

Adolescent female body image: Self-report predictive cognitions and behaviors

by

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B.S., Kansas State University, 2002

M.S., Kansas State University, 2007

AN ABSTRACT OF A DISSERTATION

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Abstract

Adolescence is a time when many experience challenges in life to which they have not been previously exposed. Complicating the transition to adolescence is the perception that they are “on stage” and everyone is watching and evaluating their transition through puberty (Woolfolk, 2019). Youth face the challenge of separating themselves from their parents, gaining more independence, and growing into their own identity (Erikson, 1968; Woolfolk, 2019). With this independence arises more reliance on peers, friends, and outside influences. They are faced with decisions to make about their postsecondary choice, career path, goal setting, body image issues, identity, sexual selves, and peer relationships. Gender differences in self-esteem have also been shown to emerge during adolescence, with girls displaying lower levels of self-esteem than their male peers (Impett, Sorsoli, Schooler, Henson, & Tolman, 2008). The emphasis on fitness, thinness, and outward beauty, increases the pressure on adolescents, specifically for this study, females to have the “perfect” body to fit with society ideals (Hartocollis, 2013).

The study explored self-esteem, self-efficacy, life satisfaction, social comparison, and body image in 8th and 12th grade girls from a rural middle school and a rural high school in a mid-size Midwestern city. The study population included 97 participants ($n = 97$) among the two schools and utilized a cross-sectional design, causal-comparative.

Survey results indicated 12th grade girls do not have higher self-esteem, life satisfaction, or self-efficacy and reported lower “how I look” and “how I feel” body image than 8th grade girls. However, 12th grade girls reported engaging in social comparison less than 8th grade girls. It is significant that girls in the study who reported school based curriculum exposure to nutrition, goal setting, and respecting their sexual selves reported higher life satisfaction, self-esteem, and self-efficacy. The girls also reported engaging in less social comparison.

The results from this study indicated the need and strong support for intentional school based curriculum. Self-esteem, self-efficacy, body image and social comparison are factors in life satisfaction and should be addressed as part of a comprehensive, standards based social-emotional curriculum.

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Approved by:

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The results from this study indicated the need and strong support for intentional school-based curricula. Self-esteem, self-efficacy, body image and social comparison are factors in life satisfaction and should be addressed as part of a comprehensive, standards based social-emotional curriculum.

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Dedication

To my late grandmother, Verna Wearing, to me you were perfect and will forever be my hero.

To my children, Kennedy Ann, Charlotte Grace, and Clint Andrew, may you always believe in your dreams and have the strength, courage, and perseverance to overcome any obstacle life hands you. I am eternally grateful I get to be your mom.

Chapter 1 - Introduction

Adolescence is a time when many experience challenges in life to which they have not been previously exposed. Complicating the transition to adolescence is the perception that they are “on stage” and everyone is watching and evaluating their transition through puberty (Woolfolk, 2019). Youth face the challenge of separating themselves from their parents, gaining more independence, and growing into their own identity (Erikson, 1968; Woolfolk, 2019). With this independence arises more reliance on peers, friends, and outside influences. They are faced with decisions to make about their postsecondary choice, career path, goal setting, body image issues, identity, sexual selves, and peer relationships. Gender differences in self-esteem have also been shown to emerge during adolescence, with girls displaying lower levels of self-esteem than their male peers (Impett, Sorsoli, Schooler, Henson, & Tolman, 2008). This is significant because overall motivation tends to decline in middle adolescents (Murdock, Anderman, & Hodge, 2000).

Along with gender differences in self-esteem, concerns over body image also emerge. Body image is central to adolescents’ self-definition, and this is true particularly for girls as they are socialized to believe that their appearance is an important basis for self-evaluation and evaluation by others (Impett et al., 2008). Research indicates that body image perceptions and self-esteem are highly related and satisfaction with one’s body or appearance is repeatedly the strongest predictor of self-esteem for female adolescents (Impett et al., 2008; Murray, Byrne, & Rieger, 2011). There are documented links between body satisfaction and self-esteem during various points of adolescent development (Impett et al., 2008; Helverson, 2013).

Body image is subjective and includes multiple facets such as affective, cognitive, and behavioral assessments of size, aesthetics, function, fitness, and health, and these perceptions can

lead to an image much different from the objective size and shape of an individual (Murray, Byrne, & Rieger, 2011). Murray et al. (2011) reported that dysfunctional evaluations of the body are at their peak during adolescence. This is concerning because body image disturbances can lead to deep and lasting psychological consequences such as depression, low self-esteem, excessive dieting, and steroid use.

Consequently, adolescence is a particularly important developmental period for the formation of self-esteem. Self-esteem is defined by Rosenberg (1965) as a “positive or negative attitude toward...the self” (p. 8). Developmental studies have shown that self-esteem is an important factor in the promotion of both physical and mental health, as well as preventing problems such as aggression and delinquent behavior (Impett et al., 2008). Girls, in particular, with a low self-esteem, are more likely to engage in relational aggression with peers, have eating disorders, and enter into unhealthy intimate relationships (Impett et al., 2008).

Girls’ self-esteem has been shown to decline substantially in Western culture during middle adolescence, with changes in body image offered as a possible explanation (Clay, Vignoles, & Dittmar, 2005). Body image can develop in the context of sociocultural factors, such as unrealistic media images of female beauty. A concern is that young girls are developing their ideal of what their bodies should look like based on unrealistic images of female beauty portrayed in the media. The emphasis on fitness, thinness, and outward beauty, increases the pressure on adolescents to have the “perfect” body to fit with society ideals, specifically females for this study, (Hartocollis, 2013). Research has indicated a noticeable decline in their perception of physical attractiveness from the age of 11 onward (Clay et al., 2005). Self-esteem follows a very similar pattern, markedly declining in females between the ages of 12 and 17 (Clay et al., 2005).

In a study implementing a curriculum from the “Everybody’s Different” program (O’Dea, 2008), Norwood (Norwood, Murray, Nolan, and Bowker (2011) demonstrated significant positive results educating young individuals on how to care for their bodies and the long-term health benefits. The results indicated teaching good health and nutrition education lessons can lead to increased self-esteem and body appreciation. In addition, when low levels of self-esteem and body dissatisfaction are not targeted; individuals are at a higher risk for developing an eating disorder to achieve their ideal body image. Results from their study indicated that the participants’ general feelings about themselves, including their physical appearance, increased over time. Girls who participated were also less likely to compare themselves with society’s image of the thin ideal. Two important components of this study are that educating young individuals about how to care for their bodies can potentially lead to increased self-esteem and body appreciation. In addition, if low levels of self-esteem and body dissatisfaction are not targeted, then individuals are at a higher risk for developing an eating disorder to achieve their ideal body image.

Body image dissatisfaction combined with lowered self-esteem and their impact on life satisfaction for adolescent females has received little attention in the literature. However, Ash and Huebner (2001) found that both positive and negative chronic, daily stressors as well as acute events had a significant impact on life satisfaction for adolescents, suggesting the importance of both acute and chronic stressors at school and home. In both the home and school setting adolescent females are subjected to negative stressors through comments about their weight as well as pressure from parents, friends, and the media to obtain certain ideals of female beauty. While attempting to navigate through this developmental stage and the dramatic changes

that often accompany it, they engage in maladaptive behaviors such as school misconduct, drug use, and eating disorders (Ash & Huebner, 2001).

Therefore, the ability to foster a greater capacity for self-efficacy may be critical in the development of healthy decision making and behaviors and contribute to a positive body image, higher self-esteem, and greater life satisfaction by avoiding and navigating through maladaptive and anti-social behaviors. Implementation of interventions that promote healthy behaviors among students who engage in unhealthy lifestyle choices is preferable with pre-to early adolescents over late adolescents based on results from a study conducted by Thunfors, Collins, and Hanlon (2009).

It is also important to take into consideration the theory that adolescents engage in comparison with other peers and when adolescents compare themselves to ideals they cannot realistically achieve it can have a negative impact on their body image, self-esteem, life satisfaction, and self-efficacy (Erikson, 1963; Festinger, 1954). Social comparison serves as a vehicle for how individuals form self-perceptions as well as how individuals direct their behaviors. As such, social comparison is critical to the formation of a positive body image, a healthy level of self-esteem and self-efficacy, and positive feelings associated with life satisfaction. Humans have a drive to self-assess and they do that by seeking standards to compare themselves to, using both objective standards as well as those in their social environments.

Organizational Evidence-based Collaboration

The data from my research can be used to present a better idea of how the girls in the study perceive themselves in relation to body image, self-esteem, self-efficacy, social comparison, and life satisfaction; thereby, creating a research-based starting point for developing

programs to address the social and emotional learning competencies outlined by the American School Counselor Association Mindsets and Behaviors (ASCA, 2014) and the Collaborative for Academic, Social, and Emotional Learning (CASEL).

ASCA (2014) Mindsets and Behaviors for Student Success: K-12 College-and Career-Readiness Standards for Every Student provide 35 mindset and behavior standards that describe knowledge, skills, and attitudes needed to achieve academic success. The Mindsets and Behaviors are based on research conducted by the University of Chicago Consortium on Chicago School Research (Farrington, Roderick, Allensworth, Nagaoka, Keyes, Johnson, and Beechum 2012). Category 1 addresses mindset standards and category 2 addresses behavior standards. These research-based standards serve as the foundation for the school counseling program and the classroom, small group, or individual group activities. Specifically, the following standards serve as the basis for the girls small counseling group addressing the topics of this study: Standard M 1., mindset standards, encourages a belief of the whole self, to include a healthy balance of mental, social/emotional and physical well-being as well as M 2. that instills self-confidence in the ability to succeed. Behavior standards addressed include social skills that emphasize the need and importance in creating positive and supportive relationships with other students, standard B-SS 2.

In addition, the Collaborative for Academic, Social, and Emotional Learning (CASEL) serves with the mission of making evidence-based social and emotional learning an integral part of education from preschool through high school (www.casel.org). Their belief is that social and emotional learning can strengthen a student's ability to integrate skills, attitudes, and behaviors to effectively and ethically deal with the daily tasks and challenges life presents. The integrated framework used by CASEL promotes intrapersonal, interpersonal, and cognitive

competence. CASEL promotes five core competencies that can be taught in a variety of ways throughout multiple settings. Those competencies are self-awareness, self-management, social awareness, relationship skills, and responsible decision making. These are all competencies associated with adolescents being able to have an accurate perception of self, self-confidence, respect for others, self-efficacy, relationship-building, self-discipline, ability to analyze situations, and evaluate and reflect on situations among others. Each of these competencies is an important component to adolescent youth developing a healthy self-esteem and positive body image to avoid harmful decision-making and destructive behavior.

Statement of the Problem

Research indicates that self-efficacy, self-esteem, life satisfaction, and social comparison are important in the development of a healthy body image (Helverson, 2013). However, the relationship among these variables has not been investigated. Self-efficacy and self-esteem are significant factors connected with academic achievement and professional success. Low self-efficacy and self-esteem influenced by body image perceptions result in higher school absenteeism, negative health issues, academic achievements, and challenges with social relationships in school and later in life (Drewnowski & Yee, 1987; Furnham & Calnan, 1998; McCabe, Ricciardelli, & Finemore, 2002; Siegel, 1998; Yanover & Thompson, 2008). Body dissatisfaction often contributes to stress, clinical depression, anxiety, and eating disorders (Helverson, 2013; Siegel, 1998). In addition to being a factor for mental health issues, body dissatisfaction is positively correlated with the ability to develop self-compassion as a protective risk-factor and ability to regulate one's mood (Helverson, 2013).

Purpose of the Study

It is the intent of this study to add to the extant literature in a way that shows to what degree self-esteem, self-efficacy, and social comparison predict life satisfaction and to what extent life satisfaction predicts body image, as well as to what extent life satisfaction predicts body image over and above self-esteem, self-efficacy, and social comparison among adolescent females. By assessing the predictive relationships among these variables, psychoeducational groups may address these concerns among adolescent youth in order to prevent a negative body image. The study helped determine the extent to which self-efficacy, self-esteem, life satisfaction, and social comparison predicted body image.

Research Questions

The research questions addressed by this study include:

1. Do 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than 8th grade girls?
2. Do 12th grade girls engage in social comparison less than 8th grade girls?
3. Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than girls who have not?
4. Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves engage in social comparison less than girls who have not been exposed?
5. Are there relationships between grade level and nutrition, goal setting, and respecting your sexual self and self-esteem, life satisfaction, self-efficacy, body image, and social comparison?
6. Does self-esteem predict life satisfaction?
7. Does self-efficacy predict life satisfaction?
8. Does social comparison predict life satisfaction?
9. Does life satisfaction predict body image?
10. Does self-esteem, self-efficacy, and social comparison predict body image to a greater extent than life satisfaction?

Significance of Study

Body dissatisfaction and sub-clinical disordered eating attitudes and behaviors are the most well-known factors that contribute to the development of anorexia nervosa and bulimia nervosa (Stice, 2002). By the age of 6 girls start to express concerns about their own shape and

size with 40%-60% of elementary girls, ages 6-12, concerned with their weight or becoming too fat and this is an issue that endures throughout life (Smolak, 2011). Dissatisfaction with body image creates a barrier to adolescent development of interpersonal skills and positive relations with peers (Davidson & McCabe, 2006). If female adolescents are at risk for engaging in maladaptive behaviors due to a poor perception of their body image starting as early as age 6 and enduring throughout their lifetime, it is critical to begin implementing curriculum to address the issue.

The results of this study provided the researcher the opportunity to examine the role of the following variables: self-esteem, self-efficacy, social comparison, life satisfaction, and body image. Each variable was examined in comparison with female adolescent's self-perceptions. The researcher targeted each of these areas and developed curriculum to address the concerns in an effort to reduce the anti-social behaviors associated with a poor sense of self.

Limitations of Study

One limitation of this study is it only sought to address the self-esteem, life satisfaction, social comparison, self-efficacy, and body image of adolescent females. These issues also impact male adolescents. In addition, the results are only generalizable to the current study's middle and high school sample, therefore not taking into account students in urban areas and to students who are younger than middle school age. Lastly, in my professional role as a school counselor I interacted with some of my sample population.

