signals that an individual is at more risk of mental health disorders such as depression (Kaltiala-Heino, Kosunen, & Rimpela, 2003).

The prevalence of major depression hovers around 9% in adolescent women (aged 12-16), with up to 15% of adolescent women obtaining scores which suggest moderate to severe depression (Kaltiala-Heino et al., 2003). The significance of puberty for depression has been explored in terms of biological, psychological, and social factors. Psychologically, the need to adjust to one's own body and sexual maturation could be the

challenge that increases the risk of depression. This task might be especially challenging for girls in Western society, especially if they physically mature early, perhaps without being mentally ready to face the challenges of becoming a woman (Katiala-Heino et al., 2003). Extending this notion is the idea that early onset of sexual behavior may serve as a maladjusted coping mechanism, and lead to further depression and, perhaps, disturbed constructs of self. Low self-esteem and depression are well–known "side effects" of perceived negative body image; however, it is unclear how body image is related to behaviors, particularly as they relate to relationships and sexual activity (Halpern, King, Oslak, & Udry, 2005).

The timing of sexual debut has occurred much earlier in the last few decades, with evidence suggesting that this trend towards earlier sexual maturation has resulted in a 3-4 year drop in the age of first intercourse for young women living in Western societies (Kaltiala-Heino et al., 2003). Several research findings indicate that early sexual activity more likely reflects problems in adolescent development than successful task development in adolescence. Adolescents may engage in sexual activity before they are ready for a variety of reasons including peer pressure, unfavorable family background and substance abuse (Kaltiala-Heino et al., 2003). In addition, sexually active adolescents displayed more depressive symptoms.

Although there are several studies that relate body image and sexual behaviors to homosexual males and males in general, research has not focused on the specific relationship between body image and sexual behaviors in women in a developmental context. This is surprising given that previous research has shown that body-affiliated thoughts are related to adolescent health behaviors and coping strategies, which can

presumably become life-long health behaviors and coping mechanisms. Some coping strategies that adolescents utilize in relation to negative body image have been identified with the most common strategies including diet, behavioral and cognitive avoidance, substance abuse, and sexual-attention seeking behaviors (Sabiston et al., 2007). Whether a majority of female adolescents are engaging in sexual behaviors as a coping strategy or for other reasons remains unclear; however, it is clear that a large number of female adolescents are engaging in sexual behaviors.

In a federal study based on data collected in 2002, 54% of 15-19 year old women had engaged in oral sex and 53% of women of the same age group had in engaged in sexual intercourse (Jayson, 2005). Though the relationship between self-esteem and sexual behavior in young women has not been explored in great detail, the results of past studies suggest that body image is often related to self-esteem and does have an effect on the sexual behavior of young women. Prior studies found that sexual openness and sexual esteem, both related to body image, increased while sexual anxiety decreased over a four year period during middle and late adolescence (Hensel et al., 2010).

Hensel et al. (2010) posit that these findings could indicate that an accumulation of sexual experiences generally bolsters confidence and reduces negativity about sexual matters, or that young women without sexual intercourse experience begin to view sex in more positive terms as they gain confidence in pre-intercourse activities or anticipate their first sexual encounter. Research indicates that young women who have healthier and more positive body images will be involved in satisfying romantic relationships with less risk-taking behaviors than young women with negative views of their perceived body image (Jayson, 2005). Thus, an important area of inquiry involves understanding the

relationship between body image and sexual behavior in adolescence, as it might be related to sexual behavior in emerging adulthood.

Body Image and Sexual Behavior

Past research suggests that body image and sexual behavior are linked though the directionality of the relationship remains unclear. Sexual behavior has also been shown to be related to well-being but, interestingly, little research has been conducted on how becoming sexually active affects well-being in adolescence (Vasilenko, Ram, & Lefkowitz, 2010). Body image is one dimension of well-being that may change after first intercourse. Learning to accept and appreciate one's body is part of healthy sexual development in adolescence. Essentially, in both adolescents and young adults, positive feelings about appearance are associated with whether or not young women have engaged in sexual behaviors and have sex more often (Vasilenko et al., 2010).

While adolescents engage in sexual behaviors other than intercourse, sexual intercourse seems to have a profound effect on the individual when compared to other sexual behaviors such as kissing, petting, and oral sex. Vasilenko, Ram, and Lefkowitz (2010) also note that intercourse among adolescents is associated with more positive and negative emotions such as pleasure, positive affect, regret, and negative affect when compared to oral sex. The researchers suggest that due to this finding, sexual intercourse may have a stronger link to well-being than non-coital behaviors.

Another aspect of well-being that may relate to sexual behavior is body image. Overall, adolescents and young adults who are more satisfied with their appearance have fewer depressive symptoms and higher self-esteem than adolescents and young adults

who are less satisfied with their bodies (Siegel, 2002; Vasilenko et al., 2010). Researchers explain that body image may be a particularly important aspect of well-being in regards to sexual behavior as engaging in intimate behaviors can be a situation where another individual can see and evaluate an individual's body.

Past studies reveal that connections, such as satisfaction with appearance, are associated with sexual behaviors including receiving oral sex, engaging in intercourse, and having more sexual experience across a range of behaviors. Research has also established a connection between the way a woman views her body and her sexuality. Results have shown that higher body esteem is linked to higher report of sexual desire, sexual experience, and sexual assertiveness, whereas body consciousness was positively related to sexual anxiety and sexual avoidance (Seal, Bradford, & Meston, 2007). Additionally, relationships between body image and sexuality have existed above and beyond effects of actual body size which implies that a woman's perception of her body, rather than her actual body size, has an influence on her experiences of sexuality (Seal et al., 2007).

One explanation for the connection between body image and sexual behavior is that individuals who are unhappy with their bodies are more likely to be self-conscious during intimate activities, which can hinder satisfaction with sexual behaviors (Vasilenko et al., 2010). Seal, Bradford, and Meston (2009) also predicted that higher body esteem would be related to higher sexual arousal and desire responses regarding sexual behavior and intercourse. The researchers did find that body esteem was positively related to sexual desire both in laboratory settings and real life sexual situations.

Pujols, Meston, and Seal (2009) have found that there are significant correlations which indicate positive relationships between sexual functioning, sexual satisfaction, and measures of body image. Sexual satisfaction is predicted by high body esteem and thoughts of body during sexual activity (Pujols et al., 2009). Similarly, a study conducted by La Rocque and Cioe (2011) had results consistent with other literature on body image and sexual behavior, that a relationship between body image and sexual behavior does exist. Specifically, La Rocque and Cioe (2011) examined the relationship between body image and sexual avoidance. Results indicated that individuals with a more negative body image were more likely to avoid sexual activity.

Alternatively, women who have a negative body image are more at risk of engaging in risky sexual behaviors. Female high school students who are underweight or who think of themselves as overweight may be at increased risk of engaging in unsafe sexual behavior. In 2005, the Youth Risk Behavior Surveillance Survey indicated that women with a low body mass index (BMI) had reduced odds of using a condom when engaging in sexual intercourse and those who considered themselves overweight had increased odds of initiating sexual intercourse before the age of thirteen as well as reduced odds of using a condom (Hollander, 2010).

