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The purpose of this research was to examine eighth grade male students' conceptions of body image, sociocultural influences, and the extent to which conceptions of body image influence physical activity preferences. Grounded on Foucault's (1977) *Panopticon* and Bernstein's (2000) *body perfection code* theories, this study examined students in two middle schools in the southeastern region of the United States. Specifically, three research questions were addressed: (1) how did adolescent males describe their body image; (2) what sociocultural factors affected the development of adolescent males' body image; and (3) how did particular conceptions of body image impact adolescent males' physical activity preferences.

Participants were eight, eighth grade adolescent males who completed the Drive for Muscularity Scale (DMS), pilot interview, pre-visual diary interview, visual diary, and post-visual diary interview. The pilot interview was used to refine interview questions, and the pre- and post-visual diary interviews were used to collect information about conceptions of body image. Participants took thirty photographs to complete the visual diary.

Dependent t-tests were used to compare the DMS scores for the attitude and behavior subscales. Interview and visual diary data were analyzed inductively and deductively using the qualitative software, NVivo 10. Photographs were categorized using post-visual diary interview data to generate integrated individual profiles. Triangulation of data sources was conducted using a constant comparison approach. The

results were discussed in relation to Foucault's (1977) Panopticon and Bernstein's (2000) body perfection code theories and previous research examining body image.

The findings of this study indicated male students' conceptions of body image differ with some students being satisfied with their bodies while others were dissatisfied. More specifically, some participants revealed they wanted to be strong, but not overly muscular, while others were comfortable with the way they looked. Secondly, conceptions of body image were influenced by sociocultural factors such as media, parents, and peers. Lastly, conceptions of body image seemed to have an impact on physical activity preferences. Based on the analysis of participant interviews and visual diary photographs, five themes consistent with the construct of the Panopticon and body perfection code emerged: Adonis Complex (body dissatisfaction), Dionysian (body satisfaction), Hidden Acceptance (an unconscious acceptance of sociocultural influences to fit socially produced norms), Lack of Concern (an indifference to sociocultural influences), and Critical Awareness (an ability to be aware of sociocultural influences critically).

Expanding the body image research pertaining to adolescent males may give better insight into bullying behaviors, body acceptance, physical activity preferences, and the use of innovative curricula to increase critical awareness of body image. In addition, physical education teachers and administrators could use the results from this study to select appropriate strategies to help adolescent male students understand the impact that media-distortion and significant others may have on their body image.

EIGHTH GRADE MALE STUDENTS' CONCEPTIONS OF PHYSICAL BODY IMAGE

by

Deockki Hong

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Approved by

_____
Committee Chair

To my parents, Seonghwan Hong and Gwanglae Jung, who have loved and supported me.

APPROVAL PAGE

This dissertation written by Deockki Hong has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Over the past decades, there has been a dramatic rise in popular concern about the male ideal body portrayed in the media. For example, the ideal thin and muscular body has become more visible in popular culture including movies, magazines, and television shows. Dworkin and Wachs (2009) argued that "each body is part of an endless process of marketplace" (p.10) in consumer culture. Constant reaffirmation of the ideal body in the media may have a pervasive effect on adolescents. However, studies on body image have largely focused on females (Cash, 2004; Cash & Smolak, 2011; Grogan, 2006; Grogan & Richards, 2002; Tiggemann, 2004). Most men and boys want to become more muscular (Grogan 2006, Grogan & Richards, 2002; McCreary, Saucier, & Courtenay, 2005), whereas women and girls want to be thinner (Grogan, 2006; Tiggemann & McGill, 2004). Therefore, data derived from women and girls cannot be generalized to men and boys.

Recently, a few researchers have investigated conceptions of body image among adolescent males (McCabe, Ricciardelli, & Karantzas, 2010; Thompson & Cafri, 2007). Adolescent males place a high value on being muscular, fear being fat, and perceive that looking good increases their power during social interactions (Bordo, 2000; Cohane & Pope, 2001; Dworkin & Wachs, 2009; Grogan & Richards, 2002).

Adolescence may be a period in which males are particularly susceptible to media influences (Groesz, Levine, & Murnen, 2002; Yoon, Thorson, & Lee, 2003). The adolescent period is complex and marked by a number of developmental issues (Levine & Smolak, 2002; Pellegrini, 2008). Rapid changes in body size during puberty may lead to the reorganization of social dominance hierarchies, especially among adolescent males. Bigger and stronger adolescent males become more dominant than their smaller peers (Levine & Smolak, 2002). Unrealistic body images in the media often influence the constructions of poor body image among adolescent males (Agliata & Tantleff-Dunn, 2004).