Definitions of Terms

Body Image: A multifaceted psychological construct that includes subjective attitudinal and perceptual experiences about one's body, particularly its appearance (Cash & Pruzinsky, 1990).

Self-Esteem: A "positive or negative attitude toward a particular object, namely, the self" (Rosenberg 1989, p. 30).

Life Satisfaction: Global life satisfaction is a cognitive evaluation of an individual's own life as a whole and encompasses both negative and positive affect (Diener, 1994).

Self-Efficacy: Self-efficacy is an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura, 1977).

Social Comparison: Social comparison refers to the appraisal and evaluation of abilities as well as opinions of oneself compared to at least one other person (Festinger, 1954).

Chapter 2 - Literature Review

Chapter two provides an examination of the theoretical framework for the variables of self-esteem, life satisfaction, self-efficacy, and social comparison. The study explored the external and internal factors of media, parents, peers, and depression and examined the extent to which these factors influence body image in adolescent females. As indicated by Shroff and Thompson (2006), a friend's preoccupation with weight and dieting, discussions with friends about outward appearances, friends' beliefs about weight and appearance, assigning characteristics and value judgments about popularity, and being teased about one's weight are all potential risk factors for higher levels of body dissatisfaction. These attributes also impact one's drive for thinness and increasing the risk factor for bulimia and decreased self-esteem. (This study also indicated that adolescent females spend time with friends who have similar beliefs as they do (Shroff & Thompson 2006.)

External factors related to body image

Media

The media has played a substantial role on influencing preadolescent girls who have a negative body image or experience body image dissatisfaction. Media has been identified as one of the important conveyors of socio-cultural ideals in both adolescent and preadolescent samples (Dohnt & Tiggemann, 2006). Advertisements, television shows, movies, and magazines can serve as a reference point for which teens compare their bodies to a perceived ideal. Based on a study by Ata, Ludden, and Lally (2007), adolescents who perceive pressure from the media to lose weight report significantly lower body esteem.

Technology and social media have impacted cultural and societal expectations, specifically with adolescents. Exposure to and/or interaction with websites, movies, television, and the many

social media sites accessed by adolescents are major contributing factors in the development of their beliefs and values on body image impacting their emotional, physical, and psychological health (Helverson, 2013). The increased awareness of a media representation of an ideal body image has placed increased pressure and competition on adolescents and decreased self-acceptance of their own appearance (Helverson, 2013; Tiwari, 2015). Using multiple media influences as exposure measures to explore peer and media influences of the body image led to significant concerns and dieting awareness in a group of younger girls, aged 5-8 years (Dohnt & Tiggemann, 2006). The study included a sample of 128 girls individually interviewed with a brief scenario to assess aspects of body image and dieting awareness.

All girls in the study conducted by Dohnt and Tiggemann (2006) reported they watched television, with 83.6% reporting they watch television frequently. When examining the use of magazines, 35% of the girls reported looking at magazines “a lot,” and another 34% reported that they looked at them “sometimes.” They also found that watching more children’s television shows predicted lower levels of dieting awareness. However, having more exposure to women’s magazines predicted greater dieting awareness. One of the greatest concerns from this study is the finding that young girls who had greater exposure to women’s magazines, possibly those of their mothers or older sisters, were less satisfied with their appearance. Findings of the study indicate media influences are significant predictors of body image and dieting awareness.

Research by McCabe and Ricciardelli (2003) demonstrated a positive correlation between body image and self-esteem for adolescents. In this study 800 adolescents (423 boys, mean age 13.92 and 377 girls, mean age 13.69) enrolled in grades 7-10, from six coeducational high schools in Melbourne, Australia completed self-assessments. Participants completed two self-assessments; Body Image and Body Change Inventory (Ricciardelli & McCabe, 2002) and the

Perceived Sociocultural Influences on Body Image and Body Change Questionnaire (Ricciardelli & McCabe, 2002). Results indicated that among adolescent girls the pressure girls feel from media to gain weight uniquely predicted both body-image importance and the use of food supplements. The media pressure girls feel to lose weight uniquely predicted body-image satisfaction and strategies to lose weight. This study reveals that media influences make it difficult for girls to be happy with their bodies no matter what size they are. Girls perceive and internalize media messages as negative feedback on their own bodies.

The Free to Be Me program, delivered through Girl Scouts, was designed to promote healthy body image and prevent unhealthy dieting. The program examined the prevalence of body dissatisfaction, dieting, and specific dieting behavior history; the extent of internalization of sociocultural values, media-influenced knowledge, acceptance of range of body size/shapes, and media exposure and associations between dieting and how these variables affect young girls (Sherwood & Neumark-Sztainer, 2001). The sample for this study was composed of 234 girls from 25 troops in the Girl Scout Council of St. Croix Valley that includes regions in Minnesota and Wisconsin. The mean age of girls in this study was 10 years with the sample being predominantly white; about 60% of the girls were in the fifth grade and approximately 40% were in the sixth grade.

Of the girls surveyed by Sherwood and Neumark-Sztainer (2001), 29% reported that they were engaging in some type of behavior to lose weight. The most common strategies reported were exercising more and reducing the amount of foods high in fat they consume. Although those strategies in and of themselves are not necessarily harmful, it is of concern that these girls are using the term “dieting” and they may be girls of normal weight. Also of concern is approximately one

third of the girls reported thinking of themselves as overweight. It was concluded that participants reported overall dissatisfaction with their stomach, thighs, and weight.

Sherwood and Neumark-Sztainer (2001) reported 10-30% of the girls revealed high levels of the media's influence on questions, indicating higher levels of internalization regarding the sociocultural ideal and the belief that they should try to resemble the appearance of women in the media. More than 75% of girls in the study indicated the influence of advertisements on people's thoughts and behaviors. In summary, the levels of body dissatisfaction, internalization, and unhealthy weight control practices reported are alarming because of their young age, the impact on psychosocial and physical development, and the potential role those factors play in the onset of eating disorders.

Parents and Peers

Recently, researchers have sought to understand and address how or in what ways parents and peers contribute to adolescents' body dissatisfaction and unhealthy eating patterns. When adolescents are in a home environment or surrounded by peers who tend to stress thinness as an ideal there is the potential for body dissatisfaction and eating problems. In addition, parents who make comments about their child's body or weight could potentially create concern in the mind of the child which, in turn may lead to disturbed eating.

A study by Smolak, Levine, and Schermer (1999) examined the impact of direct comments about a child's weight and modeling of weight concerns via mothers and fathers own behavior and the role that potentially plays in their children's body esteem, weight concerns, and weight loss attempts. Surveys were completed by 131 mothers and 89 fathers of fourth and fifth grade boys and girls. Parents were asked to complete surveys that included measures of their own dieting attempts, concerns about their shape, and beliefs about calorie-restrictive dieting. In addition, they

were also asked about the frequency of their comments to their child concerning the child's weight. Children were surveyed using the Body Esteem Scale in addition to being asked questions about their weight-related concerns and weight loss attempts (Green & Pritchard, 2003).

Results from this study indicated that mothers' comments concerning their daughters' weight were significantly correlated with weight loss attempts, while the fathers' comments were not (Green & Pritchard, 2003). As hypothesized, parental modeling of weight concerns and weight control was shown to be related to daughters' attempts to lose weight as well as concerns regarding body esteem. Daughters concerns about being or becoming over weight was related to comments expressed by mothers regarding their own weight and comments about their daughters' weight (Green & Pritchard, 2003). Overall, this study indicated parental input was related to child weight loss efforts, body esteem, and concern with being overweight. Mothers do have a greater impact on these attitudes and behaviors than fathers.

Keery, Boutelle, van den Berg, and Thompson (2005) evaluated the prevalence and effects of teasing by family members with regards to body satisfaction, eating disturbance, and psychological functioning. The final sample included 372 participants. Participants included female adolescents in the sixth, seventh, and eighth grade from a middle school in Pasco County, Florida. Participants ranged in age from 11 years old to 15 years old. Eighty-five percent were white, 5% Hispanic, 2% African-American, 2% Native American, 1% Asian, and 4% identified as other. Twenty-three percent of the participants indicated they had a parent who teased them about their appearance and 12% reported that a parent teased them about being overweight. Results from this study indicated approximately one-fourth of the girls were teased by a parent and approximately one-third were teased about their appearance by at least of one their siblings. The girls in the study who reported being teased by their parents, particularly fathers, as well as

siblings, demonstrated high levels of body dissatisfaction, social comparison internalization regarding the socio-cultural ideal of thinness, restrictive as well as bulimic eating disorders, depression, and lower levels of self-esteem than girls who did not report being teased.

The transition that girls face from childhood to adolescence during their middle school years is a time when they experience changes in physical development and in their social development impacting family and peer relationships (Keery et al., 2005; Woolfolk, 2019). Females mature at a different rate than do males. Girls reach final height at approximately 16 years of age while males continue to grow until approximately age 19. For females, early maturation can bring an array of negative attention and bullying. Negative feedback and appearance-related bullying are potentially very harmful behaviors to adolescent girls during the vulnerable transition into adolescence. The behaviors can lead to negative outcomes such as depression, low self-esteem, and body image dissatisfaction.

Dohnt and Tiggemann (2006) examined the impact of peer and media influences on the development of body satisfaction in young girls and the relationship between body image and self-esteem. The sample included 97 girls between the ages of 5 and 8 years of age who completed two individual interviews one year apart. Dohnt and Tiggemann (2006) found the girls' own desire for thinness remained fairly stable over time. Slightly more than 40 percent of the girls wished to be thinner during the first interview and more than forty-three percent during the second interview. The results also showed that girls who believed their friends desired to have a thinner body also desired a thinner body themselves, were less satisfied with their own bodies and had a lower self-esteem during the second interview. Girls who participated in appearance related conversations and imitation of others were shown to have lower appearance satisfaction. As girls move through the earlier years of schooling a strong influence by peers regarding body image does

exist and is associated with negative implications. Lastly, girls who engaged in watching television shows with an emphasis on appearance were less satisfied with their appearance indicating a negative association with the media (Dohnt & Tiggemann, 2006).

A study conducted by Sherwood and Neumark-Sztainer (2001) examined the internalization of the sociocultural ideal concerning weight-related attitudes and dieting behaviors among adolescent girls. The data collected in the Free to Be Me program reported 29% of fifth and sixth grade girls were engaged in behaviors with the goal of losing weight. Strategies varied from less extreme practices, such as exercising more and eating fewer high-fat foods, to less common but more extreme practices such as taking laxatives and inducing vomiting. Girls reported being most dissatisfied with their stomach, thighs, and weight. They were most satisfied with their height, face, and body shape. One-third of the girls reported that they think of themselves as overweight.

Perhaps most concerning in this study was the 10 to 30% of girls who responded to questions indicating higher levels of internalization of the sociocultural ideal, including the idea that they should try to look like women in the media. Over 75% of girls also reported high levels of media awareness recognizing that advertisements influence people's behavior. The young age of the girls in the study make the reported levels of body dissatisfaction, internalization, and unhealthy weight-control practices particularly concerning. It is a cause for future concern regarding the effect on their psychosocial and physical development and possible role in the onset of eating disorders.

The three most prevalent factors related to the literature regarding the development of eating disorders in adolescents include their relationship with their mothers, their likelihood to give into peer pressure, and how they respond to messages in the media (Peterson, Paulson, &

Williams 2007). The purpose of the Peterson et al. (2007) study was to examine the relative contributions of adolescents' perceptions of the pressure placed on them by the three previously mentioned environmental factors with regard to the development of eating disorder symptomology. The study included a cross section of 333 adolescent boys and girls at a public high school in a suburb of Detroit, MI. The students completed Likert-type scales of perceived pressures and eating disorder symptomology.

Results from this study indicate that perceived pressures from all three environmental contexts were related to greater eating disorder behaviors, in particular, dieting, body dissatisfaction, and a desire to be thin as well as symptoms of bulimia. Findings indicated adolescents who report less pressure from their mothers and peers to be physically attractive might be more heavily influenced by the media to lose weight and engage in dieting behaviors (Peterson, et al., 2007). Those adolescents who had greater pressure from their mothers to be physically attractive and live up to the thin ideal but lower pressure from their peers, regardless of media influence, showed greater body dissatisfaction. Overall maternal pressure to lose weight and be physically attractive had a strong influence on adolescents' belief about their own physical appearance. These three factors, media, mothers, and peers, have a cumulative effect on eating attitudes and behaviors and do not occur in isolation. Therefore, the developmental processes taking place within and between these difference environmental factors need to be considered.

Internal factors related to body image

Depression

High rates of depression in females after childhood is considered one of the strongest findings in the field of epidemiological research (Wade, Cairney, & Pevalin, 2002). Due to prevalence, chronicity, co-morbidity, and pervasive consequences associated with depression, it

is thought by some to be the most serious form of childhood psychopathology (Cicchetti & Toth, 1998). Depression is not a transient phenomenon that one outgrows; rather, depressive episodes are recurrent if the contributing factors remain unabated (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999). Therefore, it is important to examine the role that body image plays in contributing to how adolescents, particularly female adolescents, feel about themselves.

MacPhee and Andrews (2006) examined nine salient risk factors for depression in early adolescents from a group of common predictors. They examined the following nine predictors: perceived quality of peer relationships, perceived parental nurturance, perceived parental rejection, self-esteem, body image, pubertal status, SES, conduct problems, and hyper activity/inattention. The sample in the study examined 2,014 12-and 13-year-old males and females. The study divided the gender to examine potential sex differences in risk factors for depression. While parental behavior, both parental nurturance and parental rejection, and peer relationships, emerged as strong risk factors, self-esteem emerged as the strongest predictor of depression in both males and females. Of the variables in the study self-esteem accounted for 31% of the explained variance in depression scores, while the other predictors accounted for no more than 5% of the remaining variance. In conclusion this study revealed that females demonstrate a significantly higher level of depressive symptoms than males in the same age range.