Further, it does not seem that risky sexual behavior decreases as adolescents mature. In fact, the time of emerging adulthood, the developmental period from 18-25, is a time of exploration of many areas, including identity and romantic relationships (Arnett, 2000). Therefore, emerging adulthood is likely to be a period during which sexuality and body image are highly explored and with this exploration comes the potential for risk (Gillen, Lefkowitz, & Shearer, 2006). In fact, a number of emerging

adults engage in risky sexual behavior. According to Micheal, Gagnon, Laumann, and Lolata (1994) (in Gillen et al., 2006), when compared to older individuals, emerging adults are more likely to have had two or more sexual partners in the past year and are more likely to report casual sexual experiences. Unfortunately, due to reasons further explained in the discussion, risky sexual behaviors were not able to be a focus of this study, though the connection remains important.

Present Study

Summary and Rationale

Previous research has shown that a relationship between body image and sexual behavior exists in women. However, much of the existing literature focuses on how current perceived body image affects current sexual behavior, both positively and negatively. The literature lacks information a foundational aspect of the relationship between body image and sexual behavior—whether body esteem remains constant across time and how *patterns* of body image perceptions might be related to young women's sexual behavior and perceived body image during emerging adulthood.

Although research suggests that negative body image affects women of all ages, little is known about within-person changes over time. In other words, does body esteem change over time and do those changes predict patterns of sexual behavior or perceived body image? For example, if an individual has low body esteem in adolescence, does it remain low in young adulthood, and how does this affect her sexual behaviors? While the relationship between self-esteem and sexual behavior in young women has not been explored in great detail, the results of past studies suggest that body image, often related to self-esteem, does have an effect on the degree of sexual behavior in young women.

The current study will attempt to fill the gaps of previous research and examine whether perceptions of past and present body esteem affects sexual behavior and perceived body image of young adult women. Given the issues described above, this study will focus on the following:

1. **Current body esteem and retrospective reports of body esteem at 16 (as recalled by women in emerging adulthood) will be related to sexual attitudes in emerging adulthood.** Specifically, a negative body esteem at 16 will be positively correlated with lower levels of sexual desire and sexual confidence (sexual esteem) in emerging adulthood. A positive body esteem at 16 will be positively correlated with higher levels of sexual desire and sexual confidence in emerging adulthood. Additionally, current positive body esteem will be associated with higher levels of sexual confidence and sexual desire whereas lower body esteem will be associated with lower levels of sexual desire and sexual confidence.
2. **Do patterns of change between past and present perceived body esteem predict body image satisfaction, sexual desire, and sexual confidence in emerging adulthood?** Given the different trajectories of development and limited research in the area, no prediction was made.

Methods

Participants

Participants were recruited from the State University of New York at New Paltz by campus wide e-mail and through snowball advertisements on the social networking site, Facebook. The participants were asked to participate in a 20-30 minute self-report

Internet questionnaire about their current and past body image and current sexual behavior. Participants were excluded from the study if they were under the age of 18 or over the age of 25. After data collection, the final sample consisted of a total of 148 women, ranging in age from 18 to 25 (*M*= 20.83, *SD*= 1.89).

The participants were similar in ethnicity with 85.1% (N=126) self-identifying as White/Caucasian. The rest of the participants' ethnicity consisted of African American women (3.4%, n=5), Hispanic women (2.7%, n=4), Asian/Pacific Islander (1.4%, n=2), and multiracial women (6.1%, n=9). Additional demographic information revealed that 64.9% (n= 96) grew up in a suburban area, 25% (n= 37) were raised in a rural area, and 8.8% (n=13) of participants lived in an urban area growing up. Most participants were raised in an intact family (73%, n= 108); 20.9% (n= 31) were raised in a single parent, divorced family, 5.4% (n= 8) were raised in a blended family, and .7% (n=1) was raised in an extended family.

Seventy-seven percent of participants (n= 115) identified as heterosexual, 14.2% (n= 21) identified as being bisexual, 6.1% (n= 9) identified as being homosexual, and 2.0% (n= 3) identified as other or declined to answer. Lastly, 50.7% (n= 75) of participants did not identify with any religion, 48.0% (n=71) did identify with some religion, and two participants declined to answer.

Measures

Demographics. There was a short demographic section that asked participants questions such as age, ethnicity/race, religion, whether they are from an urban or rural setting, are from intact or divorced families, and their sexual orientation.

Body Image. Body esteem was assessed through scores on the Appearance Evaluation subscale (used to measure feelings of physical attractiveness or unattractiveness and satisfaction or dissatisfaction with one's looks); Body Areas Satisfaction subscale (used to measure specific areas of body satisfaction); and the Self-Classified Weight subscale (used to measure how one perceives and labels one's weight), of the Multidimensional Body-Self Relations Questionnaire (MBSRQ; Cash & Pruzinsky, 1990).

High scorers generally are content and feel mostly positive about their body whereas low scorers generally feel dissatisfied and negatively about their bodies. Cash & Pruzinsky's (1990) MBSRQ is a well-validated self-report inventory for the assessment of body image and is intended for use with adults and adolescents (15 years or older). The MBSRQ is a 69-item measure that consists of 5 subscales including Appearance Evaluation, Appearance Orientation, Overweight Preoccupation, Self-Classified Weight, and the Body Areas Satisfaction subscale. However, for the purpose of this study, only questions pertaining to body image were used. The first seven factors of the MBSRQ have very good internal consistency with alphas that range from .75 to .90. All subscales have good to excellent stability, with test-retest correlations that range from .49 to .91. Additionally, the MBSRQ has shown strong validity in numerous studies where it has been correlated with a number of health and body constructs (Cash & Pruzinsky, 1990).

Another measure of body image that was used was the Figure Rating Scale (FRS) (Stunkard et al., 1983). The FRS is a rating task that involves nine silhouettes ranging from 1 (thinnest) to 9 (heaviest) which is used to determine discrepancy between a

woman's perceived shape, her ideal shape, and the shape she believes a partner would find attractive (Stunkard, Sorensen, & Schulsinger, 1984).

Additionally, participants were asked open-ended questions asking them to rate their bodies on a scale of 1 (low body image satisfaction) to 9 (high body image satisfaction) at age 16 and at the time of the study, and why they felt this way. The qualitative portion of these questions was not analyzed formally during the study and was used for illustrative purposes only.

Sexual Behavior. Sexual behavior measures were assessed through scores on the Sexual Self-Esteem subscale of the Multidimensional Sexuality Questionnaire and the Dyadic Sexual Desire subscale of the Sexual Desire Inventory-2. The Multidimensional Sexuality Questionnaire (Snell, Fisher, & Walters, 1993) is an objective, self-report instrument designed to measure 12 aspects of human sexuality: (1) sexual-esteem, defined as positive regard for and confidence in the capacity to experience one's sexuality in a satisfying and enjoyable way; (2) sexual-preoccupation, defined as the tendency to think about sex to an excessive degree; (3) internal-sexual-control, defined as the belief that the sexual aspects of one's life are determined by one's own personal control; (4) sexual-consciousness, defined as the tendency to think and reflect about the nature of one's sexuality; (5) sexual-motivation, defined as the desire to be involved in a sexual relationship; (6) sexual-anxiety, defined as the tendency to feel tension, discomfort, and anxiety about the sexual aspects of one's life; (7) sexual-assertiveness, defined as the tendency to be assertive about the sexual aspects of one's life; (8) sexual-depression, defined as the experience of feelings of sadness, unhappiness, and depression regarding one's sex life; (9) external-sexual-control, defined as the belief that one's sexuality is

determined by influences outside of one's personal control; (10) sexual-monitoring, defined as the tendency to be aware of the public impression which one's sexuality makes on others; (11) fear-of-sex, defined as a fear of engaging in sexual relations with another individual; and (12) sexual-satisfaction, defined as the tendency to be highly satisfied with the sexual aspects of one's life.