In addition, significant others such as peers and parents often influence adolescent males' conceptions of body image (McCabe, Ricciardelli, & Karantzas, 2010; Tantleff-Dunn & Gokee, 2002). Tantleff-Dunn and Gokee (2002) argued that peer interaction influenced adolescents' body images while young children might be more susceptible to parental influence. For example, adolescent males influenced by peer popularity tried to gain muscle size to increase their social profiles (McCabe, Ricciardelli, & Karantzas, 2010). In the following sections, the role of body image in physical settings and a rationale for this dissertation research are addressed.

The Role of Body Image in Physical Settings

Body image is usually conceptualized as incorporating body size estimation, evaluation of body attractiveness, and emotions associated with body shape and size (Grogan, 2008). Research in physical education has increasingly recognized the need to

examine students' conceptions of body image in physical settings (Azzarito, 2010b, 2012; Martin & Lichtenberger, 2002; Oliver, 2013; Oliver & Lalik, 2001, 2004; Ricciardelli, McCabe, & Ridge, 2006). Azzarito and Solmon (2006a) identified physical education classes and sports as sites of the (re) production of masculinities. Oliver and her colleagues suggested that investigating girls' interpretations of health-related magazine images were important in understanding how students construct body meanings (Oliver, 2001; Oliver & Hamzeh, 2010; Oliver & Lalik, 2001, 2004). Azzarito (2012) asked high school students to create visual diaries, concluding that students' conceptions of body image played an important role in physical education and physical activities. Physical settings may be an appropriate context for discussing body image (Ricciardelli, McCabe, & Ridge, 2006).

Statement of the Problem

Detailed information about how adolescent males construct body image is limited. That is especially true for research dealing with the impact of body image conceptions on physical activity. Without a better understanding of body image conceptions among adolescents, it may be difficult for physical education teachers to understand the students, promote students' critical awareness of socially constructed body images, and organize curricula that best foster positive body image conceptions. This study focused exclusively on adolescent males and attempted to understand not only their body image conceptions but also the impact of body image conceptions on physical activity preferences.

Purpose of the Study

The purpose of this dissertation was to examine eighth grade adolescent males' conceptions of body image, sociocultural influences, and the extent to which conceptions of body image influence physical activity preferences.

Research Questions

This dissertation research was guided by three research questions:

(1) How did adolescent males describe their body image?

(2) What sociocultural factors affected the development of adolescent males' body image?

(3) How did particular conceptualizations of body image impact adolescent males' physical activity preferences?

Significance of the Study

Adolescent males often are not critically aware of society normed ideal body images. Adolescent males are particularly vulnerable to making inappropriate body image related decisions because they are not sufficiently mature to reflect critically on media and peer influences (Myers & Crowther, 2009). Additionally, young people who have negative body images are more likely to be victims of negative peer relationships while engaged in physical activity and sports (Azzarito, 2012; Crotty, 2007). Promoting body awareness may help adolescent males acknowledge their bodies as they are and minimize potential negative physical behaviors.

However, research regarding the role of adolescent males' body images in physical culture is limited. There is a need for the examination of male students' body image and the way particular conceptualization of body image impacts their physical activity participation. The results of this dissertation study could be utilized to provide teachers with a better understanding of adolescent males' perceptions of body image and the impact of body image perceptions on physical activity choices.

Assumptions

In designing this research, the researcher adopted four assumptions. First, based on previous studies (Cafri, Thompson, Ricciardelli, McCabe, Smolak, & Yesalis, 2005; Corson & Anderson, 2002; Levant, Graef, Smalley, Williams, & McMillan, 2008; Pope, Phillips, & Olivardia, 2000), the researcher assumed that adolescent males' conceptions of body images were different from females'. Second, the researcher assumed sociocultural influences play a role in developing students' body images (Cash & Smolak, 2011; Grogan, 2008; Jackson, 2002; Pope et al., 2000). Third, the researcher assumed male students' conceptions of body image influence their physical activity preferences. Fourth, the researcher assumed students' visual diaries would reflect their conceptions of body images.

Format for Dissertation

This dissertation consisted of six chapters. Chapters I (i.e. Introduction), II (i.e., Review of the Literature), III (i.e., Research Methods), and VI (i.e., Summary, Conclusions, and Recommendations) were written in a traditional dissertation format.