Body dissatisfaction has also been cited as an explanation for the increase of depressive symptoms in adolescent females (Brausch & Gutierrez, 2009). Brausch and Gutierrez (2009) hypothesized that disordered eating and body image, as well as depressive symptoms would contribute to suicidal ideation. Their sample included 392 public high school students with a

mean age of 15.04 and fairly equal gender distribution with males representing 52% of the sample.

The results from the Brausch and Gutierrez (2009) study showed that disordered eating, not body image, had a significant direct effect on suicidal ideation. However, disordered eating habits potentially reflect an overall unhappiness with the body which could lead to a constant striving to change the body through dieting, exercise, and other more intense options such as bingeing and purging or the use of laxatives (Brausch & Gutierrez, 2009). Adolescents who are continuously trying to change their bodies through diet, and exercise might fail at their attempts. That failure can lead to unhappiness, guilt, and hopelessness, and over a lengthy period of time could potentially contribute to depressive symptoms. While body image alone did not directly increase the risk of suicidal ideation, it did have an indirect effect through depressive symptoms. Disordered eating habits, which may include poor body attitudes and feelings, can be more damaging to adolescents than just poor body image alone (Brausch & Gutierrez, 2009).

Self-esteem.

Self-esteem in the simplest of terms is to imply it is “a positive or negative attitude toward a particular object, primarily being, the self” (Rosenberg, 1989, p. 30). However, Rosenberg (1989) noted two very different connotations of self-esteem that should be understood. The first is the meaning of high self-esteem, which is when a person believes he or she is “very good”; a very different meaning is that he or she thinks they are “good enough.” It is then possible that someone can consider him or herself superior to most others, yet feel inadequate in relation to goals or standards he or she have set. An adolescent may also consider him or herself to be an average person but struggle with the self he or she observes. On the other hand, low self-esteem, suggests self-rejection, self-dissatisfaction, and self-contempt. An

individual with low self-esteem then lacks respect for the self he or she observes; they do not like how they view themselves and they wish it were different.

A study in Cape Town, South Africa, examined the associations among adolescents' self-esteem across six domains (peers, school, family, sports/athletics, body image and global self-worth) and risk behaviors including substance abuse, bullying, suicidality, and sexuality (Wild, Flisher, Bhana, & Lombard, 2004). Students, grades 8-11 from a public high school in Cape Town, South Africa, were given self-report questionnaires with items pertaining to self-esteem, demographic information and questions about their participation in a range of risk behaviors (Wild, Flisher, Bhana, & Lombard, 2004). Results showed that for girls with low self-esteem with respect to body image there was a significant association for an increased likelihood of suicidality, and drug, alcohol, and cigarette use as well as risky sexual behavior. After the other self-esteem scales were controlled for, girls that had scores below the median on the body image self-esteem scale remained much more likely than girls with higher scores to report drug and cigarette use and marginally more likely to report alcohol use and suicidality. Girls with reported low global self-worth were also more likely to report suicidal ideation or behaviors than girls with higher scores for global self-worth, but were less likely to report smoking and marginally significant alcohol use.

Of particular concern are results from a three-year longitudinal study conducted by O'Dea (2006) which studied 80 girls with a mean age of 12.8 years who completed self-concept, depression, and anxiety scales over three years in addition to having their height and weight measured. Girls in the highest Body Mass Index (BMI) group in comparison to the lower BMI group reported lower self-concept across nine domains and this was a stable trend for three years (O'Dea, 2006). The nine domains of self-concept for this study included scholastic competence,

social acceptance, athletic competence, physical appearance, job competence, romantic appeal, behavioral conduct, close friendship and global self-worth. The results from this study imply that multiple areas of a girl's self-concept could be adversely affected by a heavy weight status, and not just those tied to physical appearance and social acceptance as previously thought. This study also supports the hypothesis that a poorer self-concept among heavy girls continues to be characteristic of their adolescence (O'Dea, 2006). The study found statistically significant differences between high and low weight girls in aspects of self-concept that had not previously been thought of to be impacted by weight, including scholastic competence and popularity. This finding is of particular concern because it is not solely related to physical appearance and body image, suggesting a far greater impact on self-concept. Heavy girls in this study felt inadequate in several aspects of themselves and this remained consistent over a three-year time period. In addition to the self-esteem of heavier-weight girls remaining consistently lower than that of lower-weight girls, physical appearance and close friendship, two aspects of their self-concept, became significantly poorer over the period of the study (O'Dea, 2006).

Life Satisfaction

Global life satisfaction is a cognitive evaluation of an individual's own life as a whole and encompasses both negative and positive affect (Diener, 1994). Positive affect is known as the frequency of emotions thought of to be positive, joy or affection, the individual experiences. Negative affect is referred to as the frequency with which an individual has negative emotions, such as sadness or anxiety. Life satisfaction should be taken into consideration as a relevant aspect of adolescents' well-being and functioning (Goldbeck, Schmitz, Besier, Herschbach, & Henrich, 2007).

As youth navigate through the developmental stage of adolescence, they encounter multiple positive and negative stressors as they experience physical and emotional changes as well as multiple changes to their environment (McKnight, Huebner, & Suldo, 2002). While dealing with these changes brought on by their developmental period, they often engage in maladaptive behaviors such as school misconduct, drug use, and delinquency (McKnight et al., 2002). These maladaptive responses can make it even more difficult to adapt to required roles and responsibilities required as youth enter early adulthood.

Considering life satisfaction as a plausible indicator of successful psychological development during adolescence as well as a predictor of psychiatric disorders, researchers investigated the effect of age and gender in 1,274 German students between the ages of 11 and 16 years, which is assumed to be the phase in which the most significant developmental changes occur (Goldbeck et al., 2007). They found that life satisfaction declined linearly with age and across both genders the most noted loss of life satisfaction was between 13 and 14 years of age. Across all age groups boys consistently reported more life satisfaction than girls did. Notably, girls reported lower satisfaction than boys with a stronger effect on health-related life satisfaction which may be due in part to girls feeling more imbalanced in physical and emotional aspects of well-being.

A study involving 490 students in grades 6-12 from two schools encompassing two different districts in Southeastern states, found that adolescents who reported high global life satisfaction reported significantly higher scores on all measures of academic, interpersonal, and intrapersonal functioning than their peers who report low life satisfaction (Gilman & Huebner, 2006). Adolescents who report high global life satisfaction also report more positive relationships with others, including their parents and peers; less intrapersonal stress such as

anxiety and depression; and higher levels of hope as well as a greater sense of control than adolescents reporting lower global satisfaction. In comparison, findings from a study conducted by McKnight et al. (2002) examined 1,201 adolescents in grades 6 -12 and found stressful life events contribute to lower levels of life satisfaction by increasing negative externalizing and internalizing maladaptive behaviors.

In a study conducted by Esch and Zullig (2008) the connection between weight perceptions, unhealthy dieting behaviors, and overall life satisfaction among middle school students was examined. The study hypothesized that 7th and 8th grade students who report poor weight perceptions and dieting behaviors would also report significantly reduced life satisfaction. The study sample consisted of 136 females and 109 males with the majority of the students being in the 7th grade and being of white race or ethnicity. Participants completed the Middle School Youth Risk Behavior Survey as well as one question from the Brief Multidimensional Students' Life Satisfaction Scale. Esch and Zullig (2008) concluded that there was significantly reduced life satisfaction for females and males who reported being overweight, females who reported eating less food or fewer calories to lose weight, and females and males who reported fasting for 24 hours or more to lose weight as well as reduced life satisfaction for females who reported using diet pills, powders, or liquids to lose weight. These findings suggest that unhealthy weight perceptions and dieting behaviors develop early in adolescence and impact life satisfaction.

Self-Efficacy

Self-efficacy, as described by Bandura (1977), is an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments. Bandura (1977) explained that a person's perceived self-efficacy can have a direct influence on their choice of activities. Efficacy expectations are described as the amount of effort people are

willing to put forth in addition to how long they will persist when faced with obstacles and challenges. Bandura believed the greater the perceived self-efficacy, the more active the person will be in achieving their goals. After strong self-efficacy expectations have been developed through multiple successes, the negative impact of the occasional failure will most likely be reduced.

Furthermore, Caprara, Gerbino, Paciello, Di Giunta, and Pastorelli (2010) discussed social self-efficacy as an individual's belief in creating a capability to develop supportive social relationships with parents and peers, to avoid transgressive behavior, to empathize with others' feelings, and provide a buffer against stressful events. It is possible that social self-efficacy serves as a protective factor, mediating or lessening the relationship between negative social experiences such as peer victimization and negative outcomes, fostering academic or emotional resilience (Raskauskas, Rubiano, Offen, & Wayland, 2015). While social support can reduce a person's vulnerability to stress, depression, and physical illness, it does not occur on its own; people have to find, create, and maintain supportive relationships for themselves which would require a strong sense of social self-efficacy (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999).

Research concerned with individual factors that could potentially influence adolescents' interests in multiple health behaviors as well as their potential interest in programs that promote healthy lifestyles and reduce obesity surveyed 737 middle and high school students from rural Pennsylvania that were not involved in either healthy exercise or dietary behaviors (Thunfors, Collins, & Hanlon, 2009). Participants reported their self-efficacy on three scales: being physically active most days, eating mostly healthy foods and achieving/maintaining a healthy weight. Thunfors et al. (2009) concluded that self-efficacy in healthy eating and physical

activity was significantly tied to interest in a healthy diet, weight loss, and outdoor activity. However, there was not a significant overall association between weight loss self-efficacy and the five behavior health interests, sports programs, outdoor recreation, weight lifting, weight loss, and healthy eating and cooking. The implication of this finding is such that if adolescents who are drawn to participate in weight management programs are not confident in their ability to lose weight, they are potentially entering these programs at a significant disadvantage. According to Thunfors et al. (2009), it is possible that self-efficacy is more important in maintaining health behavior change efforts, than initiating participation or creating initial interest. Fostering greater self-efficacy may be critical in making healthier lifestyle choices.

Social Comparison Theory

According to Festinger (1954), social comparison theory refers to the appraisal and evaluation of abilities as well as opinions of oneself compared to at least one other person. Abilities and opinions have a close functional tie between them and they act together in such a way that they affect behavior. How an individual perceives a situation and his/her abilities to control, change, or influence the situation greatly impacts the individual's actions and behaviors.

When there is no opportunity for physical or social comparison with others, an individual can make a subjective evaluation of opinions and abilities (Festinger, 1954). Studies indicate "level of aspiration" fluctuate dramatically as performance fluctuates (Festinger, 1954; Garcia & Tor, 2007; Thornton & Arrowood, 1966). Therefore, if a person scores better on a task than they previously had and what was at one time considered a good score is no longer good then their "level of aspiration" goes up. If his or her performance level drops, his or her "level of aspiration" drops as well. Performance continues to fluctuate, even after the person has had a large amount of experience with the task.

The tendency to compare oneself with another specific person decreases as the difference between his or her ability or opinion increases (Festinger, 1954). A person is not likely to evaluate their opinions or abilities by comparing them to those of who people who seem to be too divergent from themselves (Festinger, 1954). For example, a female adolescent who is overweight is not likely to compare herself to a female adolescent she perceives to be much smaller than she is. Therefore, when given a variety of possible people for comparison, someone who appears to be close to their own ability or opinion is most likely to be chosen for comparison. Lastly, if an opinion or ability is not important to someone, there will be no drive to evaluate that particular ability or opinion. The more important an opinion or ability is, the greater the drive for evaluation will be.

Research examining the social comparison pathways that connect girls' own behaviors to the behaviors and characteristics of their schoolmates found that similar others are the most influential group within the school setting for girls both because of their physical BMI status and their behaviors matter to girls of a similar weight (Mueller, Pearson, Muller, Frank, & Turner, 2010). When comparing weight loss behavior, the behavior of overweight girls is most strongly associated with the rate at which weight-loss behavior among other overweight girls is occurring and the same is true for underweight girls (Mueller et al., 2010).

Evidence from the Mueller et al. (2010) research also shows that each girl in the school matters. Girls are less likely to attempt weight-loss efforts in a school where there are multiple overweight girls and the average female BMI is high and more likely to try to lose weight in a school where many of the girls are underweight. Most importantly though is the finding that it is the comparison with similar others, in this case females with similar body size, that is the most powerful in regards to influencing behavior, specifically, females weight-loss behavior.

Corning, Krumm, and Smithams (2006) tested differences in social comparison processes and predictive variables in the presence of eating disorder symptoms in women. The study consisted of 130 undergraduate women at a private, middle-sized university in the Midwest. The average age of participants was 19.4 and most women identified themselves as European American. The primary analysis from the study reported the differences in the general tendency to socially compare predicted the presence of eating disorder symptoms (Corning et al., 2006). Of particular note, social comparison tendencies were stronger in women with eating disorder symptoms; they were more likely to engage in social comparison than their asymptomatic peers. Social comparison theory supports the idea that self-uncertainty heightens the drive to compare with others (Festinger, 1954).

How women view their own bodies as a result of making social comparisons to other women's bodies predicted emotional disturbance symptomology (Corning et al., 2006). Women with the presence of emotional disturbance symptoms also had a significantly lower self-esteem than their symptom-free peers did. Self-defeating, body-related social comparisons were able to predict these low levels of self-esteem, which, then in turn, predicted emotional disturbance symptoms.

Morrison, Kalin, and Morrison (2004) hypothesized that greater self-reported use of universalistic social comparison is connected to less favorable body image evaluation and that greater self-reported use of universalistic social comparison is connected with high levels of body-image investment. Based on the results of this study, it was concluded that females were more likely to engage in universalistic social comparison when evaluating their physical appearance as well as indicating females possessed lower levels of appearance self-esteem. Results also indicated that engaging in universalistic social comparison is inversely related to

body-image evaluation, when looking at appearance self-esteem and body satisfaction, and is positively related to indices of body-image investment such as dieting to lose weight as well as the use of unhealthy weight management practices.