Factor analysis (12 factor maximum likelihood with oblique rotation) confirmed that the items on the Multidimensional Sexuality Questionnaire largely form conceptual clusters corresponding to the 12 MSQ concepts (Snell et al., 1993). Other results indicated that all 12 subscales had clearly acceptable levels of reliability (alphas ranged from .71 to .94, with an average of .85; test-retest reliabilities ranged from .50 to .86, with an average of .87). The 12 MSQ subscales were also found to be largely uncontaminated by social desirability tendencies. Additional findings indicated that men reported higher levels of sexual-esteem, sexual-preoccupation, sexual-motivation, sexual-assertiveness, and external-sexual-control than did women. By contrast, women reported greater fear-of-sexual-relations than did males. Other results indicated that the MSQ subscales were related to both exchange and communal approaches to sex, to sexual attitudes, and to women's and men's sexual behaviors. Scores in the Multidimensional Sexuality Questionnaire can be treated as individual difference measures of the 12 constructs measured by the MSQ or as dependent variables when examining predictive correlates of these concepts.

The internal consistency of the subscales on the Multidimensional Sexuality Questionnaire was determined by calculating Cronbach alpha coefficients, using 372 participants (265 women; 117 males; 4 gender unspecified) drawn from lower division

psychology courses at a small Midwestern university (Snell et al., 1993). The average age of the sample was 24.1, with a range of 17 to 60. The alpha coefficients were computed for each of the 12 subscales. Each coefficient was based on 5 items. The alphas for all subjects on the 12 subscales ranged from .87 to .90. Test-retest reliability ranged from .85 to .76. In brief, the 12 MSQ subscales had more than adequate internal consistency and test-retest reliability.

Evidence for the validity of the Multidimensional Sexuality Questionnaire (MSQ) comes from a variety of findings. Snell et al. (1993) found that among university students, women's and men's scores on the MSQ were associated not only with their sexual attitudes and their exchange and communal approaches to sexual relations, but also with their scores on other instruments conceptually similar to the MSQ. Men and women's sexual behaviors were also predictably related to their scores on the MSQ subscales. Additional research provides evidence that the MSQ subscales were related in predictable ways to men and women's contraceptive behaviors (Fisher et al., 1995).

The Sexual Desire Inventory (Spector, Carey, & Steinberg, 1996) is a measure of sexual desire, which measures both dyadic sexual desire and solitary sexual desire. The SDI is a cognitive measure that explores the strength of a person's sex drive and the desired frequency of sexual behavior rather than just the frequency of actual behavior. Factor analysis supported the existence of the dyadic and solitary factors. Internal consistency estimates for the measure were .86 for dyadic sexual desire and .96 for solitary sexual desire.

Procedure

Women who responded to the advertisements in the e-mail and on Facebook were directed to a link leading to a secure and encrypted website, SurveyMonkey, which hosted the questionnaire and was specifically formatted to record the responses to all of the questions in one session, eliminating the need for participants' answers to be linked to any identifying information. Participants first viewed a cover letter that contained informed consent and the principal investigator's information should they have any questions or concerns; additionally, it explained that all of the questions were anonymous and that they could skip any question or exit the questionnaire at any time.

After submitting their consent, participants were directed to answer the questionnaire which collected demographic information and assessed information about the participants' body image satisfaction, the specific constructs of sexual behavior of sexual confidence and desire, and lastly, an open-ended question asking participants to assess their past (age 16) and current (present age) body image satisfaction and why they felt this way. Participants were then asked to submit their answers to the questionnaire.

Results

Descriptive Data

Several analyses were carried out to examine the relationship between demographic and study variables. A correlational analysis between age and the dependent variables revealed that there was a positive relationship between age and sexual confidence r (146) = .23, p <.01 and also a positive relationship between age and sexual desire r (146) = .29, p<.001. Older participants were more likely to have increased sexual confidence and sexual desire when compared to younger participants.

Other analyses revealed that no other significant relationships existed between demographic and dependent variables.

Correlations between Study Variables

During analyses, correlations were conducted in order to determine whether the study variables had any relationship with one another. As can be seen in Table 1, there were several strong correlations between study variables. Some of the most notable include the positive correlation between current body esteem and body area satisfaction, r (138) =.711, p<.001, current body esteem and appearance satisfaction r (139) =.769, p<.001, and between sexual confidence and sexual desire r (146) =.399, p<.001. In addition, there was a negative correlation between current body esteem and figure satisfaction (based on a discrepancy score) of r (138) =-.630, p<.001.

Hypothesis 1

Emerging adult women who reported more positive body esteem both at the present time and at the age of 16 were expected to also report higher levels of sexual desire and sexual confidence at the time of the study.

As shown in Table 1, Pearson correlations were conducted to determine whether a positive relationship existed between body perceptions, both current and past, and the study variables of sexual desire and sexual confidence. As can be seen in Table 1, the results of the correlation indicate that past body perception was positively correlated with sexual confidence r (139) =.351, p<.001, and sexual desire r (139) =.190, p<.05. These results confirm that participants who had a positive body image perception at 16 have higher levels of sexual desire and sexual confidence in emerging adulthood than those who had a negative body image perception at 16. Results also indicate that women with

current positive body esteem had higher levels of sexual confidence r (138) = .335, p<.001 but not higher levels of sexual desire r (138) =.090, p>.05 during emerging adulthood. Therefore hypothesis one was partially supported.

Question 1

Participants were compared on scores of body area satisfaction, self weight classification, appearance evaluation, figure satisfaction (both current and at age 16), sexual desire, and sexual confidence as a function of change in body esteem (experimental variable). In other words, the interest of the study lay in *patterns* of change in dependent variables, as perceived over time. Based on their perceived body esteem from age 16, participants were first placed in one of three groups (positive body esteem, neutral body esteem, and negative body esteem) based on median splits. They were then placed in a second group based on their current body esteem (positive, neutral, and negative), also based on median splits. Assignment to groups was based on the ratings the women gave their bodies in the open-ended questions (body esteem measure) of the questionnaire. Those who rated their bodies as a 1-4 were placed in Group 1 (negative body esteem); those who rated their bodies as a 5 were placed in Group 2 (neutral body esteem); and those who rated their bodies as a 6-9 were placed in Group 3 (positive body esteem). Participants were then regrouped into four groups—those who were consistently positive in their body esteem, those who were consistently negative in their body esteem, those who changed from positive to negative in their body esteem, and those who changed from negative to positive in their body esteem. These groups were then used as independent variables to compare women across dependent variables. Participants were also asked to describe why they felt about their bodies the way they did

at both age 16 and at the time of the study. While various reasons were given for each individual, quotes with similarities were found that characterized each of the four groups; examples are given in Table 3 between the extreme groups.