Chapters IV (i.e., Eighth Grade Male Students' Conceptions of Body Image and Its Influence on Physical Activity) and V (i.e., Sociocultural Influences on Middle School Male Students' Body Image in Physical Activity) were written in a manuscript format. Chapters IV and V consist of an abstract, introduction, theoretical framework, methods, results, and discussion. To facilitate understanding of the dissertation by readers, the research questions are answered as follows: RQ1 was addressed in Chapter IV; RQ2 was addressed in Chapter V; RQ3 was addressed in Chapters IV and V.

Limitations, Delimitations, and Definitions of Key Terminology

Limitations

This study had several limitations associated with the research design, variables, instrumentation, and the researcher. First, this research was limited to examinations of adolescent male body image within two middle schools. Because this study was limited to eight adolescent males, it was unlikely that the findings from this research were representative of the range of male conceptions of body image and, therefore, are not generalizable beyond this sample.

Second, sociocultural influences on body image were limited to three sources: media, parents, and peers. With such a limited scope, it was unlikely that the findings from this research are a complete representation of all possible sociocultural influences on body image. Third, although the researcher reviewed the literature to identify validated, age- and gender-appropriate instruments, the Drive for Muscularity Scale (DMS) (McCreary & Sasse, 2000) might not be an effective selection tool for the purpose

of this dissertation research. As in the use of many self-report and interview methodologies (Hyde, 2005; Levant et al., 2012; McCreary & Sasse, 2000; Mizen, 2005), selected participants might not answer truthfully or at all. Additionally, a pilot interview was used to validate magazine pictures selected for use during the pre-visual diary interview process, however, there were no other procedures used to validate the pictures.

Further, because the researcher speaks English as a second language and did not know the participants in the sample prior to this research, some adolescent males might not have spoken candidly during interviews. Finally, the sensitivity of the topic might have limited the extent to which adolescent males were willing to discuss or reveal their conceptions of body image.

Delimitations

In this study, there were a few delimitations. First, because the researcher selected two middle schools in the same geographic area and with similar population, the range of conceptions of body image adolescent males might also be similar. Second, the researcher limited this examination to adolescent male body image, thereby eliminating the possibility of comparing male and female conceptions of body image. Third, because the researcher examined body images of eighth grade male students, the findings of this study could not be generalized to the other gender or grade levels. Fourth, the researcher limited the visual diary photography to after school physical activity. Because the adolescent males used cameras to take photographs of physical activities, it was difficult for them to participate in physical education *and* take photographs simultaneously. In

addition, taking photographs during the physical education class might disrupt other students.

Definitions of Key Terminology

This section provided definitions of the key terms and phrases from the literature guiding this research.

Adolescence. Adolescence is a transitional stage of physical and psychological human development generally occurring during the period from puberty to legal adulthood. The period of adolescence is most closely associated with the teenage years, though its physical, psychological, and cultural expressions can begin earlier and end later (Haibach, Reid, & Collier, 2011).

Adonis complex. The Adonis Complex reflects "An array of usually secret, but surprisingly common body image concerns of boys and men" (Pope et al., 2000, p. 6). Adonis was half man and half god, the ultimate in masculine beauty. Males who have Adonis Complex syndrome are dissatisfied with their bodies because they consider their bodies as small even if they are big and muscular.

Body dissatisfaction. Body dissatisfaction is a negative affective response to one's perception of physical appearance (McCabe & Ricciardelli, 2001a).

Body image. Body image refers to "a person's perceptions, thoughts, and feelings about his or her body" (Grogan, 2008, p.3). Body image is a multidimensional construct that incorporates cognitive, behavioral, emotional, and perceptual elements of one's body that plays an important role in quality of life (Cash, 2004; Cash & Smolak, 2011). Body

image is conceptualized as incorporating body size estimation, evaluation of body attractiveness, and emotions associated with body shape and size.

Body perfection code. Body perfection code refers to particular representations of weight, health, and body. Body perfection code is a form of educational code that provides a way of understanding how society values (e.g., code) a particular (e.g., perfect) construction of a body image (Bernstein, 2000). Body perfection code is closely related to the regulation of the body in society.

Critical awareness. Critical awareness refers to a notion that relates to learner's ability to understand knowledge with careful consideration (Horn, Jr., 2003). Critical awareness can help learner's uncover the hidden meanings and implications of knowledge.