Social comparison theory supports the idea that basing self-evaluations of physical appearance on universalistic targets, such as famous people, has negative implications for body-image and the Morrison et al. (2004) study offers fairly strong support for this theory. The study showed that this type of self-evaluation can potentially have a fairly powerful effect on at least one aspect of body-image evaluation, appearance self-esteem, as well as three indices of body-image investment, specifically, dieting to gain weight, use of unsafe weight control practices, and the use of steroids to increase muscle mass (Morrison et al. 2004). Overall, the study suggests the universalistic social comparison is a fairly strong indicator of body-image evaluation and body image investment among both male and female adolescents.

The theoretical framework considers several factors that need to be taken into consideration when looking at how female adolescents perceive their own body image. Adolescence is often a difficult and overwhelming time of transition complicated by many external and internal factors they are expected to navigate. It is important to examine how these factors can impact their self-esteem, self-efficacy, and life satisfaction as well as considering the extent to which they engage in social comparison. In order to help female adolescents be their healthiest self it is critical to examine their self-perceptions and build curriculum to help address areas of concern.

Chapter 3 - Method

The purpose of this cross-sectional study design was to examine the relationship between body image, life satisfaction, self-efficacy, social comparison, and self-esteem in adolescent females. Specifically, this study examined the role self-esteem, self-efficacy, social comparison, and life satisfaction play in predicting body image. The goal of this study was to see if life satisfaction predicts body image over and above self-esteem, self-efficacy, and social comparison.

Research Questions

The research questions addressed by this study included:

1. Do 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than 8th grade girls?
2. Do 12th grade girls engage in social comparison less than 8th grade girls?
3. Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than girls who have not?
4. Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves engage in social comparison less than girls who have not been exposed?
5. Are there relationships between grade level and nutrition, goal setting, and respecting your sexual self, and self-esteem, life satisfaction, self-efficacy, body image, and social comparison?
6. Does self-esteem predict life satisfaction?
7. Does self-efficacy predict life satisfaction?
8. Does social comparison predict life satisfaction?
9. Does life satisfaction predict body image?
10. Does self-esteem, self-efficacy, and social comparison predict body image to a greater extent than life satisfaction?

Sampling Frame and Setting

This study took place at a rural public middle school as well as a rural public high school, grades 8 and 12, in a medium sized Midwestern city, with a population of approximately 45,000. The unified school district where the study took place had a total enrollment of 7,077; total male population was 3,632, 51.3%, and total female population was 3,445, 48.7%. The district

ethnicity breakdown was as follows: African American, 417, 5.9%; Hispanic, 1,081, 15.3%; other, 621, 8.8%; and White, 4,958, 70%.

The unified school district where the study took place is composed of two middle schools and two high schools. The middle school where the present study took place had a population of 816; total male population was 426, 52.2%, and total female population was 390, 47.8%. Building ethnicity breakdown was as follows: African American, 69, 8.4%; Hispanic, 89, 11%; other, 57, 7%; and White, 601, 73.6%. The building had 539, 66%, economically disadvantaged students, and 277, 34%, non-economically disadvantaged students. The high school where the present study took place had a population of 1,028; total male population was 520, 50.6%, and total female population was 508, 49.4%. The building ethnicity breakdown was as follows: African American, 40, 3.9%; Hispanic, 201, 19.6%; other, 117, 11.4%; and White, 669, 65.1%. The building had 611, 59.4%, economically disadvantaged students, and 417, 40.6%, non-economically disadvantaged students.

Participants

This study contained nonrandom samples obtained through cluster sampling. By using cluster sampling, I was able to obtain intact groups, not individuals at random. Cluster sampling is appropriate in educational settings because educational research often does not allow for the selection and assignment of individual participants (Fields, 2009). Cluster sampling allowed me to use intact groups with similar criteria. The criteria that were used to form the survey population included: 8th grade female students who were enrolled in advisory and 12th grade female students who were enrolled in Extended Learning Opportunity.

For this study, I solicited 100% of the population of the 12th grade girls and 8th grade girls. The girls who chose to participate and who had parent permission composed the sample.

Participation was solicited in multiple ways. The parent of each student who had a senior or 8th grade female student at the high school or middle school received an e-mail containing a letter that explained the current research study as well as a form to sign indicating the student had permission (Appendix A). Students who were 18 years old were able to give permission for themselves (Appendix A). Information was published in the school newsletter at both participating schools discussing the details of the current research as well as letting them know about the e-mail they would receive containing the letter discussing the study. I was available at parent/teacher conferences to further explain and address any concerns or answer any questions.

The final study included 97 participants ($n = 97$) among the two schools. In the spring of 2017, at the time the survey was administered, there were a total of 138 8th grade girls and a total of 123 senior girls. The 8th grade participation was 32 students ($n = 32$) for a response rate of 23%. The 12th grade participation was 65 students ($n = 65$) for a response rate of 53%. The overall response rate was 37%. The sample was representative of the population.

Protection of Human Subjects

Prior to the survey being administered, approval from Kansas State University's Institutional Review Board. Permission was also granted from the superintendent, district administrative team, and building principals. The researcher and those administering the survey at each school adhered to the American School Counselor Association Ethical Standards for School Counselors (ASCA, 2016).

The survey did not contain any identifiable information, nor were they able to trace back to any one participant. Participants were not given incentives to participate; participation was voluntary and it was explained that cumulative data would be reviewed and analyzed. It was also explained that results of the survey would in no way negatively impact the student, school

staff, or school building. Lastly, students were informed that students in another grade and from another building would also be participating in the survey.

Procedures

The survey was given during a four-week window in April and May 2017. For the high school girls who chose to participate in this study, the survey was administered during their Extended Learning Opportunity (ELO), a non-academic time offered to every enrolled student. Each student also had access to a school-issued Chrome Book. The students were administered the survey through a confidential online survey tool, Qualtrics. The female students gathered with a counselor in one room during their ELO time. Instructions for the assessment were given verbally as well as written on the instrument. Prior to the survey being administered the students were reminded that the process was voluntary and confidential. When the survey was distributed to the girls, they also received a crossword puzzle to complete while waiting for others to complete the survey. After all students completed the survey, they returned to their regularly scheduled ELO.

At the middle school where the study was conducted, students who chose to participate in the survey gathered in one room to complete the survey. Students were provided a school laptop and logon access. A counselor colleague administered verbal instructions and the participants were provided written instructions on their survey. Students were reminded prior to the survey that the process was voluntary and confidential. Students completed the survey using a confidential online survey tool, Qualtrics. They were provided with a crossword puzzle to work on while they waited for others to complete the survey. Once they all completed the survey they returned to their regular class hour.

Instruments

The study utilized an online survey. There were 42 items on the survey derived from five instruments, two demographic questions, and three covariate questions. The survey was expected to take 25 to 30 minutes to complete. Items one through 31 were answered on a scale of one to five, one being “strongly disagree” to five being “strongly agree.” The remaining eleven questions were answered on a scale of zero to three: zero being not important to three being very important. The directions on the survey indicated when the scales changed. Participants were asked to read each question and answer using the scales provided.

Data for the study came from the following five primary sources combined into one self-report survey, (a) Rosenberg (1965) Self-Esteem Scale; (b) Body-Image Ideals Questionnaire (Cash & Szymanski, 1995); (c) The Scale for Social Comparison Orientation (INCOM, Iowa-Netherlands Comparison Orientation Scale) English version designed by Gibbons and Buunk (1999); (d) Self-Efficacy Scale, modified version, by Sherer and Maddux (1982); and (e) The Satisfaction With Life Scale (SWLS) developed by Diener, Emmons, and Griffin (1985). The following two demographic statements were included, “Please indicate the grade you are in today,” and, “Please indicate your gender as male or female.” The following question was asked regarding three topics, “Have you learned anything about the following in any of your classes: a. nutrition, b. goal setting, c. respecting your sexual self. Each topic was scored as follows: no = 0 and yes = 1.

Self-esteem

Self-esteem was measured using the Rosenberg (1965) Self-Esteem Scale. The scale is commonly scored using a Likert scale. The original scale contains 10 items that are answered on a 4-point scale ranging from strongly agree to strongly disagree. However, researchers using the

tool are allowed to use a 5 or 7-point Likert scale. For the current study, a 5-point scale was utilized allowing respondents the option to respond “neither disagree or agree” instead of the all or nothing responses on the 4-point scale.

While the Rosenberg Self-esteem Scale was originally developed in 1965, it is still widely used in self-esteem research (Richardson, Ratner, & Zumbo, 2009). The original scale was developed with 5,024 high school juniors and seniors from 10 randomly selected schools in New York State. It was scored as a Guttman scale that typically has high reliability with test-retest correlations typically ranging from .82 to .88. Cronbach’s alpha for various samples are reported in the range of .77 to .88. An example statement is “I feel that I have a number of good qualities.”

The scale for scoring ranges from 0 to 30, with 30 indicating the highest score possible. There is no predetermined cut off score for high or low self-esteem. The recommendation is to look at similar studies with similar populations that have used the scale to see where their cutoff is for low self-esteem. The general consensus is that scores of 15 or below indicate low self-esteem. The Rosenberg Self-Esteem Scale may be used without explicit permission. However, the author’s family would like to be informed of its use (Lancaster, S. Personal communication, 2016).

Body Image

Body image was measured using the Body-Image Ideals Questionnaire (BIQ) developed by Cash and Szymanski (1995). BIQ available for a \$15 fee, may be purchased to be administered for a period of 2 years with no more than 1,000 administrations.

The participants answered 11 questions on the BIQ related to appearance and answered using a 4-point Likert Scale. Based on extant research (see Cash & Szymanski, 1995), the initial

version of the BIQ included 10 physical characteristics: height, skin complexion, hair texture and thickness, facial features, muscle tone and definition, body proportions, weight, chest (or breast) size, physical strength, and physical coordination. In the current version of the BIQ, an “overall physical appearance” item was added (Szymanski & Cash, 1995). For the BIQ portion of the survey the respondents were asked to indicate how important it is that they have each physical ideal: 0 = “not important,” 1 = “somewhat important,” 2 = “moderately important,” 3 = “very important.”

The initial validation of the study conducted by Cash and Szymanski (1995) was completed with 284 college women and provided strong evidence of the reliability and validity of the measure. Collectively, the empirical results of multiple investigations support the reliability and validity of the BIQ as an assessment of people’s evaluations of their physical appearance. Validation was based on a five BIQ samples with 896 women, $M = 1.75$, $SD = 1.38$ and internal consistency of $\alpha = .76$.

Reliability for the BIQ ranges from .75 to .82 (Cash & Szymanski, 1995). Correlations for discriminant validity of the BIQ were computed between each BIQ index and a short form of the Marlowe-Crowne Social Desirability Scale (SDS) measure of social desirability. The importance scale was unrelated to SDS, $r(278) = -.06$. Modest but significant r s were reported for Discrepancy, $r(278) = -.26$ and for Weighted Discrepancy, $r(277) = -.25$, where $p < .001$. Convergent validity of the BIQ was obtained by examining correlations between the three BIQ scales and five other measures of body-image attitudes. The significance criterion was set at p less than .01. For body areas satisfaction zero-order r was $-.71$, for appearance evaluation zero-order r was $-.60$ and for body-image dysphoria zero-order r as $.58$.

Social Comparison

Social comparison was measured using the Iowa-Netherlands Comparison Orientation Scale (INCOM, Gibbons & Buunk, 1999). This is an 11-item, self-report survey. Statements such as, “I often compare myself with others with respect to what I have accomplished in life,” are responded to using a 5-point Likert scale.

One of the first steps in constructing this scale was to see if respondents actually admitted to engaging in social comparison (Gibbons & Buunk, 1999). As a way to address this, two samples, one with 500 adolescents with a mean age of 14 and one with college freshmen, mean age of 18, were given a brief definition of academic social comparison and then they were asked to indicate how often they engaged in such comparison. The mean values were well above the midpoint for both samples ($M = 91.2$ and 96.7 , $SD = 28.3$ and 29.1). Even more important, virtually all of the people who took this assessment indicated they had engaged in academic comparison at least some of the time.

The structure of the INCOM was generally consistent with previous discussions of social comparison processes consistent with Festinger (1954). The authors of the INCOM identified three primary research areas in which the scale can be used, one of which is the design and development of more effective interventions. Research on health-risk behaviors completed by Gibbons and Gerrard (1997) has shown that risk images or prototypes have a stronger impact on health behaviors associated with young people who are high in social comparison tendencies. Knowing prior to planning interventions which adolescents are likely to respond to such efforts could prove useful.

Reliability for this scale is reported to have an internal consistency of .83. Reports concerning validity show that people with higher scores on the INCOM were found to have more

comparison orientation behaviors than those with a lower score. The Iowa-Netherlands Comparison Orientation Scale, INCOM, is available for use with citation of the authors of the study.

Life Satisfaction

Life Satisfaction was measured using The Satisfaction With Life Scale (SWLS, Diener, Emmons, Larsen, & Griffin, 1985). The scale contained five items that were answered using a 5-point Likert scale. The scale assesses global life satisfaction and does not measure positive affect and loneliness constructs. The SWLS is shown to have favorable psychometric properties (1985).

The subjects used to test the psychometric properties of the scale were 176 undergraduates at the University of Illinois who were enrolled in introductory psychology classes. They were administered the SWLS in a group setting and two months later 76 of these students were readministered the scale. Each item is scored from a 1 to 5, so the possible range of scores on the questionnaire is from 5 (low satisfaction) to 25 (high satisfaction). The mean score on the SWLS was 23.5, with a standard deviation of 6.43. The two-month, test-retest correlation coefficient was .82, and the coefficient alpha was .87. The Satisfaction With Life Scale is copyrighted but free to use, without permission or charge, as long as credit is given to the authors of the scale.

Self-Efficacy

Social self-efficacy was measured using The Self-Efficacy Scale (Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, & Rogers, 1982). Items on the scale were written to measure general self-efficacy expectancies in relation to social skills and vocational competencies. The items particularly focused on three areas: willingness to initiate behavior,

willingness to expend effort in completing the behavior, and persistence in the face of adversity. A factor analysis yielded two subscales: a General Self-Efficacy subscale and a Social Self-Efficacy subscale. There are 6 items that comprised the social self-efficacy subscale and accounted for 8.5% of the total variance. The 6 items were reflective of efficacy expectations in social situations. The mean of the social self-efficacy subscale was 57.99 with a standard deviation of 12.08.