As shown in Table 2, change in perceptions of body esteem had significant effects on all of the study variables except sexual desire F (3,133) =2.59, p>.05. An ANOVA revealed that there was a significant difference between the four groups on the study variable of body area satisfaction F (3,133) = 18.51, p<.01. Specifically, post hoc comparisons using the Tukey HSD revealed that the mean score of the consistently negative group differed significantly from the change to positive group (M=-5.52, p<.01) and from the consistently positive group (M=-9.24, p<.01). The post hoc comparisons also showed that the change to negative group mean score differed significantly from the consistently positive group (M=-6.24, p<.01) and that the change to positive group mean score differed significantly from the consistently positive group (M=-3.72, p<.01).

These comparisons suggest that those who were consistently positive had more body area satisfaction than the other groups. Interestingly, the post hoc comparisons suggest that those who were in the consistently negative group reported lower body area satisfaction than the change to negative group and that the change to positive group differed from those who were consistently positive in that they reported lower body area satisfaction.

Significant results were also found across groups on self-weight classification, F (3, 133) = 12.59, p<.01. Post hoc comparisons using the Tukey HSD test revealed that the mean scores of the consistently negative group were significantly higher than the change to positive group (M=1.19, p<.05) and the consistently positive group (M=1.81,

$p<.01$). In other words, participants in the consistently negative group placed themselves in a higher weight category than those who changed to positive in their body esteem and those who were consistently positive in their body esteem.

Significant differences were also found on appearance evaluations, F (3,133) =31.70, $p<.01$. Tukey HSD post hoc tests showed that participants who were consistently negative had a lower mean score than those who changed to negative (M=-4.10, $p<.05$), those who changed to positive (M=-6.17, $p<.05$), and those who were consistently positive (M=-10.25, $p<.05$). Post hoc comparisons also indicated that those who changed to negative had significantly lower mean scores than those who were consistently positive (M=-6.15, $p<.05$); and those who changed to positive still had a lower mean score than those who were consistently positive (M=-4.09, $p<.05$).

The ANOVA analyses suggests that there were significant differences between groups on current figure satisfaction, F (3,133) =19.09, $p<.01$. Again, post hoc Tukey HSD comparisons were conducted in order to see where group differences existed. The consistently negative group had a higher mean discrepancy score than the change to negative group (M=.66, $p<.05$), than the change to positive group (M=.94, $p<.05$), and the consistently positive group (M=1.46, $p<.05$). This suggests that those who were consistently negative reported higher discrepancy scores, indicating greater unhappiness with current body figure satisfaction, than did the other groups. Additionally, the post hoc comparisons also showed that those who changed to positive had a higher mean score than those who were consistently positive (M=.79, $p<.05$), which suggests that they are not as satisfied with their current figure as those who always reported a positive body esteem.

Lastly, the results from the univariate ANOVA suggested that the change in body esteem perception is related to sexual confidence in emerging adulthood F (3,133) =9.52, p<.01. Post hoc analyses revealed significant differences in the mean scores between the consistently negative group and consistently positive group (M=-6.96, p<.05) and the change to negative group (M=-4.87, p<.05). In other words, those who were consistently negative report less sexual confidence than those who were consistently positive or those who changed to negative. The post hoc analyses also revealed that, following a pattern in other study variables, those who changed to positive had a lower mean score than those who were consistently positive (M=-4.03, p<.05) in sexual confidence. Similar to other results, this suggests that those who have only recently come to feel more positive about their body have lower sexual confidence than those who have always felt good about their bodies.

Discussion

The present study was conducted in order to examine the gap in the current body of research on the effect of patterns in perceived body esteem on certain factors in emerging adulthood. Past research that examined these factors has focused primarily on the effect that current perceived body image has on current sexual behavior (Pujols et al., 2009 & La Rocque & Cioe, 2011). There has been little to no research on how past and current body esteem interact, and how patterns of change may be related to sexual behavior and body image attitudes, particularly satisfaction with one's body, in emerging adult women.

Additionally, in many studies body image and body esteem are used interchangeably (e.g. Goldenberg et al., 2000; Martijn et al., 2010; and McLaren, Hardy, & Kuh, 2003). Taking into consideration the broad construct of body image, several measures were selected which included body area satisfaction, self weight classification, appearance evaluation, and figure satisfaction at age 16 and at the time of the study.

Contrary to hypothesis 1, sexual desire during emerging adulthood was only related to age and body esteem at age 16. Sexual desire was not significantly correlated with any other study variables. These findings were contrary to past research (Seal et al., 2009 & Pujols et al., 2009) which found that sexual desire was more closely related to body image than actual body size. These same studies also suggested that perceived physical attractiveness and body esteem were important for a woman's sexual desire. This discrepancy may be explained by the fact that in those particular studies, body esteem was defined as a part of the larger overlying construct of body image whereas in the present study, body esteem was used separately from body image. While the two are obviously connected, measuring them differently will yield differing results. In addition, as women mature, there may be a complex set of factors that become more important in their sexual desire than body esteem, including such things as satisfaction with their partners and finding attractive qualities in their partners. These issues are particularly important for emerging adults who are beginning to think about long-term commitments.

In support of hypothesis 1, the study found that past body esteem and current body esteem are significantly related to sexual confidence. Participants who had positive body esteem at 16 and at the time of the study feel more sexually confident in emerging adulthood. Those who had positive body esteem in the past may have felt sexually

confident in the past as well, likely leading to more sexual experience and satisfaction with those experiences (Hensel et al., 2011). Those early experiences will likely have further encouraged both positive body esteem and sexual confidence during emerging adulthood.

This study revealed that patterns of perceived current body esteem and perceived body esteem at 16 are significantly correlated to the body image variables used in this study. The results indicate that body esteem, both past and current, are related to higher levels of body satisfaction, more positive appearance evaluations, and lower self weight classification. Therefore, those who have more positive body esteem and have always had positive body esteem are more also more likely to have a positive body image in emerging adulthood, as an inoculation effect. This is important to note as having positive body esteem at a younger age seems to work as a protective factor against poor body image in emerging adulthood, a sometimes difficult transitioning period, which is often associated with less depression, a decreased risk of eating disorders and mental health risks, and overall more healthy well-being than those with a negative body image. As well, women with current positive body esteem may receive benefits in their social lives in the form of more interpersonal relationships, which is likely related to a bigger social network which in turn means more social support—also a protective buffering factor against potential risks.

Finally, the current study sought to compare the scores on body area satisfaction, self-weight classification, appearance evaluation, figure satisfaction, sexual confidence and sexual desire between the four groups of women—those who were consistently negative, those who changed to negative, those who changed to positive, and those who

were consistently positive. No prediction was made due to lack of research in patterns of change in body esteem from the past to the present and individual development trajectories. Interestingly, it was found that women who changed from being positive to negative are more sexually confident than those who changed from negative to positive. This indicates that being positive about one's body at some point in the past may serve as a sort of protective factor that is continuous into emerging adulthood.

Another pattern that was discovered during this study was that women who were in the changed to negative group had higher mean scores in body area satisfaction, appearance evaluation, current figure satisfaction, and sexual confidence than those women who were in the consistently negative group. This was a surprising finding due to the fact that one might assume such a drastic change from feeling positive about one's body to feeling negative about one's body would be detrimental to body image and result in lower levels of all the above mentioned study variables when compared to someone was had always felt negative about her body and was therefore in a stable, though negative, state. This may be explained by the fact that at one time, feeling positive about your body serves as a protective factor. It may be that since women who felt positive about their bodies in the past have a certain respect and admiration for their bodies than those who have always felt negative about their bodies do not possess. Additionally, it may be that during the time of the study, women who changed to negative were in a transitional stage and will therefore return to the level of body esteem perceived previously.