Dionysian. Dionysian is a person who appeals to the emotions and instincts and enjoys life as it is like the Greek god Dionysus who is the god of wine (Stuckrad, 2010). Dionysian does not compete with others unlike a person who has Adonis Complex. Dionysian pursues satisfaction and pleasure; acknowledge his body as it is; and enjoys physical activity itself.

Ethnography. Ethnography is an approach to experiencing, interpreting, and representing culture and society that informs and is informed by sets of different disciplinary agendas and theoretical principles. Rather than a method for the collection of data, ethnography is a process of creating and representing knowledge based on ethnographers' own experiences (Marshall & Rossman, 2011).

Gym culture. Gym culture refers to a disciplinary culture in which bodybuilders express a desire and a determined effort to construct muscular bodies that are rely on excessive exercise (Saltman, 2002).

Hidden acceptance. Hidden acceptance is an adapted term from the hidden curriculum suggested by John Dewey (1917). As an extension of the hidden curriculum framework, Hidden acceptance explains how children and adolescents unintentionally learn social messages during their interactions. Hidden acceptance is used as a broad category that includes all of the unrecognized and unintended knowledge, values, and beliefs that are socioculturally influenced.

Intrapersonal factors. Intrapersonal factors refer to beliefs and values held to be true by the individual concerning oneself in relation to society. For instance, how a person conceives his physical attractiveness would be an example of an intrapersonal factor associated with body image (Akert, Aronson, & Wilson, 2010).

Muscle dysmorphia. Muscle dysmorphia is a syndrome in which boys and men believe they are not muscular enough (American Psychiatry Association, 1995).

Muscular ideal. The male muscular ideal is characterized by large muscular arms, especially biceps, and a large muscular chest (Ricciardelli & McCabe, 2003b).

Muscularity. Muscularity refers to having well-developed muscles reflected in a strong and powerfully built body (Cafri et al., 2005).

Panopticon. Panopticon is a symbol that depicts a hidden surveillance system (Foucault, 1977). It consists of a tower at its center with windows looking down on

individuals. The Panopticon suggests that others are constantly watching and making judgments on our every move (Markula & Pringe, 2006). It includes a set of techniques and institutions for measuring, supervising, and correcting the abnormal.

Social comparison theory. Social comparison theory is centered on the belief that there is a drive within individuals to gain accurate self-evaluations (Festinger, 1954). The theory explains how individuals evaluate their own opinions and abilities by comparing themselves to others to reduce uncertainty and learn how to define the self.

Visual diary. A visual diary includes photographs that reflect images crucial to an individual's meaning-making process and expression (Azzarito, 2012).

Visual ethnography. Visual ethnography is a subfield of visual anthropology. It includes production of ethnographic photography, film, and/or new media (Pink, 2007).

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of the review of the literature was to examine research and theories on body image in general and adolescent males' body images in particular. This chapter consists of four sections. First, definitions of body image, human development, body image development, and male body image were reviewed. Second, psychological, social, and cultural factors that influence body image were reviewed. Third, critical theories related to body image, body pedagogy, body as curriculum, and masculinity in physical education and physical activity were reviewed. Fourth, the quantitative and qualitative methodologies of body image research were discussed.

Body Image

Definitions of Body Image

Body image is a multidimensional construct that incorporates cognitive, behavioral, emotional, and perceptual elements of one's body that plays an important role in quality of life (Cash, 2004; Cash & Smolak, 2011). Body image is defined in various ways depending on researchers' specific areas of interest. Body image has been investigated from both psychological and sociological viewpoints that explain not only individuals' experiences regarding their bodies, but also the impact of cultural phenomena on individuals' perceptions of body image. For example, in his book, *The*

Image and Appearance of the Human Body, Paul Schilder (1999) argued that body image is not just a perceptual construct, but also a reflection of attitudes and interactions with others. Since 1950, researchers have used the term, "body image" with various meanings that include weight satisfaction, appearance evaluation, appearance orientation, body concern, body esteem, body schema, and body perception.

Until the 1990s, most psychological investigations of body image were conducted with young women, largely focusing on eating disorders (Grogan, 2008). It mainly focused on body images of adolescent females who were concerned with body weight and shape. Since 2000, a significant shift has occurred in the body image research, broadening the research participants to incorporate adolescent males, and adult males and females. This emphasis has transformed preliminary conceptions of body image that focused on weight and shape concerns of body into a multifaceted construct that includes psychological and sociological concerns. In psychology, the journal, *Body Image: An International Journal of Research,* first published in 2004, provided a scholarly outlet for body image research. Similarly, in sociology, the success of the journal *Body and Society*, published in the United Kingdom in the mid-1990s, demonstrated high interest in the role of the body in social life (Grogan, 2008).