Subjects used to determine the reliability of the scale were 376 students in introductory psychology classes. The reliability for the social self-efficacy subscale was reported to be .71. Validity indicated higher scores for social self-efficacy are associated with increases in self-esteem, therefore belief in one's ability to perform a certain task is one factor contributing to a person's attitude toward oneself (Sherer, et al., 1982). The Self-Efficacy Scale may be used without permission as long as the authors are cited in the research.

Analyses

Once data collection was complete, data were cleaned and coded with missing values removed. Frequencies with means and standard deviations are reported for all of the variables. Principal components factor analyses were conducted to provide evidence of each scales validity. Cronbach's alpha test of internal consistency was also conducted to provide evidence of each scales reliabilities.

To answer research question 1 (Do 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than 8th grade girls?), independent samples *t*-test were conducted. To answer research question 2 (Do 12th grade girls engage in social comparison less than 8th grade girls?), an independent samples *t*-test was conducted. To answer research question 3 (Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves have higher self-esteem, life satisfaction, self-efficacy, and body

image satisfaction than girls who have not?), independent samples *t*-test were conducted. To answer research question 4 (Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves engage in social comparison less than girls who have not been exposed?), an independent samples *t*-test was conducted. To answer research question 5 (Are there relationships between grade level and nutrition, goal setting, and respecting your sexual self and self-esteem, life satisfaction, self-efficacy, body image, and social comparison?), a point bi-serial correlation was conducted. To answer research question 6 (Does self-esteem predict life satisfaction?), a simple regression was conducted. A simple regression was also conducted for research questions 7-9 (Does self-efficacy predict life satisfaction? Does social comparison predict life satisfaction? Does life satisfaction predict body image?). A probability level less than .05 indicated a significant finding and an *r*-square effect size was calculated.

To answer question 10 (Does self-esteem, self-efficacy, and social comparison predict body image to a greater extent than life satisfaction?), a hierarchical regression was conducted whereas life satisfaction was statistically controlled in block 1, and self-esteem, self-efficacy, and social comparison was entered at block 2. A probability level less than .05 indicated a significant finding, and an *r*-square effect size was calculated.

Research data were gathered and analyzed with the results used to influence the counseling curriculum for classroom, small group, and/or individual counseling designed to educate adolescents regarding healthy body image, positive self-image, self-esteem, and self-efficacy. Data indicating the impact and influence of peers and the power of the media will also be used in curriculum design to help educate students.

Chapter 4 - Results

Prior to addressing research questions, cleaning and coding of data were necessary.

Thirteen of the 31 items were reverse scored, an example of the coding that had to occur. Simple bi-variate correlations were conducted to determine whether relationships existed between items. Results indicated every item was correlated with at least one other item at the $p < .05$ level. For example, see appendix D, correlation table.

Validity of Factors

Body Image

Due to the correlative nature of the items and anticipated correlation of factors, a principal components exploratory factor analysis with promax rotation were conducted. Interestingly, body image revealed a 2-factor structure. Clearly, the items loading on each of the two factors presented in table 4.1 appeared to be indicative of looks body image and feels body image.

Table 4.1

Rotated Component Matrix

Rotated Component Matrix^a		
	Component	
	1	2
How important to you are your ideal facial features?	.816	
How important to you are your ideal body proportions?	.809	
How important to you is your ideal skin complexion?	.744	
How important to you is your ideal weight?	.744	
How important to you is your overall physical appearance?	.735	
How important to you are your ideal hair texture and thickness?	.692	
How important to you is your ideal chest size?	.659	
How important to you is your ideal physical strength?		.910
How important to you is your ideal physical coordination?		.841
How important to you is your ideal muscle tone and definition?		.709
For the next set of questions please note that the scale changes. Please use the following scale for the questions: 0. Not Important 1. Somewhat Important 2. Moderately Important. 3. Very Important. - How important to you is your ideal height?		.670

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

The total variance explained by these two factors was 67.7 percent.

Validity of Factors

Self-Efficacy and Social Comparison

When the 16 self-efficacy and social comparison items were factored results indicated a clean two-factor structure accounting for 53.7 percent of total variance explained. One item was dropped from the original self-efficacy scale and seven items were dropped from the original social comparison scale. It is suspected that so many of the social comparison items were dropped due to the reverse wording, complicating interpretation for this studies population. The complete pattern matrix structure is present in table 4.2.

Table 4.2

Pattern Matrix

Pattern Matrix^a		
	Component	
	1	2
Seff-When I am trying to become friends with someone who seems uninterested at first, I don't give up easily.	.822	
Seff-If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me.	.746	
RSeff_If I meet someone interesting	.683	
Seff-I have acquired my friends through my personal abilities at making friends.	.631	
SocComp_I have never considered my situation in life relative to that of other people.		.740
RSocCom_I always pay a lot of attention		.732
RSocComp_I often compare how I am doing socially		.718
SocComp_I am not the type of person who compares often with others.		.630

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

Validity of Factors

Self-Esteem and Life Satisfaction

Promax rotation for self-esteem and life satisfaction principal components converged in three iterations. The final pattern matrix revealed a two-factor structure accounting for 68.9 percent of total variance explained. Table 4.3 presents the factor loadings.

Table 4.3

Pattern Matrix

Pattern Matrix^a		
	Component	
	1	2
Est-I feel that I'm a person of worth, at least on an equal plane with others.	1.025	
Est-I am able to do things as well as other people.	.842	
REst_I feel I fo not have much to be proud of.	.721	
REst_All in all, I am inclined t feel that I am a failure.	.703	
Est-I feel that I have a number of good qualities.	.699	
Est-I take a positive attitude toward myself.	.692	
Est-On the whole, I am satisfied with myself.	.602	
LS_The conditions of my life are excellent.		.936
LS_In most ways my life is close to my ideal.		.877
LS_So far I have gotten the important things I want in life.		.699
LS_I am satisfied with my life.		.602

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

In all the 31 original item survey was reduced to 19 items. The principal component strategy allowed for establishing validity for this population of adolescent girls. The items that were removed either cross loaded on multiple factors or failed to load on any factor at .6 and above. The cutoff was established to yield stronger convergence with the individual factors.

Kaiser (1974) suggests a cutoff score of .3 and above.

Reliability

Reliability of a construct establishes consistency. The internal consistency of psychosocial scales should be at least .6 Cronbach's alpha (Fields, 2009). Acceptable reliabilities vary according to the type of research being conducted (Fields, pg. 709).

Table 4.4

Item Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Seff-When I am trying to become friends with someone who seems uninterested at first, I don't give up easily.	9.6042	4.705	.592	.581
Seff-If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me.	9.5833	4.688	.543	.613
RSeff_If I meet someone interesting	9.4583	5.346	.396	.705
Seff-I have acquired my friends through my personal abilities at making friends.	8.8854	5.639	.457	.667

The four self-efficacy items were reliable at $\alpha = .71$ as indicated in table 4.5.

Table 4.5

Self-Efficacy Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.708	4

Table 4.6

Item-Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SocComp_I have never considered my situation in life relative to that of other people.	7.8144	5.674	.415	.651
RSocCom_I always pay a lot of attention	8.3608	5.066	.463	.622
RSocComp_I often compare how I am doing socially	8.3093	4.633	.563	.552
SocComp_I am not the type of person who compares often with others.	8.1134	5.227	.432	.642

The four social comparison items were reliable at $\alpha = .69$ as indicated in table 4.7.

Table 4.7

Social Comparison Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.685	4

Table 4.8

Item Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LS_The conditions of my life are excellent.	10.25	6.813	.666	.779
LS_In most ways my life is close to my ideal.	9.92	8.160	.601	.809
LS_So far I have gotten the important things I want in life.	10.00	7.563	.614	.801
LS_I am satisfied with my life.	9.95	6.174	.759	.733

The four life satisfaction items were reliable at $\alpha = .83$ as indicated in table 4.9.

Table 4.9

Life Satisfaction Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.828	4

Table 4.10

Item-Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Est-I feel that I'm a person of worth, at least on an equal plane with others.	21.0104	32.389	.702	.916
Est-I am able to do things as well as other people.	21.1146	33.218	.644	.921
REst_I feel I do not have much to be proud of.	21.3125	29.312	.774	.909
REst_All in all, I am inclined t feel that I am a failure.	21.3333	29.404	.774	.909
Est-I feel that I have a number of good qualities.	21.0625	31.259	.764	.910
Est-I take a positive attitude toward myself.	21.4479	30.271	.840	.902
Est-On the whole, I am satisfied with myself.	21.4688	28.988	.821	.904

The seven self-esteem items were reliable at $\alpha = .92$ as indicated in table 4.11.

Table 4.11

Self-Esteem Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.922	7

Table 4.12

Item-Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How important to you is your ideal skin complexion?	14.40	24.243	.733	.891
How important to you are your ideal hair texture and thickness?	14.59	24.557	.688	.896
How important to you are your ideal facial features?	14.36	24.108	.759	.888
How important to you are your ideal body proportions?	14.08	24.243	.800	.884
How important to you is your ideal weight?	13.81	24.444	.682	.896
How important to you is your overall physical appearance?	13.87	24.388	.739	.890
How important to you is your ideal chest size?	14.85	24.195	.654	.901

The seven “how I look” body image items were reliable at $\alpha = .91$ as indicated in table 4.13.

Table 4.13

“How I Look” Body Image Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.906	7

Table 4.14

Item-Total Statistics

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
How important to you is your ideal physical coordination?	6.36	7.254	.779	.808
How important to you is your ideal muscle tone and definition?	6.59	7.682	.701	.841
For the next set of questions please note that the scale changes. Please use the following scale for the questions: 0. Not Important 1. Somewhat Important 2. Moderately Important. 3. Very Important. - How important to you is your ideal height?	7.28	8.745	.569	.889
How important to you is your ideal physical strength?	6.37	7.465	.851	.782

The four items for “how I feel” body image were reliable at $\alpha = .87$. as indicated in table 4.15.

Table 4.15

“How I Feel” Body Image Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.869	4

Based on reliability and validity findings body image was measured as two dependent variables. The first body image was deemed “how I look” body image and it included item numbers one, five, nine and ten from the body image questionnaire. The mean “how I look” body image was determined based on the mathematical average of the four items. Higher numbers indicated greater “how I look” body image.

“How I Feel” body image was measured as a dependent variable and included item numbers two, three, four, six, seven, eight, and eleven from the body image questionnaire. The mean “how I feel” body image was determined based on the mathematical average of the seven items. Higher numbers indicated greater “how I feel” body image.

Self-efficacy was measured as an independent variable and included item numbers six, twelve, sixteen, and twenty-four from the survey. The mean for self-efficacy was determined based on the mathematical average of the four items. Higher numbers indicated greater self-efficacy.

Social comparison was measured as an independent variable and included item numbers eleven, twenty, twenty-two, and twenty-five from the survey. The mean for social comparison was determined based on the mathematical average of the four items. Social comparison is considered a maladaptive behavior. As such, items were reverse scored so that the higher the score the less social comparison occurred which is an adaptive behavior.

Life Satisfaction was measured as an independent variable and included item numbers one, nineteen, twenty-three, and thirty-one from the survey. The mean for life satisfaction was determined based on the mathematical average of the four items. Higher numbers indicated greater life satisfaction.

Self-esteem was measured as an independent variable and included item numbers five, ten, thirteen, fifteen, seventeen, eighteen, and twenty-nine from the survey. The mean for self-esteem was determined based on the mathematical average of the seven items. Higher numbers indicated greater life satisfaction.

Research Question 1

Do 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than 8th grade girls?

To determine whether 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction five independent *t*-tests were conducted. Results indicated 12th graders do not have statistically significantly higher self-esteem ($M = 3.64, SD = .83$), life satisfaction ($M = 3.37, SD = .82$), and self-efficacy ($M = 3.13, SD = .71$) than 8th grade girl's self-esteem ($M = 3.35, SD = 1.06$), life satisfaction ($M = 3.29, SD = .96$), and self-efficacy ($M = 3.12, SD = .75$). However, 12th grade girls revealed lower "how I look" body image ($M = 2.25, SD = .82$), and "how I feel" body image ($M = 2.01, SD = .89$) than 8th grade girl's "how I look" body image ($M = 2.64, SD = .76$), and "how I feel" body image ($M = 2.64, SD = .80$).

Research Question 2

Do 12th grade girls engage in social comparison less than 8th grade girls?

To answer research question two an additional independent samples *t*-test was conducted. Since higher scores indicate lower social comparison as reverse scored earlier higher mean scores are more desirable. With this population 12th grade girls reported fewer social comparison behaviors ($M = 2.85, SD = .71$) than 8th grade girls ($M = 2.45, SD = .66, p = .009$).

Research Question 3

Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than girls who have not?

Independent samples *t*-tests were conducted and results showed girls who reported curriculum based exposure to nutrition, goal setting, and respecting their sexual selves indicated higher life satisfaction ($M = 3.58, SD = .77$), self-esteem ($M = 3.84, SD = .66$), and self-efficacy ($M = 3.33, SD = .67$) than girls who indicated exposure to just one or two of the curricular components: life satisfaction ($M = 3.12, SD = .90, p = .008$), self-esteem ($M = 3.27, SD = 1.04, p = .002$), and self-efficacy ($M = 2.95, SD = .72, p = .009$). There was no statistically significant difference in the “how I look” body image ($M = 2.48, SD = .75$), or the “how I feel” body image ($M = 2.28, SD = .85$) of the girls who had only one or two reported curriculum exposures ($p = .21, p = .52$) compared to those who reported exposure to all three curriculum exposures on “how I look” body image ($M = 2.28, SD = .75$), and “how I feel” body image ($M = 2.15, SD = .98$).

Research Question 4

Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves engage in social comparison less than girls who have not been exposed?

After conducting an independent samples *t*-test, it was concluded that girls who reported curriculum-based exposure to nutrition, goal setting, and respecting their sexual selves indicated they did not engage in social comparison as much ($M = 2.87, SD = .67$) as those who had exposure to only one or two curriculum based treatments ($M = 2.57, SD = .74, p = .038$).