Yet another pattern that was seen was women who changed to positive consistently scored lower than women who were in the consistently positive group in

body area satisfaction, appearance evaluation, figure satisfaction, and sexual confidence. This is an interesting result as it suggests that for women who currently feel positive about their bodies, their new found body esteem is not as beneficial as women who have always felt positive about their bodies. It might be expected that women who now feel positive about their bodies report higher levels of body area satisfaction, positive appearance evaluations, figure satisfaction, and sexual confidence than women who have always felt positive about their bodies, as people often become excited over positive new changes. However, this study indicates that women who now feel positive about their bodies may still be unstable in body esteem and have periods of lower body esteem—a sort of lingering doubt or periods of regression to former feelings about her body.

Finally, the results of the study found that women who were consistently negative about their bodies scored overall lower than the other groups on all measures of the study and women who were consistently positive about their bodies scored overall higher on all measures of the study, thus reinforcing the idea that patterns of change in body esteem are related to aspects of body image and sexual behavior and that positive body esteem improves body image.

During the course of analysis, another pattern that appeared to be present was a relationship between sexual risk behaviors and the change in body image perception. No significant effects were found but the analysis revealed results that were trending towards significance, particularly among participants who were consistently positive about their bodies. The analysis suggests that those who were consistently positive took the most sexual risks (M = 51.8) followed by those who changed to positive (M = 47.8). Those who changed to negative (M = 23.5) took the least amount of sexual risks. Participants

who were consistently negative (M = 40.2) fell in the middle of these groups with a moderate amount of sexual risk behaviors. An explanation for this may be that women who were consistently positive in their body esteem may be more confident and therefore, have more sex than other groups which increases the likelihood of sexual risk behaviors. The same logic can be applied to those who changed to positive—that they are now having more sex than when they were uncomfortable with their bodies and thus, risky sexual behavior increases with increased sexual activity. Similarly, those who changed to negative may be having less sex which decreases the likelihood of sexual risk behaviors. However, until a better measure is used in future studies, the pattern and possible causes remain unclear.

It is also important to note that this study measured *perceptions* of body image in adolescence and at the time of the study. Moreover, the study focused on how emerging adult women make sense of their bodies, both in adolescence and in the present time, and how that may affect attitudes about themselves in emerging adulthood. Participants rated their retrospective body perceptions from the current understanding of their bodies, which most likely affected their retrospective perceptions of their bodies, either to be more positive or negative according to how they perceive their bodies now. This exemplifies the complexity of the relationship that exists in the pattern of past and present body image perceptions and the need for more research in the area.

Limitations

A main limitation of this study was that Hypothesis 1was correlational. Correlational research is often hard to interpret due to the fact that the directionality of

the effects is unknown. Simply speaking, correlations cannot prove causation but only suggest that two variables are related in a systematic way.

Another limitation that is common of questionnaire research is that the data collected is self-reported. In many instances, the researcher has to trust that participants provided honest and complete responses to the questionnaire and often, participants provide unreliable answers. Dove-tailing with this issue is that fact that the data collected relies on the current feelings of the participants on any given day and they may have responded differently on a different day. This leads to another limitation of the study in that it was partly retrospective. Retrospective studies rely on memory, in which case biases may become part of the study.

Another limited area of the study was in the sexual risk portion of the questionnaire. This portion was originally intended to establish a relationship between risky sexual behaviors and body esteem. However, the measure originally used was open-ended and a wide variety of answers were given, so much so that no patterns were able to be established. For example, on some questions concerning how many times a participant had actively sought sexual intercourse with strangers, the answers ranged from zero times to three hundred and forty-four times. For this type of measure to be successful in future studies, specific answer options should be provided. Lastly, the participants of this study were female and similar in all demographic variables and the results of this study may not apply to the general population and to males in particular.

Future Research

The present study has provided knowledge that patterns of change in body esteem have significant results on several aspects of body image and sexual behavior in women during emerging adulthood, and has important implications for mental health. Future research should explore a larger and more diverse demographic sample. There are undoubtedly many other variables that are involved in body esteem, body image, and sexual behavior in young women. Studying a more diverse sample may help uncover some of those variables and contribute to a better understanding of these constructs.

Future research may also benefit from further parsing apart and including other dimensions of body image and sexual behavior. Studying other aspects of body image and sexual behavior—such as sexual risk taking, types of sexual behavior, satisfaction with sexual behavior, differences between being single and in a relationship—may also contribute to the better understanding of the relationship that exists between body esteem, body image, and sexual behavior. It may be that certain types of sexual behavior, risk taking sexual behaviors, and being in a relationship are associated with other aspects of body image not examined in this study and with either positive or negative body esteem. The results of this study also suggest that future research to further distinguish between *body esteem* and *body image* will go far in understanding the current relationship and the effect that each has on other variables of sexual behavior.

Finally, after examining the results of this study, future research may wish to examine other developmental periods of a women's life, i.e. during middle adulthood and older adulthood, in order to investigate whether changes in body esteem occur at these

times as well and what effects they will have. Obviously, body esteem can either serve as a protective factor or risk factor, and changes that can determine body esteem patterns are important to understand as they contribute to women's mental health and overall well-being.

Conclusion

In conclusion, this study suggests that changes from past body esteem to current body esteem are associated with either positive or negative outcomes, possible risk factors, and possible protective agents in the constructs of sexual behavior and body image in emerging adult women. Emerging adulthood is a distinctive developmental period where individuals begin to experiment more, go through developmental tasks, take on more responsibility, find more independence, and begin to form a new identity. Forming new opinions, representations, and emotions about one's body is also part of this transition. Therefore it can be said that this developmental period is riddled with stressors, both positive and negative. However, this study suggests that past body perceptions are related to current body esteem, as well as some aspects of sexual behavior.

References

Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *Journal of American Psychology, 25*, 469-480.

Cash, T.F., & Pruzinsky, T. (Eds.). (1990). *Body images: Development, deviance, and change.* New York: Guilford.

Clark, L., & Tiggeman, M. (2008). Sociocultural and individual psychological predictors of body image in young girls: A prospective study. *Developmental Psychology*, *44*(4), 1124-1134. doi:10.1037/0012-1649.44.4.1124.

Dawson, L.H., Shih, M.C., Moor de, C., & Shrier, L. (2008). Reasons why adolescents and young adults have sex: Associations with psychological characteristics and sexual behavior. *Journal of Sex Research, 45*(3), 225-232. doi: 10.1080/00224490801987457

Gillen, M.M., Lefkowitz, E.S., & Shearer, C.L. (2006). Does body image play a role in risky sexual behavior and attitudes? *Journal of Youth and Adolescence, 35*(2), 243-255. doi: 10.1077/s10964-005-9005-6

Fisher, T. D., Snell, W. E., Jr. (1995). *Validation of the Multidimensional Sexuality Questionnaire.* Unpublished manuscript, The Ohio University at Mansfield.

Frederickson, B.L., & Roberts, T. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*, 173-206.