Grogan (2008) defined body image as "a person's perceptions, thoughts, and feelings about his or her body" (Grogan, 2008, p. 3). According to Grogan (2008), the image of an individual's body is largely determined by social experience. Thompson and Van den Berg (2002) pointed out that body image has become a relatively complex

phenomenon that has four components: (a) global subjective dissatisfaction, referring to overall satisfaction-dissatisfaction with one's appearance; (b) affective distress regarding appearance, describing one's emotions about one's appearance, including anxiety and discomfort; (c) cognitive aspects of body image, including investment in one's appearance, erroneous thoughts or beliefs about one's body, and body image schemas; and (d) behavioral avoidance reflecting dissatisfaction with appearance.

Human Development

One's body image develops as part of his/her self-conception. Body image should be understood in the large frame of human development that includes physical, personal, and cognitive aspects as critical elements of maturation.

Physical development. Researchers have examined adolescents' conceptions of body image in relation to physical growth and motor skill development (Haibach, Reid, & Collier, 2011). The growth in height and weight tends to be great during the first two years of adolescence. Although the most noticeable differences in the rate of change occur during adolescent growth spurt, there is considerable variability in the period the adolescent growth spurt occurs.

Early and late growth spurts may impact early and late adolescent maturers' body images. Adolescents' body size and shape also influence their motor skills (Gallabue & Ozmun, 2005). Late maturers' motor abilities may not be sufficient to perform certain physical skills in physical education or physical activities, which may impact their body images. Adolescents' motor learning is affected not only by changes in overall stature

and weight but also by changes in body proportions, such as muscle mass. Growth in muscle mass may occur through an increase in the number of muscle fibers or in the relative fiber size and volume. Gender differences in muscle mass are small until adolescence when both genders have a rapid gain in muscle mass. However, the spurt in muscle mass continues in adolescent females only until approximately age 13 years, while in adolescent males the rapid increase continues until age 17 years (Haibach et al., 2011). This growth spurt tends to occur earlier for adolescent females (between about 11 and 14 years of age) than for adolescent males (between about 13 and 16 years of age) (Pressley & McCormick, 2007).

McCabe and Ricciardelli examined the relationships between pubertal status and body change strategies to increase weight and muscle mass (McCabe & Ricciardelli, 2003a, 2003b, 2004a, 2004b, 2004c; Ricciardelli & McCabe, 2004). For example, McCabe and Ricciardelli (2004b) concluded that late-maturing males were more likely to use food supplements to build muscular size than early maturing males. In their research, use of supplements moderately predicted an increased use of strategies to increase muscle size (McCabe & Ricciardelli, 2004b).

The timing of puberty is considered one of the most salient factors for determining whether or not puberty is associated with emotional or social adjustment difficulties (McCabe & Ricciardelli, 2003b, 2004a, 2004c). Puberty involves changes in physical appearance and body shape, triggering psychological and social changes that directly influence body image (McCabe & Ricciardelli, 2004c). The development of a

positive self-esteem during early adolescence is influenced by body image and physical development. McCabe and Ricciardelli indicated that body image during adolescents is central to the developing self-concept and has an impact on psychosocial adjustment.

Personality development. Erikson's (1963) psychosocial theory of personality development posits eight stages of development. Each stage builds on the foundations of earlier stages. The first stage of Erikson's theory centers on parents' responsiveness to the infant's basic needs. This stage is critical to the development of interactions leading to trust or mistrust. At the second stage, children develop their first interests. For example, a child who enjoys music may like to play with the radio. The third stage occurs during the preschool period. At this stage, children attempt to initiate and complete their own actions for a purpose. They may feel frustrated when their initiatives do not produce desired results. The fourth stage occurs during elementary school years. At this stage, children start recognizing their social talents and continue to discover interests as their formal education continues.

The fifth stage, identity crisis, occurs during the adolescent period. Erickson (1963) viewed the identity crisis as the most prominent stage through eight stages of development. During the adolescent period, individuals begin to establish who they are, what they believe in, and who they want to become, thus developing an identity. Successful identity achievement requires trying out various possible identities, struggling with them before making a commitment to a specific identity. Failure to achieve a distinct identity results in confusion.