Research Question 5

Are there relationships between grade level and nutrition, goal setting, and respecting your sexual self and self-esteem, life satisfaction, self-efficacy, body image, and social comparison?

Point-biserial correlations indicate statistically significant relationships between grade level and “how I look” body image ($r = .224, p = .03$), and “how I feel” body image ($r = .329, p = .001$), and social comparison ($r = -.266, p = .009$). Results also indicated significant bi-serial correlations between their school based curriculum exposure and their self-efficacy, ($r = .266, p = .009$), social comparison ($r = .211, p = .38$), life satisfaction, ($r = .266, p = .008$), and self-esteem ($r = .312, p = .002$).

Follow-up independent samples *t*-tests revealed 12th grade girls have lower “how I look” body image ($M = 2.25, SD = .82$) and “how I feel” body image ($M = 2.01, SD = .89$) than 8th grade girls’ “how I look” body image ($M = 2.64, SD = .76$) and “how I feel” body image ($M = 2.64, SD = .80$). 12th grade girls reported less social comparison behaviors ($M = 2.85, SD = .71$) than 8th grade girls ($M = 2.45, SD = .66, p = .009$). Follow-up independent samples *t*-tests also indicated 12th graders do not have statistically significantly higher self-esteem ($M = 3.64, SD = .83$), life satisfaction, ($M = 3.37, SD = .82$), and self-efficacy ($M = 3.13, SD = .71$) than 8th grade girl’s self-esteem ($M = 3.35, SD = 1.06$), life satisfaction, ($M = 3.29, SD = .96$), and self-efficacy ($M = 3.12, SD = .75$).

Follow up independent samples *t*-tests revealed girls who reported curriculum-based exposure to nutrition, goal setting, and respecting their sexual selves indicated higher life satisfaction ($M = 3.58, SD = .77$), self-esteem ($M = 3.84, SD = .66$), and self-efficacy ($M = 3.33, SD = .67$) than girls who indicated exposure to just one or two of the following curricular

components: life satisfaction ($M = 3.12, SD = .90, p = .008$), self-esteem ($M = 3.27, SD = 1.04, p = .002$), and self-efficacy ($M = 2.95, SD = .72, p = .009$). Girls who reported curriculum-based exposure to nutrition, goal setting, and respecting their sexual selves indicated they did not engage in social comparison as much ($M = 2.87, SD = .67$) as those who had exposure to only one or two curriculum based treatments ($M = 2.57, SD = .74, p = .038$). Appendix E presents the remainder of the statistically significant bivariate correlations.

Research Questions 6-9

Does self-esteem predict life satisfaction? For the respondents, self-esteem predicted life satisfaction as revealed in the simple regression analysis ($R^2 = .76, p < .001, n^2 = .76$). Does self-efficacy predict life satisfaction? Self-efficacy significantly predicted life satisfaction as demonstrated in the simple regression analysis ($R^2 = .33, p = .001, n^2 = .33$). Does social comparison predict life satisfaction? Social comparison is significantly related to life satisfaction as revealed by the simple regression analysis ($R^2 = .24, p = .029, n^2 = .24$). Does life satisfaction predict body image? Life satisfaction does not appear to predict “how I look” body image based on the simple regression analysis ($R^2 = .12, p = .82, n^2 = .12$). Life satisfaction does not appear to predict “how I feel” body image based on the simple regression analysis ($R^2 = .17, p = .42, n^2 = .17$).

Research Question 10

Does self-esteem, self-efficacy, and social comparison predict body image to a greater extent than life satisfaction?

Life satisfaction, social comparison, self-efficacy, and self-esteem account for 32% of the variability in “how I feel” body image ($R^2 = .32, p < .001$) as indicated in the model summary and ANOVA table below.

Table 4.16

Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.041 ^a	0.002	-0.009	0.80482	0.002	0.154	1	93	0.696
2	.565 ^b	0.320	0.289	0.67535	0.318	14.025	3	90	0.000

a. Predictors: (Constant), Life Satisfaction

b. Predictors: (Constant), Life Satisfaction, Social Comparison, Self-Efficacy, Self-Esteem

Table 4.17

ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.100	1	0.100	0.154	.696 ^b
	Residual	60.240	93	0.648		
	Total	60.339	94			
2	Regression	19.291	4	4.823	10.574	.000 ^c
	Residual	41.049	90	0.456		
	Total	60.339	94			

a. Dependent Variable: "How I Look" Body Image

b. Predictors: (Constant), Life Satisfaction

c. Predictors: (Constant), Life Satisfaction, Social Comparison, Self-Efficacy, Self-

Since the largest variance inflation factor (VIF) is substantially less than 10 (I.E., VIF = 2.65 for self-esteem), multicollinearity does not appear to be present (Myers, 1990).

Life satisfaction, social comparison, self-efficacy, and self-esteem account for 18% of the variability in “how I feel” body image ($R^2 = 18.4, p < .05$) as indicated in the model summary and ANOVA table below.

Table 4.18

Model Summary

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.062 ^a	0.004	-0.007	0.88806	0.004	0.355	1	93	0.553
2	.429 ^b	0.184	0.148	0.81685	0.181	6.641	3	90	0.000

a. Predictors: (Constant), Life Satisfaction

b. Predictors: (Constant), Life Satisfaction, Social Comparison, Self-Efficacy, Self-Esteem

Table 4.19

ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.280	1	0.280	0.355	.553 ^b
	Residual	73.345	93	0.789		
	Total	73.625	94			
2	Regression	13.574	4	3.393	5.086	.001 ^c
	Residual	60.051	90	0.667		
	Total	73.625	94			

a. Dependent Variable: "How I Feel" Body Image

b. Predictors: (Constant), Life Satisfaction

c. Predictors: (Constant), Life Satisfaction, Social Comparison, Self-Efficacy, Self-

Since the largest variance inflation factor (VIF) is substantially less than 10 (I.E., VIF = 2.65 for self-esteem), multicollinearity does not appear to be present (Myers, 1990).

Chapter 5 - Discussion, Summary, Conclusion, & Recommendations

Navigating adolescence is often a difficult and challenging process. If one encounters behavioral, cognitive and/or affective issues that become barriers to a successful navigation of adolescence there is an increased risk for maladaptive behaviors to surface, such as, eating disorders, depression, anxiety, low self-esteem, and low self-efficacy. These mental health issues generally result in a lack of school success. The following chapter reviews the results of the study by addressing each research question, recommendations for professionals, and recommendations for future research.

A population of 261 possible participants, all of whom were female and either enrolled in their 8th grade year or 12th grade year at rural public schools in the Midwest, were solicited as participants for this study. It was hypothesized that there would be statistically significant differences between 8th grade females and 12th grade females. The final study sample included 97 ($n=97$) among the two schools, for an overall response rate of 53%.

As noted in the sample section of chapter 3, adolescent girls were solicited from schools with the following demographic breakdown: The middle school where the present study took place had a population of 816; total male population was 426, 52.2% and total female population was 390, 47.8%. Building ethnicity breakdown was as follows: 69, 8.4% African American, 89, 11% Hispanic, 57, 7% other and 601, 73.6% White. The building had 539, 66% economically disadvantaged students and 277, 34% non-economically disadvantaged students. The high school where the present study was conducted had a population of 1,028; total male population was 520, 50.6% and total female population was 508, 49.4%. Building ethnicity breakdown was as follows: 40, 3.9% African American, 201, 19.6% Hispanic, 117, 11.4% other and 669, 65.1% White. The building had 611, 59.4% economically disadvantaged students and 417, 40.6% non-

economically disadvantaged students. However, the survey administered for this research study did not question the participants beyond their gender and grade at the time of participation.

Significant in this study was the body image scale split into two distinct categories, “how I look” body image and “how I feel” body image. When the questions are taken into consideration for “how I look” and “how I feel” body image this finding is noteworthy. The “how I feel” body image questions are related to physical strength and coordination, not items associated with how one looks. The “how I look” body image questions are related to skin complexion, hair texture, physical appearance, etc. The research supports the idea that young girls are making a clear distinction between how they look and how they feel.

Research Question 1

Do 12th grade girls have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than 8th grade girls?

Results from the current study indicated that 12th grade girls do not have statistically significant higher self-esteem, life satisfaction, or self-efficacy than 8th grade girls. The finding is supported by research that shows self-esteem begins a noticeable decline in females between the ages of 12 and 17 (Clay et al., 2005); therefore, 12th grade girls would not be expected to have a higher self-esteem than 8th grade girls. Research also shows a decline in life satisfaction with age supporting the finding that 12th grade girls did not report higher life-satisfaction than 8th grade girls (Goldbeck, Schmitz, Besier, Herschbach, & Henrich, 2007). Based on findings from the current study self-efficacy for 12th grade girls was not higher than 8th grade girls. If 12th grade girls had a greater belief in themselves and their ability to produce specific performance attainments, it seems their self-esteem and life satisfaction would be higher. Twelfth grade girls from the current study reported lower “how I look” and “how I feel” body image than 8th grade

girls. Research conducted by Smolak (2011) shows that as early as age 6 girls start to express concern with their own body image and this endures throughout their lifetime, and research from this study supports that finding as demonstrated by the decline from 8th grade girls to 12th grade girls. A decline in body image perception is problematic because body image dissatisfaction often contributes to stress, clinical depression, anxiety, and eating disorders (Helverson, 2013; Siegel, 1998).

Research Question 2

Do 12th grade girls engage in social comparison less than 8th grade girls?

The current study showed that 12th grade girls engaged in social comparison less than 8th grade girls. The finding is promising if 12th grade girls have formed a greater sense of themselves and a healthy self-identity. However, Festinger (1954) reported that a person is not likely to evaluate their opinions or abilities by comparing them to those of people who seem too different from themselves. It is a real possibility that 12th grade girls reported engaging in social comparison less than 8th grade girls because they are not likely to compare themselves to individuals unlike them because those individuals appear to be too unattainable. It is probable they compare themselves to girls who are similar to them which could cause them to think they were not engaging in comparison at all. A plausible explanation could be that 12th girls are so desensitized to comparing themselves to others, it has become such a way of life, they do not even recognize they are engaging in such behaviors.

An interesting finding in research conducted by Mulgrew, Volcevski-Kostas, and Rendell (2013) found that in 180 male participants, grades 9-11, who were exposed to music video clips containing male singers of either muscular or average appearance boys who viewed the muscular music video clips had higher ratings of social comparison than boys who viewed the clips with

average looking singers. Results from this study found that when boys do engage in social comparison the outcome is a lowered mood as well as lowered body satisfaction. However, previous research has indicated that boys do not report that they compare themselves to images in the media, supporting the idea that adolescents may actually be engaging in social comparison but unaware they are doing so (Hargreaves & Tiggemann, 2006).

Education curriculum related to topics impacting social comparison and peer pressure provides adolescents evidence-based information to enhance their knowledge base and decision-making. Standards based curricular including engagement and processing to address the thoughts and feelings of adolescents are critical to healthy development.

Research Question 3

Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves have higher self-esteem, life satisfaction, self-efficacy, and body image satisfaction than girls who have not?

Girls who had school-based curriculum exposure to nutrition, goal setting, and respecting their sexual selves indicated higher life satisfaction, self-esteem, and self-efficacy than girls who reported exposure to just one or two of the curricular components and it was not surprising there was a difference between girls who had exposure to all three curricular components versus girls who only had exposure to one or two components. There was no reported difference between 8th grade and 12th grade girls in the “how I look” body image and the “how I feel” body image among girls who had only one or two curriculum exposures versus girls who had all three exposures and this was of particular interest. The expectation would be that if girls reported some curricular exposure their body image perception would be better than those with less curricular exposure. However, a study conducted by Dohnt and Tiggemann (2006) found

significant concerns and dieting awareness in a group of younger girls, aged 5-8 years. It could be then that dieting and body image awareness starts so young the curricular components need to be in place before they are in the 8th grade in order to make an impact.

The research indicated the importance of intentional programming in the school setting that focuses on each of these areas, starting at a young age. The exposure considered in this research is exposure they receive through curriculum that is in place as part of a comprehensive guidance program and it does not begin until middle school.

Research Question 4

Do girls who have had exposure to nutrition, goal setting, and respecting their sexual selves engage in social comparison less than girls who have not been exposed?

Girls that reported curriculum-based exposure to goal setting, nutrition, and respecting their sexual selves indicated they did not engage in social comparison as much as the girls who only had one or two curriculum-based exposures.

A research study conducted by Carey, Donaghue, and Broderick (2013) looked at adolescent females and how their friendship clique environment shaped their body image concern and dieting behavior. Results found that members of the same friendship cliques were similar in regard to their body image concerns, dietary restraint, and the use of extreme weight loss behaviors. These results support social comparison theory in that something that is of importance to their peers it is likely to be important and hold meaning for them as well, thus likely influencing their behavior.

The finding from this study supports the need for planned and intentional curriculum to address girls engaging in social comparison less often. Engaging in social comparison can be harmful if one cannot reach the ideal that they are using as a basis for comparison. Thus, more

education about positive thoughts about oneself could serve as a protective factor against engaging in social comparison. Adolescents who compare themselves to unrealistic ideals are at risk for developing a negative impact on their body image, self-esteem, life satisfaction and self-efficacy (Erikson, 1963; Festinger, 1954).

Research Question 5

Are there relationships between grade level and nutrition, goal setting, and respecting your sexual self and self-esteem, life satisfaction, self-efficacy, body image, and social comparison?

Results indicated that statistically significant relationships do exist between variables. Based on point-biserial correlations 8th grade girls reported higher “how I look” and “how I feel” body image and also that they engaged in social comparison more often than 12th grade girls.

Girls who had school-based curriculum exposure to nutrition, goal setting and respecting their sexual selves indicated higher life satisfaction, self-esteem and self-efficacy than girls who reported exposure to just one or two of the curricular components. The research indicates there is a difference between girls who report exposure to all three curricular exposures than those who report exposure to only one or two.