Graaf de, H., Vanwesenbeeck, I., Woertman, L., & Meeus, W. (2011). Parenting and adolescent's sexual development in western societies: A literature review. *European Psychologist, 16*(1), 21-31. doi: 10.1027/1016-9040/a000031

Grabe, S., Ward, L., & Hyde, J. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134*(3), 460-476. doi:10.1037/0033-2909.134.3.460

Goldenberg, J.L, McCoy, S.K., Pyszczynski, T., Greenberg, J., Solomon, S. (2000). The body as a source of self-esteem: The effect of mortality salience on identification with one's body, interest in sex, and appearance monitoring. *Journal of Personality and Social Psychology, 79*(1), 118-130. doi: 10.1037//0022-3514.79.1.118

Halpern, C., King, R., Oslak, S., & Udry, J. (2005). Body mass index, dieting, romance, and sexual activity in adolescent girls: relationships over time. *Journal of Research on Adolescents, 15*(4), 550-559.

Hensel, D.J., Fortenberry, J.D., O'Sullivan, L.F., & Orr, D.P. (2011). The developmental association of sexual self-concept with sexual behavior among adolescent women. *Journal of Adolescence, 34*, 675-684. doi: 10.1016/j.adolescence.2010.09.005

Hollander, D. (2010). Body image predicts some risky behaviors among teenage women. *Perspectives on Sexual & Reproductive Health, 42*(1), 67.

Kaltiala-Heino, R., Kosunen, E., & Rimpela, M. (2003). Pubertal timing, sexual behavior, and self-reported depression in middle adolescence. *Journal of Adolescence, 26*, 531-545. doi: 10.1016/S0140-1971(03)00053-8

Jayson, S. (2005, October 19). Teens define sex in new ways. *USA Today*. Retrieved December 12, 2008, from http://www.usatoday.com

La Rocque, C.L., & Cioe, J. (2011). An evaluation of the relationship between body image and sexual avoidance. *Journal of Sex Research, 48*(4), 397-408. doi: 10.1080/00224499.2010.499522

Martijn, C., Vanderlinden, M., Roefs, Huijding, J., & Jansen, J. (2010). Increasing body satisfaction of body concerned women through evaluative conditioning using social stimuli. *Health Psychology, 29*(5), 514-520. doi: 10.1037/a0020770

McLaren, L., Hardy, R., & Kuh, D. (2003). Women's body satisfaction at midlife and lifetime body size: A prospective study. *Health Psychology, 22*(4), 370-377. doi: 10.1037/0278-6133.22.4.370

Murray, K.M., Byrne, D.G., & Rieger, E. (2011). Investigating adolescent stress and body image. *Journal of Adolescence, 34*, 269-278 doi: 10.1016/j.adolescence.2010.05.004

Paxton, S.J., Eisenberg, M.E., & Neumark-Sztainer, D. (2006). Prospective predictors of Body dissatisfaction in adolescent girls and boys: A five-year longitudinal study. *Developmental Psychology, 42*(5), 888-899. doi: 10.1037/0012-1649.42.5.888

Pujols, Y., Meston, C.M., & Seal, B.N. (2010). The association between sexual satisfaction and body image in women. *Journal of Sexual Medicine, 7*, 905-916. doi: 10.1111/j.1743-6109.2009.01604.x

Sabiston, C. M., Sedgwick, W. A., Crocker, P. R. E., Kowalski, K. C., & Mack, D. E. (2007). Social physique anxiety in adolescence: an exploration of influences, coping strategies, and health behaviors. *Journal of Adolescent Research, 22,* 78-101.

Seal, B.N., Bradford, A., & Meston, C.M. (2009). The association between body esteem and sexual desire among college women. *Archive of Sexual Behavior, 38,* 866-872. doi: 10.1007/s10508-008-9467-1

Siegel, J.M. (2002). Body image change and adolescent depressive symptoms. *Journal of Adolescent Research, 17,* 27-41.

Snell, W. E., Jr., Fisher, T. D., & Walters, A. S. (1993). The Multidimensional Sexuality Questionnaire: An objective self-report measure of psychological tendencies associated with human sexuality. *Annals of Sex Research, 6,* 27-55.

Spector, I. P., Carey, M. P., & Steinberg, L. (1996). The sexual desire inventory: Development, factor structure, and evidence of reliability. *Journal of Sex & Marital Therapy, 22,* 175-190.

Steinfeldt, J. A., Zakrajsek, R., Carter, H., & Steinfeldt, M. (2011). Conformity to gender norms among female student-athletes: Implications for body image. *Psychology of Men & Masculinity*, *12*(4), 401-416. doi: 10.1037/a0023634.

Stunkard, A.J., Sorensen, I., & Schulsinger, F. (1984). Use of the Danish adoption register for the study of obesity and thinness. In S.S. Ketty, L.P. Rowland, R.L. Sidman, & S.W. Matthysse (Eds.), *The genetics of neurological and psychiatric disorders.* New York: Raven. 115-120.

Swami, V., Airs, N., Chouhan, B., Leon, M.A.P., & Towell, T. (2009). Are there ethnic differences in positive body image among female british undergraduates. *European Psychologist, 14*(4), 288-296. doi: 10.1027/1016-9040.14.4.288

Vasilenko, S.A., Ram, N., &Lefkowitz, E.S. (2011). Body image and first sexual intercourse in late adolescence. *Journal of Adolescence, 34*, 327-335. doi: 10.1016/j.adolescence.2010.04.005

TABLES

TABLE 1. Pearson Correlations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Age	1	-.060	.055	-.021	.232**	.296**	-.075	.039	.146	.079
2. Body Area Satisfaction		1	-.516**	.823**	.433**	.080	-.374**	-.584**	.401**	.711**
3. Self Weight Classification			1	-.590**	-.288**	-.061	.494**	.685**	-.347**	-.544**
4. Appearance Evaluation				1	.524**	.153	-.426**	-.624**	.468**	.769**
5. Sexual Confidence					1	.399**	-.182**	-.227**	.351**	.335**
6. Sexual Desire						1	-.043	-.075	.190*	.090
7. Figure Satisfaction (age 16)							1	.483**	-.610**	-.313**
8. Figure Satisfaction (current)								1	-.358**	-.630**
9. Body Esteem (age 16)									1	.344**
10. Body Esteem (current)										1

Note: * = $p < .05$, ** = $p < .01$

TABLE 2. Effect of Body Perception Change on Study Variables

	Always Hated Body (N= 22)		Loved then Hated Body (N= 20)		Hated then Loved Body (N= 38)		Always Loved Body (N= 57)			
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Body Image										
Body Area Satisfaction	23.95	4.74	26.95	5.30	29.47	6.12	33.19	4.96	18.51	.000**
Self Weight Classification	7.82	1.30	7.30	1.17	6.63	1.28	6.00	1.32	12.59	.000**
Appearance Evaluation	13.05	4.25	17.15	4.99	19.21	5.37	23.30	5.71	31.70	.000**
Figure Satisfaction (current)	1.86	.94	1.20	.77	.92	.78	.40	.75	19.09	.000**
Sexual Behavior										
Sexual Confidence	11.77	5.66	16.65	7.09	14.71	6.12	18.73	4.45	9.52	.000**
Sexual Desire	40.00	5.69	39.65	8.55	39.07	8.64	43.09	7.06	2.59	.06

Note: * = $p < .05$, *

TABLE 3. Comparison of Consistently Positive v. Consistently Negative (Qualitative)