The sixth stage is the Intimacy vs. Isolation conflict stages. Although Erikson believed adolescents sometimes feel isolated during this stage, once they establish an identity, they become capable of forming intimate, reciprocal relationships, minimizing isolation. The seventh stage is care. During middle age, the primary developmental task is one of caring for others, contributing to society, and helping to guide future generations. The last stage is wisdom. This stage can occur any time individuals feel they are near the end of their lives. Erickson's fifth stage, identity crisis, may be important in forming adolescents' body images because body image is included in identity for adolescents.

Cognitive development. Piaget's theory of cognitive development proposed four general periods to describe the different ways children and adolescents think and reason from birth to maturity (Piaget, 1926; Shaffer, 1999). Most children reach the sensorimotor period by two years old during which time they can understand many words. Children experience the world through movement and their five senses (Piaget, 1926). The second period, occurring between ages two and seven, is described as preoperational thought. This stage is characterized by the use of symbols such as images and words. During the third period, concrete operations (ages 7 - 11), children develop more logical use of thinking skills. The fourth period, formal operations, begins at about age 11 and develops until adulthood. In this period, children's thinking is no longer restricted to concrete objects, and they can conceptualize abstractions. The age associated with Piaget's fourth stage varies. Some 12-year-old youngsters, for example, may still be functioning in the concrete operational stage while others may be well into formal

operations. Cognitive development influences adolescents' conceptions of body images. For example, in Piaget's fourth period, formal operations, adolescents begin to conceptualize body image when they become more aware of their bodies and sensitive to the comments and criticisms from peers, parents, and the media.

Male Body Image

Over the past decades, there has been a dramatic rise in the popular concern about conceptions of male body image. Psychologists (e.g., Cafri et al., 2005; Pope et al., 2000; Thompson & Cafri, 2007) and sociologists (e.g., Monaghan, 2005a, 2005b) have become increasingly interested in men's body image and body dissatisfaction because the male body has become more visible in popular culture.

Men appear more susceptible to a greater variety of weight concerns than women because the physical ideal to which many men aspire is more complex than the thinness norm many women embrace (Corson & Andersen, 2002). According to Pope and his colleagues (2000), many men want to change their weight, especially body shape and muscularity. They noted that body shape concerns and appearance obsession are common problems faced by today's man.

Currently in American culture, boys and men are taught that it is inappropriate for males to be obsessed with appearance. Nevertheless, Pope et al. (2000) reported boys and men believe that they are not muscular enough. Males with muscle dysmorphia feel ashamed of looking too small when they are actually very muscular by cultural standards. Boys and men are not just satisfied with working out and eating healthy food. They have

a need to be extremely muscular, which can have a negative impact on emotional and physical development. Pope and his colleagues (2000) called this syndrome the "Adonis Complex." In Greek mythology, Adonis was half man and half god: the ultimate in masculine beauty. Pope et al. (2000) referred to Adonis Complex as "an array of usually secret, but surprisingly common, body image concerns of boys and men" (Pope et al., 2000, p. 6).

Appearance fixing. Men engage in appearance-fixing behaviors, such as exercise and bodybuilding, steroid use, and cosmetic surgery, to change the look of their bodies and to reduce body dissatisfaction (Cash, 2002). Men tend to exercise rather than diet to lose weight because dieting is perceived generally as a feminine-appropriate behavior (Grogan & Richards, 2002; Mayville, Williamson, White, Netemeyer, & Drab, 2002). Professional bodybuilders have long used anabolic steroids to increase muscle bulk. Steroids enable the user to build muscle bulk much more quickly than is possible through weight training alone. Many men use exercise to change the way they look, although men are significantly less likely to be motivated to exercise for appearance reasons than women (Grogan, 2008). Bodybuilding is becoming an increasingly popular way for men to attain the culturally valued, slender and muscular body. Bodybuilders often exemplify an extreme form of the V-shaped body, but some adolescent boys do not favor overly muscular body shape.

Cosmetic surgery is another appearance fix that has become popular for men. For example, 17 % of cosmetic procedures in the United States were performed on men

(American Society of Plastic Surgeons, 2005). The most popular male procedures were nose reshaping, hair implants, and eyelid surgery. Cosmetic surgery, however, is not common for adolescents males.