A study conducted by Lawrie, Sullivan, Davies, and Hill (2007) that examined the types of strategies used by both boys and girls, 8 to 14 years of age, found that girls had significantly higher scores than boys for food restrictive practices. Boys had a significantly higher score than girls for practices that involve the use of food and exercise strategies to increase muscle size. Both groups showed concern with their weight and reported the lowest scores of all for strategies to increase weight. While boys indicated they would like to be bigger, stronger, and more powerful, they did not associate this with an increase in body weight. Food-restrictive practices

was significantly the most common body change strategy used by the girls in this study and was the third most common strategy used by the boys.

With the knowledge from the current study as well as past research it is of critical importance that intentional curriculum designed to target these areas is put in place and is accessible for all students. Body image and weight loss are factors impacting how boys and girls and boys view themselves and in order to prevent maladaptive social behaviors it should be addressed as part of school-wide curriculum.

Research Questions 6-9

- Does self-esteem predict life satisfaction?
- Does self-efficacy predict life satisfaction?
- Does social comparison predict life satisfaction?
- Does life satisfaction predict body image?

Results from this study indicate that self-esteem, self-efficacy, and social comparison all statistically significantly predicted life satisfaction. The outcome was not surprising considering that life satisfaction is a cognitive evaluation of an individual's life as a whole and includes both positive and negative affect (Diener, 1994) and self-esteem, self-efficacy, and social comparison take positive and negative affect into consideration.

Life satisfaction does not appear to statistically significantly predict "how I look" or "how I feel" body image and this is noteworthy. In part this could be due to social comparison theory. Social comparison theory states that girls are more likely to compare themselves to like individuals. If they are comparing to like individuals, they might be more satisfied with how they look and feel, due to not noticing unattainable differences, than if they were comparing to someone outside of their likeness.

Research Question 10

Does self-esteem, self-efficacy, and social comparison predict body image to a greater extent than life satisfaction?

The “how I feel” body image, life satisfaction, social comparison, self-efficacy, and self-esteem accounted for 32% of the variance. The “how I look” body image, life satisfaction, social comparison, self-efficacy, and self-esteem accounted for 18% of the variance. Research indicates self-efficacy, self-esteem, life satisfaction, and social comparison are all very important in the development of a healthy body image (Helverson, 2013). However, there are other factors that could account for this variance that were not assessed in this research but are potentially just as critical and could include media, parental factors, mental health factors as well as specific body esteem.

A study conducted by Meier and Gray (2014) with 103 female adolescent participants between the ages of 12 and 18 years from a public middle and high school in New York State found that the amount of Facebook time spent on photo activity is associated with higher thin ideal internalization, self-objectification, weight dissatisfaction, and drive for thinness. A media study conducted by Ferguson, Munoz, Garza, and Galindo (2014) found a small concurrent correlation between social media use and life satisfaction in 237 mostly Hispanic girls between the ages of 10 and 17. Social media had a small predictive relationship with peer competition, implying that social media is a possible arena in which peer competition carried out.

Paulk, Dowd, Zayaz, Eklund, and Kildare (2014) found among participants recruited from universities in the Southeast and Pacific Northwest regions of the United States that women overall reported poorer body image than men, and young adults from the Southeast reported poorer body image than young adults from the Pacific Northwest. This could mean that

individuals residing in the Pacific Northwest hold different standards of beauty or place less focus on appearance than those individuals living in the Southeast. Of particular interest was there were no significant differences reported in body mass index scores of women from the two regions. A possible explanation for why women in the Southeastern United States report lower body satisfaction than women in the Pacific Northwest is the difference in the climate between places thus resulting in different clothing choices; women in the Southeast are more likely to wear lighter weight, more revealing clothing due to the warmer weather.

Multiple factors should be considered when looking at body image perception for adolescents. For the many reasons and ideals that go into shaping body image perception youth need to be made aware of all the potential influences and how to successfully navigate those influences so they are able to develop a positive and healthy image of who they are. This is accomplished, in part, through early education and comprehensive school curriculum.

Recommendations for Professionals

As a result of the findings from this study the following are recommendations for professionals in the field:

1. Intentional curriculum planning that targets areas of self-esteem, body image, life satisfaction, self-efficacy and social comparison theory is strongly needed. Educating youth on each area specifically and how they fit together will be of benefit for developing healthier individuals. The research shows that girls who had exposure to three curricular components reported higher levels of life satisfaction, self-esteem and self-efficacy than girls who reported exposure to just one or two of the curricular components. Thus, pointing to the need for more education in each of these areas.
2. Research shows that by the age of 6 girls have started to express concerns about their weight (Smolak, 2011). A study by Dohnt and Tiggemann (2006) also found girls aged 5-8 express significant body image concerns. This is an issue that is happening at a young age and enduring throughout a lifetime. Awareness and education needs to start at a much younger age instead of waiting until girls are in middle or high school before offering any curriculum, or not offering it all, concerning the variables addressed in this research.
3. Building self-efficacy and self-esteem could help to mitigate the potentially damaging effects of body image ideals adolescents, and younger children, receive from peers, the media and parental influences. If girls had greater capacity for self-efficacy and self-esteem hopefully they would engage less in social comparison, have higher life satisfaction and feel better about their bodies.

Developing curriculum using social-emotional standards outlined by the American School Counselor Association (ASCA, 2014), Kansas State Department of Education, Social and Emotional Standards (2012), and CASEL (casel.org) and incorporating those standards into new programs or programs that already exist is a good place to start. Emphasis should also be placed on the behaviors girls should engage in and not what they should not be doing. For example, telling them the healthy foods to eat opposed to talked to them about dieting and what they should not eat.

4. Given that there is a difference in results with their happenstance exposure it would be beneficial to develop curriculum and programs that intentionally target these issues. Components of school-based prevention programs should include how social media use may play a role in appearance culture and should encourage adolescents to self-regulate the amount of time spent on social media.

Recommendations for Future Research

1. Ash and Hueber (2001) found in their study that both acute events as well as chronic daily stressors at school and at home had a significant impact on life satisfaction for adolescents. Future research could address specifically what these stressors are and to what extent they impact life satisfaction so they could be targeted in curriculum designed to address the issue.
2. The issues addressed in this study do not only have an impact on female adolescents, they also impact male adolescents. Research should be done to incorporate male adolescents and the affect these issues have on them.

3. Furthermore, studies by Franko and Streigel-Moore (2002) indicate there are differences in body esteem and positive body image among ethnic groups which warrants further study. An ethnographic study of 18 female college students living in the northeastern United States conducted by Cheney (2011) also found evidence supporting that women of ethnic minorities endorse beauty that extends beyond the physical body and tend to experience more body satisfaction. Their definition of beauty is fluid, expressive, and represents one's inner beauty, attitude and personality (Cheney, 2011). Therefore, future studies should consider what role skin color and ethnicity play in body image satisfaction.
4. It would be beneficial to conduct a longitudinal study that follows adolescents over a period of time to see where specifically they decline in perceptions about themselves. If a curriculum was in place it would be interesting to see if they have as sharp of a decline or even a decline at all compared to those that did not have any intentional curriculum.
5. Lastly, sexual activity and sexual harassment issues should be included in future research to evaluate their potential impact on body image, self-esteem, self-efficacy, social comparison, and life satisfaction.

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Appendix A - Informed Consent Letters

January 5, 2017

MW High School


Dear Parents/Guardians of MW High School 12th grade female students:

I am honored to serve as a school counselor in the No Name School District at Any Name Middle School. All City schools, including MW High School, are dedicated to helping every child achieve success. School counselor student standards include standards that describe knowledge, skills, and attitudes needed to achieve academic and career success. The school counseling curriculum includes providing knowledge and skill development in self-esteem, self-efficacy, academic and career choices.

This month a school counselor will discuss with the 12th grade girls: nutrition, self-efficacy, and healthy body image and how those factors impact academic and career success. To better meet the needs of students, I am conducting a brief anonymous and confidential online survey regarding how an adolescent female perceives her image and to learn how it affects her self-esteem, self-efficacy, life satisfaction, and social comparison. The results of this survey (combined with other student surveys) will be used to inform the counseling curriculum for developing educational groups, classroom, small group, and individual counseling designed to educate adolescents regarding healthy body image, positive self-image, self-esteem, and self-efficacy. I will also use the aggregate data (combined group data) in my doctoral dissertation study at Kansas State University. I am very interested in identifying image perceptions and working with the students to best prevent and remediate negative perceptions and promote and enhance positive perceptions and self-efficacy. It is my goal that my dissertation study will stimulate discussion among professionals to help promote a positive sense of self among adolescent females.

In addition to the 12th grade girls, surveys will be also collected from students in another grade and school. The cumulative data will be reviewed and analyzed. No student will be individually identified. Results of the survey will in no way negatively impact your student, school staff, or school building. A MW High School counselor will administer the online survey during the students' ELO periods in order to minimize interruption of classroom instructional time. Upon completion of the survey's students will be provided a handout with resources related to healthy

nutrition, body image, self-efficacy, and self-esteem and then excused to their next period classes.

Your cooperation in allowing your minor student to take this survey is greatly appreciated, however, it is completely voluntary. Participants may withdraw from the consent at any time. If you have questions, please feel free to call me at 785-819-1541 or e-mail me at smw3349@ksu.edu. You are also welcome to contact my advisor, Dr. Judy Hughey, 785-532-5527, jhughey@ksu.edu, or Rick Scheidt, KSU Committee on Research, 785-532-3224.

Thank you for your help with this important study.

Sincerely,

Sarah Lancaster
School Counselor
Doctoral Candidate

I give permission for my student to participate in the confidential survey: _____
(Parent Signature)

MW High School 12th grade female student:

I am honored to serve as a school counselor in the No name School District at Any Name Middle School. All schools, including MW High School, are dedicated to helping every child achieve success. School counselor student standards include standards that describe knowledge, skills, and attitudes needed to achieve academic and career success. The school counseling curriculum includes providing knowledge and skill development in self-esteem, self-efficacy, academic and career choices.

This month a school counselor will discuss with the 12th grade girls: nutrition, self-efficacy, and healthy body image and how those factors impact academic and career success. To better meet the needs of students, I am conducting a brief anonymous and confidential online survey regarding how an adolescent female perceives her image and to learn how it affects her self-esteem, self-efficacy, life satisfaction, and social comparison. The results of this survey (combined with other student surveys) will be used to inform the counseling curriculum for developing educational groups, classroom, small group, and individual counseling designed to educate adolescents regarding healthy body image, positive self-image, self-esteem, and self-efficacy. I will also use the aggregate data (combined group data) in my doctoral dissertation

study at Kansas State University. I am very interested in identifying image perceptions and working with the students to best prevent and remediate negative perceptions and promote and enhance positive perceptions and self-efficacy. It is my goal that my dissertation study will stimulate discussion among professionals to help promote a positive sense of self among adolescent females.

In addition to the 12th grade girls, surveys will be also collected from students in another grade and school. The cumulative data will be reviewed and analyzed. No student will be individually identified. Results of the survey will in no way negatively impact your student, school staff, or school building. A MW High School counselor will administer the online survey during the students' ELO periods in order to minimize interruption of classroom instructional time. Upon completion of the survey's students will be provided a handout with resources related to healthy nutrition, body image, self-efficacy, and self-esteem and then excused to their next period classes.

Your cooperation in taking this survey is greatly appreciated, however, it is completely voluntary. Participants may withdraw from the consent at any time. If you have questions, please feel free to call me at 785-819-1541 or e-mail me at smw3349@ksu.edu. You are also welcome to contact my advisor, Dr. Judy Hughey, 785-532-5527, jhughey@ksu.edu, or Rick Scheidt, KSU Committee on Research, 785-532-3224.

Thank you for your help with this important study.

Sincerely,

Sarah Lancaster
School Counselor
Doctoral Candidate

I consent to participate in the confidential survey: _____
(Student over 18-years-of-age)

Assent Form

Dear Student,

I am honored to be a school counselor at No name Middle School, All School District. All Schools are dedicated to helping every student achieve success. School counselor student standards include standards that describe knowledge, skills, and attitudes needed to achieve academic and career success. The school counseling curriculum includes providing knowledge and skill development in self-esteem, self-efficacy, academic and career choices.

This month a school counselor will discuss with you, nutrition, self-efficacy, and healthy body image and how those factors impact your academic and future career success. To help students be successful, I am conducting a brief anonymous and confidential online survey regarding how an adolescent female perceives her image and to learn how it affects her self-esteem, self-efficacy, life satisfaction, and social comparison. The results of this survey (combined with other student surveys) will be used to inform the counseling curriculum for developing educational groups, classroom, small group, and individual counseling designed to educate adolescents regarding healthy body image, positive self-image, self-esteem, and self-efficacy. I will also use the aggregate data in my doctoral dissertation study at Kansas State University. It is my goal that my dissertation study will stimulate discussion among professionals to help promote a positive sense of self among adolescent females.

In addition to your class completing the survey, surveys will be also collected from students in another grade and school. The cumulative data will be reviewed and analyzed. No student will be individually identified. Results of the survey will in no way negatively impact your student, school staff, or school building. A school counselor, other than myself, will administer the online survey during your advisory period. Upon completion of the survey you will be provided a handout with resources related to healthy nutrition, body image, self-efficacy, and self-esteem and then excused to your next period class.

Your cooperation in helping me with this survey is greatly appreciated, however, it is completely voluntary. You may withdraw from the consent at any time. If you have questions, please feel free to call me at 785-819-1541 or e-mail me at smw3349@ksu.edu. You are also welcome to contact my advisor, Dr. Judy Hughey, 785-532-5527, jhughey@ksu.edu, or Rick Scheidt, KSU Committee on Research, 785-532-3224.

perceptions and self-efficacy. It is my goal that my dissertation study will stimulate discussion among professionals to help promote a positive sense of self among adolescent females.

In addition to the 8th grade girls at Any name Middle School, surveys will be also collected from students in another grade and school. The cumulative data will be reviewed and analyzed. No student will be individually identified. Results of the survey will in no way negatively impact your student, school staff, or school building. A school counselor, other than myself, will administer the online survey during the students' advisory period in order to minimize interruption of classroom instructional time. Upon completion of the survey students will be provided a handout with resources related to healthy nutrition, body image, self-efficacy, and self-esteem and then excused to their next period classes.