Time Of Study	Consistently Positive	Consistently Negative
At Age 16	*Participant A:* "My body was about the same as it is now, just slightly less developed. I was satisfied with it at the time." *Participant B:* "I was raised in a very Irish household- my grandparents immigrated to the US in the late 50s, as did all of their friends, and as the first child in my generation, I spent much of my time with them in my early formative years. They taught me two crucial things: 1. My body was normal and lovely, and I should be proud of my strong ankles and "healthy, agricultural Irish hips", even if the media says they're ugly. Those models may be able to traipse around in high society, but they can't pull a plow or defend themselves in a fight without being snapped in half, now, can they? and [*sic*] 2. Why be bothered by what other people think is the ideal body image? If you're enjoying yourself and surviving, that's what counts."	*Participant C:* "Even though I wasn't anywhere near fat at 16, I still felt like I could and should have been thinner, partially because I was taller than all of my friends and felt as I should be as thin as them." *Participant D:* "I was overweight and all of my friends were very skinny."
At Time of Study	*Participant A:* "For the most part I am very fortunate to have the body I was given, but it's normal to a bit feel self-conscious every once in a while. Otherwise, I love my body." *Participant B:* "I've gained a bit of weight in the past few years. It's not like I cry [*sic*] have any significant health risks to worry about at my age, weight and height, but I would like to fit back into the pants I wore last year. That'd be nice. Also, as an actress, I need to keep myself in proper, working order, so I would rather be a bit fitter than I am, to be ready for anything a role might demand of me."	*Participant C:* "Though I have learned to be more accepting of myself, I still feel that I would like to be thinner. I weigh more now than I did at 16 and I wish I could have appreciated my body then instead of worrying about changing it. Now, I feel like I am constantly making efforts to lose weight and becoming frustrated when I do not get the results I want. I believe this constant struggle probably reflects more of my attitude towards myself in general." *Participant D:* "I am extremely overweight and uncomfortable with how I look and feel. I am not comfortable in my body."

APPENDICES

1. What is your age?
    a. 18
    b. 19
    c. 20
    d. 21
    e. 22
    f. 23
    g. 24
    h. 25

2. What is your ethnicity?
    a. African American/Black
    b. Hispanic/Latin
    c. Native American/American Indian
    d. Asian/Pacific Islander
    e. Caucasian/White
    f. Multiracial
    g. Other—please specify

3. Which best describes where you grew up?
    a. Rural area
    b. Urban area
    c. Suburban area
    d. Other—please specify

4. Which best describes the family in which you were raised?
    a. Intact
    b. Divorced, single-parent (please specify either mother or father)
    c. Blended
    d. Extended
    e. Other—please specify

5. With which sexuality do you most identify with?
    a. Homosexual
    b. Bisexual
    c. Heterosexual
    d. Other—please specify

6. With what religion, if any, do you identify with?

7. The following questions contain a series of statements about how people might think, feel, or behave involving body image. Please read each item carefully and decide to what extent it is characteristic of you. Remember, all your responses are anonymous, so please be completely honest and answer all items.
    a. Before going out in public, I always notice how I look.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree
    b. I am careful to buy clothes which will make me look my best.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree
    c. My body is sexually appealing.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree
    d. I constantly worry about being or becoming fat.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree
    e. I like my looks just the way they are.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree
    f. I check my appearance in a mirror whenever I can.
        i. Definitely disagree
        ii. Mostly disagree
        iii. Neither agree or disagree
        iv. Mostly agree
        v. Definitely agree

g. Before going out, I usually spend a lot of time getting ready.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
h. I am very conscious of even small changes in my weight.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
i. Most people would consider me good looking.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
j. It is important that I always look good.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
k. I like the way I look without my clothes.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
l. I am self-conscious if my grooming is not right.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree
    iv. Mostly agree
    v. Definitely agree
m. I like the way my clothes fit me.
    i. Definitely disagree
    ii. Mostly disagree
    iii. Neither agree or disagree

iv. Mostly agree
v. Definitely agree

n. I don't care what people think about my appearance.
i. Definitely disagree
ii. Mostly disagree
iii. Neither agree or disagree
iv. Mostly agree
v. Definitely agree

o. I dislike my physique.
i. Definitely disagree
ii. Mostly disagree
iii. Neither agree or disagree
iv. Mostly agree
v. Definitely agree

p. I am physically attractive.
i. Definitely disagree
ii. Mostly disagree
iii. Neither agree or disagree
iv. Mostly agree
v. Definitely agree

q. I never think about my appearance.
i. Definitely disagree
ii. Mostly disagree
iii. Neither agree or disagree
iv. Mostly agree
v. Definitely agree

r. I am always trying to improve my physical appearance.
i. Definitely disagree
ii. Mostly disagree
iii. Neither agree or disagree
iv. Mostly agree
v. Definitely agree

8. I think I am:
a. Very underweight
b. Somewhat underweight
c. Normal weight
d. Somewhat overweight
e. Very overweight

9. From looking at me, most other people would think I am:
    a. Very underweight
    b. Somewhat underweight
    c. Normal weight
    d. Somewhat overweight
    e. Very overweight

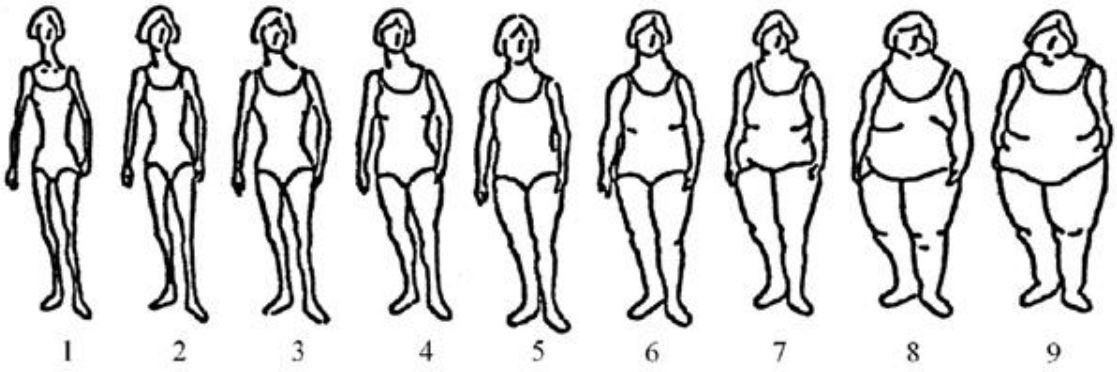
10. Using this 1-5 scale (1 = Very dissatisfied and 5 = Very satisfied), please indicate how satisfied you are with each of the following areas of your body.
    a. Face (facial features, complexion)
        i. Very dissatisfied
        ii. Mostly dissatisfied
        iii. Neither satisfied or dissatisfied
        iv. Mostly satisfied
        v. Very satisfied
    b. Hair (color, thickness, texture)
        i. Very dissatisfied
        ii. Mostly dissatisfied
        iii. Neither satisfied or dissatisfied
        iv. Mostly satisfied
        v. Very satisfied
    c. Lower torso (buttocks, hips, thighs, legs)
        i. Very dissatisfied
        ii. Mostly dissatisfied
        iii. Neither satisfied or dissatisfied
        iv. Mostly satisfied
        v. Very satisfied
    d. Mid torso (waist, stomach)
        i. Very dissatisfied
        ii. Mostly dissatisfied
        iii. Neither satisfied or dissatisfied
        iv. Mostly satisfied
        v. Very satisfied
    e. Upper torso (breasts, shoulders, arms)
        i. Very dissatisfied
        ii. Mostly dissatisfied
        iii. Neither satisfied or dissatisfied
        iv. Mostly satisfied
        v. Very satisfied
    f. Muscle tone