Body size perception. Mills, Jadd, and Key (2012) examined the effect of body norms on ideal and current body size perception. Ninety-six undergraduate male participants between the ages of 18 and 24 were assigned randomly to one of three experimental conditions: (a) a thinner body norm; (b) a heavier body norm; or (c) no body norm. Current and ideal body size perceptions were measured using body silhouettes measures. The male-specific body image 9-point Likert scale featured drawings of men with varying degrees of muscularity that ranged from having: (1) no visible muscle, to being (9) extremely muscular (Mills & D'Alfonso, 2007). The results showed that men had a more muscular ideal body size in the more muscular norm condition than in the less muscular norm condition.

Grogan (2008) argued that most men aspire to muscular shapes characterized by well-developed muscles on chest, arms, and shoulders, and a slim waist rather than a thin or fat build. The slender, muscular shape is the masculine ideal because it is intimately tied to Western cultural notions of maleness representing power and strength.

Muscularity pursuit. The pursuit of muscularity among adolescent males has received increasing attention since 2000s (Cafri, Strauss, & Thompson, 2002; Cafri & Thompson, 2004; Cafri, Van den Berg, & Thompson, 2006; Cafri et al., 2005; Labre, 2002; Morrison, Morrison, & Hopkins, 2003; Ricciardelli & McCabe, 2004). Extreme

examples of the pursuit of muscularity included muscle dysmorphia, professional bodybuilding, and the use of anabolic steroids. Other less extreme body change strategies included taking food supplements, such as protein powders, ingesting large amounts of food, and using exercise and recreational forms of bodybuilding for the purpose of gaining weight and increasing muscle mass (McCabe & Ricciardelli, 2001a, 2001b; O'Dea & Rawstorne, 2001; Olivardia, 2002).

Ricciardelli and McCabe provided a detailed review of the prevalence of the pursuit of muscularity among adolescent males. Results from their review indicated that about a third of adolescent males desired a larger and more muscular body build, whereas another third desired a thinner body size (Ricciardelli & McCabe, 2001, 2002, 2003a, 2003b, 2004). Other researchers reported that adolescent males wanting to be thinner might reflect a desire for less body fat rather than a small frame (Cafri, Strauss, & Thompson, 2002; Cafri & Thompson, 2004).

Body dissatisfaction. Body dissatisfaction is defined as "a person's negative thoughts and feelings about his or her body" (Grogan, 2008, p. 4). Body dissatisfaction is related to negative evaluations of body size, shape, muscularity, and weight. Body dissatisfaction is widespread among men and women as well as boys and girls in United States (Gray & Ginsberg, 2007; Nowell & Ricciardelli, 2008).

The adolescence period is particularly critical in regard to feelings of dissatisfaction with one's body due to noticeable changes in weight, shape, or other physical features (Levine & Smolak, 2002). Currently, there are a growing number of

studies reporting adolescent males' dissatisfaction with their bodies. A growing number of adolescent males report dissatisfaction with their muscle size, height, strength, shoulders, biceps, and chests (McCabe & Ricciardelli, 2001a, 2003b, 2004a, 2004b, 2004c). Although the thin and the muscular ideal body builds appear to be at opposite ends of the spectrum, an increasing number of studies show that adolescent males engage in strategies to increase muscles and decrease weight. For instance, adolescent males may use one set of strategies to achieve slimness in the lower body areas and other strategies to achieve strength and body mass in the upper body.

In a longitudinal study, Jones, Bain, and King (2008) examined contributions of weight loss and muscularity concerns as dual pathways to body image dissatisfaction among early adolescent males. The first study included 67 adolescent males who reported on weight loss concerns, muscular ideal, BMI, and body dissatisfaction during seventh grade and 1 year later. In the second study, 87 seventh and eighth grade male students were assessed in the Fall and Spring of a school year. The results confirmed that although both weight and muscularity concerns were related to body dissatisfaction, muscularity concerns were more strongly affected to positive body image than weight loss concerns.

Frisén and Holmqvist (2010) pointed out that the study of body image has been a pathology-focused field of research. Thus, a great deal of attention has been extensively given to the negative components of body image such as body dissatisfaction. Nevertheless, a few studies that have looked at aspects of positive body image. For instance, Frisén and Holmqvist (2010) examined appearance ideals using qualitative

method from the perspectives of 14-year-old adolescents (N=29) with a positive body image. A thematic analysis revealed two main themes particularly salient in the adolescents' thoughts about appearance ideals. The first involved the adolescents' criticisms of ideals and media's ways of portraying them. The second theme involved the adolescents' thoughts on what they perceived as beautiful and attractive. The authors suggested the importance of teaching adolescents both to be critical of media content and to provide them with alternative ways of thinking about appearance ideals, beauty, and attractiveness.