Your cooperation in allowing your student to take this survey is greatly appreciated, however, it is completely voluntary. Participants may withdraw from the consent at any time. If you have questions, please feel free to call me at 785-819-1541 or e-mail me at smw3349@ksu.edu. You are also welcome to contact my advisor, Dr. Judy Hughey, 785-532-5527, jhughey@ksu.edu, or Rick Scheidt, KSU Committee on Research, 785-532-3224.

Thank you for your help with this important study.

Sincerely,

Sarah Lancaster
School Counselor
Doctoral Candidate

I give permission for my student to participate in the confidential survey: _____
(Parent Signature)

Appendix B - Survey

Thank you for agreeing to participate in this survey today. Please carefully read and then answer each question following the instructions provided. Thank you.

Please indicate the gender you are by circling one:

Male Female

Please indicate what grade you are in today by writing it in the space provided:

Grade _____

Please indicate if you ever learned anything about the following in any of your classes by writing “yes” or “no” in the space provided:

a. nutrition _____ b. goal setting _____ c. respecting your sexual self _____

Please carefully read each statement below and then indicate how much you agree with each statement using the scale provided below.

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

1. In most ways my life is close to my ideal. (Life satisfaction)
2. I often compare myself with others with respect to what I have accomplished in life. (INCOM)
3. I always like to know what others in a similar situation would do. (INCOM)
4. It is difficult for me to make new friends. (Self-efficacy scale)
5. I feel that I’m a person of worth, at least on an equal plane with others. (Self-esteem scale)
6. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me. (Self-efficacy scale)
7. If I want to learn more about something, I try to find out what others think about it. (INCOM)
8. If I could live my life over, I would change almost nothing. (Life satisfaction)
9. At times I think I am no good at all. (Self-esteem scale)
10. I am able to do things as well as most other people. (Self-esteem scale)
11. I am not the type of person who compares often with others. (INCOM)

12. When I am trying to become friends with someone who seems uninterested at first, I don't give up easily. (Self-efficacy scale)
13. On the whole, I am satisfied with myself. (Self-esteem scale)
14. I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing. (INCOM)
15. I feel I do not have much to be proud of. (Self-esteem scale)
16. If I meet someone interesting who is hard to make friends with, I'll soon stop trying to make friends with that person. (Self-efficacy scale)
17. I take a positive attitude toward myself. (Self-esteem scale)
18. I feel that I have a number of good qualities. (Self-esteem scale)
19. So far I have gotten the important things I want in life. ((Life satisfaction)
20. I often compare how I am doing socially (e.g., social skills, popularity) with other people. (INCOM)
21. I wish I could have more respect for myself. (Self-esteem scale)
22. I always pay a lot of attention to how I do things compared with how others do things. (INCOM)
23. I am satisfied with my life. (Life satisfaction)
24. I have acquired my friends through my personal abilities at making friends. (Self-efficacy scale)
25. I never consider my situation in life relative to that of other people. (INCOM)
26. I certainly feel useless at times. (Self-esteem scale)
27. If I want to find out how well I have done something, I compare what I have done with how others have done. (INCOM)
28. I often like to talk with others about mutual opinions and experiences. (INCOM)
29. All in all, I am inclined to feel that I am a failure. (Self-esteem scale)
30. I often try to find out what others think who face similar problems as I face. (INCOM)
31. The conditions of my life are excellent. (Life satisfaction)

For the next set of questions please note that the scale changes. Please use the following scale for the questions below:

0. Not Important
1. Somewhat Important
2. Moderately Important
3. Very Important

The Body Image Questionnaire

1. How important to you is your ideal height?
2. How important to you is your skin complexion?
3. How important to you are your ideal hair texture and thickness?
4. How important to you are your ideal facial features?
5. How important to you is your ideal muscle tone and definition?
6. How important to you are your ideal body proportions?
7. How important to you is your ideal weight?
8. How important to you is your ideal chest size?
9. How important to you is your ideal physical strength?
10. How important to you is your ideal physical coordination?
11. How important to you is your overall physical appearance?

Thank you for your time completing this survey today!

Appendix C - Survey Questions Used

Thank you for agreeing to participate in this survey today. Please carefully read and then answer each question following the instructions provided. Thank you.

Please indicate the gender you are by circling one:

Male Female

Please indicate what grade you are in today by writing it in the space provided:

Grade _____

Please indicate if you ever learned anything about the following in any of your classes by writing “yes” or “no” in the space provided:

a. nutrition _____ b. goal setting _____ c. respecting your sexual self _____

Please carefully read each statement below and then indicate how much you agree with each statement using the scale provided below.

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

1. In most ways my life is close to my ideal. (Life satisfaction)
5. I feel that I’m a person of worth, at least on an equal plane with others. (Self-esteem scale)
6. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me. (Self-efficacy scale)
10. I am able to do things as well as most other people. (Self-esteem scale)
11. I am not the type of person who compares often with others. (INCOM)
12. When I am trying to become friends with someone who seems uninterested at first, I don’t give up easily. (Self-efficacy scale)
13. On the whole, I am satisfied with myself. (Self-esteem scale)
15. I feel I do not have much to be proud of. (Self-esteem scale)
16. If I meet someone interesting who is hard to make friends with, I’ll soon stop trying to make friends with that person. (Self-efficacy scale)
17. I take a positive attitude toward myself. (Self-esteem scale)

18. I feel that I have a number of good qualities. (Self-esteem scale)
19. So far I have gotten the important things I want in life. ((Life satisfaction)
20. I often compare how I am doing socially (e.g., social skills, popularity) with other people. (INCOM)
22. I always pay a lot of attention to how I do things compared with how others do things. (INCOM)
23. I am satisfied with my life. (Life satisfaction)
24. I have acquired my friends through my personal abilities at making friends. (Self-efficacy scale)
25. I never consider my situation in life relative to that of other people. (INCOM)
29. All in all, I am inclined to feel that I am a failure. (Self-esteem scale)
31. The conditions of my life are excellent. (Life satisfaction)

For the next set of questions please note that the scale changes. Please use the following scale for the questions below:

0. Not Important
1. Somewhat Important
2. Moderately Important
3. Very Important

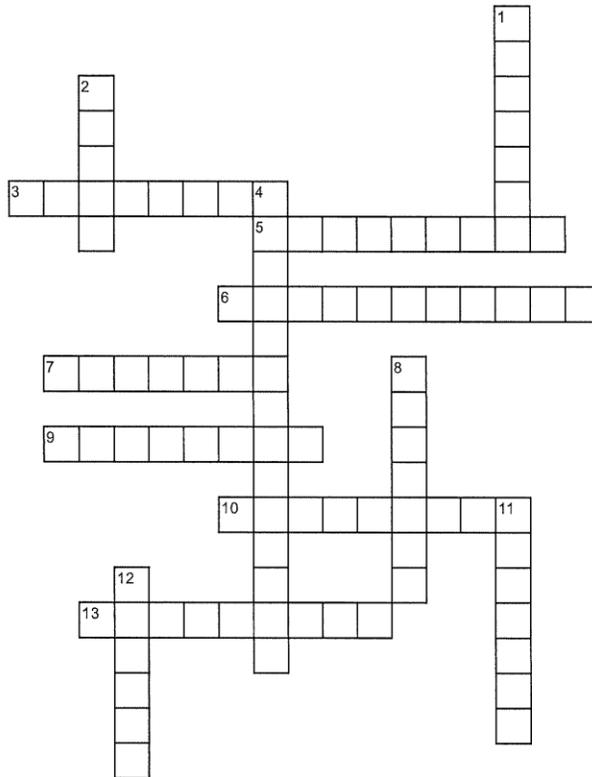
The Body Image Questionnaire

1. How important to you is your ideal height?
2. How important to you is your skin complexion?
3. How important to you are your ideal hair texture and thickness?
4. How important to you are your ideal facial features?
5. How important to you is your ideal muscle tone and definition?
6. How important to you are your ideal body proportions?
7. How important to you is your ideal weight?
8. How important to you is your ideal chest size?
9. How important to you is your ideal physical strength?
10. How important to you is your ideal physical coordination?
11. How important to you is your overall physical appearance?

Thank you for your time completing this survey today!

Appendix D - Crossword Puzzle and Word Bank

BODY IMAGE



Across

- 3 teen often experience body image _____ in order to fit in with peers.
- 5 _____ themselves the way they are will help teen improve their body image.
- 6 persons with _____ disorder often eat a very large amount of food and feel out of control while doing so.
- 7 one method of _____ is when a person makes themselves vomit in order to prevent themselves from gaining weight.
- 9 _____ is a condition in which a person starve themselves in order to loose weight
- 10 _____ refers to the way we see our bodies and the way we think others see our bodies
- 13 unrealistic ideas about what an ideal body shape is often seen in the _____

Down

- 1 showing _____ is one way to help someone with an eating disorder
- 2 both _____ and females experience body image pressure.
- 4 a condition in which a person eats a very small amount of food or extremely large amounts of food is called _____
- 8 a person suffering from _____ eats a large amount of food in a short time then try to prevent themselves from gaining weight by purging
- 11 we should be willing to show _____ to persons with eating disorder
- 12 _____ members usually influence a teens' body image by criticizing how they look.

Crossword Puzzle Word bank:

Mass media

Family

Obsession

Concern

Skinny

Purging

Males

Females

Pressure

Body image

Empathy

Healthy Habits

Bulimia

Eating disorder

Weight loss

Binge eating

Anorexia

Exercise

Accepting

Appendix E - Correlation Table

Correlations							
		"How I Look" Body Image	"How I Feel" Body Image	SelfEfficacy	Social Comparison	Life Satisfaction	Self-Esteem
"How I Look" Body Image	Pearson Correlation	1	.695**	-0.127	-.509**	-0.033	-.285**
	Sig. (2-tailed)		0.000	0.218	0.000	0.749	0.005
	N	97	97	96	97	97	96
"How I Feel" Body Image	Pearson Correlation	.695**	1	0.111	-.350**	0.067	-0.114
	Sig. (2-tailed)	0.000		0.283	0.000	0.517	0.269
	N	97	97	96	97	97	96
SelfEfficacy	Pearson Correlation	-0.127	0.111	1	.209*	.448**	.492**
	Sig. (2-tailed)	0.218	0.283		0.041	0.000	0.000
	N	96	96	96	96	96	95
Social Comparison	Pearson Correlation	-.509**	-.350**	.209*	1	.307**	.465**
	Sig. (2-tailed)	0.000	0.000	0.041		0.002	0.000
	N	97	97	96	97	97	96
Life Satisfaction	Pearson Correlation	-0.033	0.067	.448**	.307**	1	.789**
	Sig. (2-tailed)	0.749	0.517	0.000	0.002		0.000
	N	97	97	96	97	97	96
Self-Esteem	Pearson Correlation	-.285**	-0.114	.492**	.465**	.789**	1
	Sig. (2-tailed)	0.005	0.269	0.000	0.000	0.000	
	N	96	96	95	96	96	96
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Appendix F - Bivariate Correlations

Correlations									
		Grade_Please indicate what grade you are in today.	All or Less Than All Treatment	"How I Look" Body Image	"How I Feel" Body Image	Self- Efficacy	Social Comparison	Life Satisfaction	Self- Esteem
Grade_Please indicate what grade you are in today.	Pearson Correlation	1	0.022	.224*	.329**	-0.010	-.266**	-0.044	-0.150
	Sig. (2-tailed)		0.833	0.028	0.001	0.921	0.009	0.671	0.145
	N	97	97	97	97	96	97	97	96
All or Less Than All Treatment	Pearson Correlation	0.022	1	-0.127	-0.067	.266**	.211*	.266**	.312**
	Sig. (2-tailed)	0.833		0.214	0.517	0.009	0.038	0.008	0.002
	N	97	97	97	97	96	97	97	96
"How I Look" Body Image	Pearson Correlation	.224*	-0.127	1	.695**	-0.127	-.509**	-0.033	-.285**
	Sig. (2-tailed)	0.028	0.214		0.000	0.218	0.000	0.749	0.005
	N	97	97	97	97	96	97	97	96
"How I Feel" Body Image	Pearson Correlation	.329**	-0.067	.695**	1	0.111	-.350**	0.067	-0.114
	Sig. (2-tailed)	0.001	0.517	0.000		0.283	0.000	0.517	0.269
	N	97	97	97	97	96	97	97	96
Self-Efficacy	Pearson Correlation	-0.010	.266**	-0.127	0.111	1	.209*	.448**	.492**
	Sig. (2-tailed)	0.921	0.009	0.218	0.283		0.041	0.000	0.000
	N	96	96	96	96	96	96	96	95
Social Comparison	Pearson Correlation	-.266**	.211*	-.509**	-.350**	.209*	1	.307**	.465**
	Sig. (2-tailed)	0.009	0.038	0.000	0.000	0.041		0.002	0.000
	N	97	97	97	97	96	97	97	96
Life Satisfaction	Pearson Correlation	-0.044	.266**	-0.033	0.067	.448**	.307**	1	.789**
	Sig. (2-tailed)	0.671	0.008	0.749	0.517	0.000	0.002		0.000
	N	97	97	97	97	96	97	97	96
Self-Esteem	Pearson Correlation	-0.150	.312**	-.285**	-0.114	.492**	.465**	.789**	1
	Sig. (2-tailed)	0.145	0.002	0.005	0.269	0.000	0.000	0.000	
	N	96	96	96	96	95	96	96	96

*. Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Appendix G - Consent Letter From

To Whom It May Concern:

Sarah Lancaster has permission to conduct research at No Name Middle School with 8th grade girls and No Name High School with 12th grade girls during the spring of 2017. Participants will be informed of the confidential and voluntary status of their participation. The parent or guardian of students 17 years of age and younger will sign a permission slip and girls 18 years are able to sign their own consent forms. Survey's will be administered during non-academic time and results will not be traceable to any individual student. Principals at each of these schools have been informed and are in support of the research.


Executive Director Administrative Student Support Services
MW School District