i. Very dissatisfied
ii. Mostly dissatisfied
iii. Neither satisfied or dissatisfied
iv. Mostly satisfied
v. Very satisfied

g. Weight
i. Very dissatisfied
ii. Mostly dissatisfied
iii. Neither satisfied or dissatisfied
iv. Mostly satisfied
v. Very satisfied

h. Height
i. Very dissatisfied
ii. Mostly dissatisfied
iii. Neither satisfied or dissatisfied
iv. Mostly satisfied
v. Very satisfied

i. Overall appearance
i. Very dissatisfied
ii. Mostly dissatisfied
iii. Neither satisfied or dissatisfied
iv. Mostly satisfied
v. Very satisfied

11. 

Using the previous figure, please choose the number of the figure which you believe most closely answers the question.

a. Which figure looks most like you currently look?
i. 1
ii. 2
iii. 3
iv. 4

v. 5
vi. 6
vii. 7
viii. 8
ix. 9

b. Which figure looks most like you would like to look?
   i. 1
   ii. 2
   iii. 3
   iv. 4
   v. 5
   vi. 6
   vii. 7
   viii. 8
   ix. 9

c. Which figure looks most like a female your age should look?
   i. 1
   ii. 2
   iii. 3
   iv. 4
   v. 5
   vi. 6
   vii. 7
   viii. 8
   ix. 9

d. Which figure do you believe a partner would find most attractive?
   i. 1
   ii. 2
   iii. 3
   iv. 4
   v. 5
   vi. 6
   vii. 7
   viii. 8
   ix. 9

e. Which figure looks most like you at 16?
   i. 1
   ii. 2
   iii. 3
   iv. 4

v. 5
vi. 6
vii. 7
viii. 8
ix. 9

f. Which figure looks most like you would have like to look at 16?
    i. 1
    ii. 2
    iii. 3
    iv. 4
    v. 5
    vi. 6
    vii. 7
    viii. 8
    ix. 9

g. Which figure do you believe a partner would have found attractive at 16?
    i. 1
    ii. 2
    iii. 3
    iv. 4
    v. 5
    vi. 6
    vii. 7
    viii. 8
    ix. 9

12. Listed below are several statements that concern the topic of sexual behavior. Please read each item carefully and decide to what extent it is characteristic of you.
    a. I am confident about myself as a sexual partner.
        i. Not at all
        ii. Slightly
        iii. Somewhat
        iv. Moderately
        v. Very
    b. I am a pretty good sexual partner.
        i. Not at all
        ii. Slightly
        iii. Somewhat
        iv. Moderately

v. Very

c. I am better at sex than most other people.
    i. Not at all
    ii. Slightly
    iii. Somewhat
    iv. Moderately
    v. Very
d. I would rate myself pretty favorably as a sexual partner.
    i. Not at all
    ii. Slightly
    iii. Somewhat
    iv. Moderately
    v. Very
e. I would be very confident in a sexual encounter.
    i. Not at all
    ii. Slightly
    iii. Somewhat
    iv. Moderately
    v. Very

13. Please read the following questions and record the number that is true for you over the past 6 months in the blank box. If you do not know for sure the amount of times a behavior took place, try to estimate the number as close as you can. If the questions do not apply to you or you have never engaged in that activity, please put a "0" on the blank. In the following questions "sex" includes oral, anal, and vaginal sex and "sexual behavior" includes passionate kissing, making out, fondling, petting, oral and hand stimulation to the genitals and anal area. Remember, your answers are anonymous, so please answer as honestly as possible.
    a. How many partners have you engaged in sexual behavior with but not had sex with?
    b. How many times have you left a social event with someone you just met?
    c. How many times have you engaged in sexual behavior with someone you didn't know?
    d. How many times have you gone out with the intent of engaging in sexual behavior?
    e. How many times have you felt so sexual that you could not control your sexual behaviors?
    f. How many times have you gone out with the intent of having sex with someone?

g. How many times have you had an unexpected and unanticipated sexual experience?
h. How many times have you had a sexual encounter you engaged in willingly, but later regretted?
i. How many partners have you had sex with?
j. How many times have you had vaginal intercourse without a latex or polyurethane condom?
k. How many times have you had vaginal intercourse without protection against pregnancy?
l. How many people have you had sex that you know but are not involved in any sort of relationship?
m. How many times have you had sex with someone you don't know well or just met?
n. How many partners have you had sex with that you didn't trust?

14. The following questions ask about your level of sexual desire. By desire, INTEREST IN or WISH FOR SEXUAL ACTIVITY is meant. For each item, please choose the phrase that best represents your thoughts and feelings. Remember, your answers are anonymous, so please answer as honestly as possible.
    a. During the last month, how often would you have liked to engage in sexual activity with a partner?
        i. None at all
        ii. Once a day
        iii. More than once a day
        iv. Once a week
        v. Twice a week
        vi. 3 to 4 times a week
        vii. Once every two weeks
        viii. Once a month
    b. During the last month, how often have you had sexual thoughts involving a partner?
        i. None at all
        ii. Once a day
        iii. More than once a day
        iv. Once a week
        v. Twice a week
        vi. 3 to 4 times a week
        vii. Once every two weeks
        viii. Once a month

15. The following questions ask about your level of sexual desire. By desire, INTEREST IN or WISH FOR SEXUAL ACTIVITY is meant. For each item, please choose number (1 = No desire and 9 = Strong desire) that best represents your thoughts and feelings. Remember, your answers are anonymous, so please answer as honestly as possible.
    a. When you spend time with an attractive person, how strong is your sexual desire?
        i. 1
        ii. 2
        iii. 3
        iv. 4
        v. 5
        vi. 6
        vii. 7
        viii. 8
        ix. 9
    b. When you are in romantic situation, how strong is your sexual desire?
        i. 1
        ii. 2
        iii. 3
        iv. 4
        v. 5
        vi. 6
        vii. 7
        viii. 8
        ix. 9
    c. How strong is your desire to engage in sexual activity with a partner?
        i. 1
        ii. 2
        iii. 3
        iv. 4
        v. 5
        vi. 6
        vii. 7
        viii. 8
        ix. 9
    d. How important is it for you to fulfill your sexual desire through activity with a partner?
        i. 1

ii. 2
iii. 3
iv. 4
v. 5
vi. 6
vii. 7
viii. 8
ix. 9

e. Compared to others your age, how would you rate your desire to behave sexually with a partner?
   i. 1
   ii. 2
   iii. 3
   iv. 4
   v. 5
   vi. 6
   vii. 7
   viii. 8
   ix. 9

16. Think about your body when you were 16. On a scale of 1 to 9 (1 = I hated my body and 9 = I loved my body), how did you feel about your body?

17. Why did you feel this way? Please be as complete as possible.

18. Think about your current body. On a scale of 1 to 9 (1 = I hate my body and 9 = I love my body), how do you feel about your body?

19. Why do you feel this way? Please be as complete as possible.