In sum, pressure to conform to the muscular ideal male body as featured in the mass media can negatively affect men's body image. It is not simply that the number of negative body images among adolescent males has increased, but that this increase has been accompanied by the emergence of a new kind of representational practice in mainstream popular culture portrayed in the mass media advertising and marketing practices (Ricciardelli, McCabe, & Ridge, 2006).

Factors that Impact Body Image

Psychological Factors

Self-discrepancy theory. Higgins' (1987) Self-Discrepancy Theory (SDT) provides a platform for understanding how different types of discrepancies between representations of the self are related to different kinds of emotional vulnerabilities. A primary goal of SDT is to aid in predicting which types of incongruent ideas will cause individuals to feel different kinds of negative emotions.

The structure of SDT was built on three concepts: (a) a distinction among the different kinds of discomfort felt by individuals holding incongruent ideals; (b) the relationships between the different possible types of emotional vulnerabilities and different types of discrepancies people may have for the self; and (c) the role of both the availability and accessibility to different discrepancies that may potentially influence the type of discomfort they are most likely to experience.

Self-schema theory. Self-schema theory considers body image as a mental construction rather than an objective evaluation. Self-schema reflects a person's mental representation of who they are. This mental representation of the self becomes established over time to a large degree as a reaction to the experience of being labeled in a particular way by others (Wykes & Gunter, 2005). Wykes and Gunter (2005) argued that the presence of a dominant body image schema could influence the processing of body-related information or interfere with the processing of other information.

Implicit personality theory. Implicit personality theory focuses on the knowledge structures that people use to understand and predict the behavior of others (Jackson, 2002; Jackson & Chen, 2010; Jackson & Goossen, 2006). Implicit personality theory conceptualizes as cognitive structure that consists of personal attributes and inferential relations that specify the degree to which attributes are related. Implicit personality theory provides a framework for understanding the physical attractiveness stereotype.

Social Factors

Sociologists have developed many sociocultural theories regarding body image (Thompson, Van den Berg, Roehrig, Guarda, & Heinberg, 2004). The sociocultural perspective is an approach to understanding human behavior that focuses on how cultural values influence individual values and their behaviors. For example, if the culture values attractiveness, then individuals will value attractiveness in themselves and others. Body image development is a lifelong process inevitably influenced by the significant others who play the most central roles at different times in our lives (Cash & Pruzinsky, 2002; Cash & Smolak, 2011). A growing body of literature suggests that others' opinions have a profound impact on how we view and feel about our bodies. Adolescents are embedded in various relationships, most significantly peer relationships and relationships with parents.

Social expectancy theory. Social expectancy theorists argue that cultural values influence perceptions of and behavior toward others that in turn influence the behavior of others (Merton, 1968). It is commonly known as the "self-fulfilling prophecy." A self-fulfilling prophecy is a prediction that directly or indirectly causes itself to become true due to positive feedback between beliefs and behaviors. For example, once people convince themselves that a situation really has a certain meaning, regardless of whether it actually does; they will take real actions in consequence. Social expectancy theory hypothesizes that variability exists among cultures, although there is a consensual agreement within culture about who is attractive and who is not (Merton, 1968).

However, there is very little research on why attractiveness is valued, or why some body characteristics are considered attractive and others are not.

Social comparison theory. Social comparison theory was initially proposed by social psychologist Leon Festinger in 1954. Social comparison theory is centered on the belief that there is a drive within individuals to gain accurate self-evaluations. The theory explains how individuals evaluate their own opinions and abilities by comparing themselves to others to reduce uncertainty and learn how to define the self (Festinger, 1954).

Social comparison theory is offered to explain how exposure to the sociocultural attractive ideals leads to increased body dissatisfaction (Agliata & Tantleff-Dunn, 2004; Wykes & Gunter, 2005). Recent research has addressed the role of social comparison as a prime factor in the development and maintenance of body image disturbance (Agliata & Tantleff-Dunn, 2004). Females report that appearance-related peer group comparisons are most influential on body image, whereas males place a greater emphasis on comparisons with celebrities.

Morrison, Kalin, and Morrison (2004) used social comparison theory to account for variations in body-image evaluation and body-image investment among male and female adolescents. Pliner, Chaiken, and Flett (1990) measured exposures to magazines and television using Appearance Self-Esteem Scale (ASES), and the Body Figure Perception Questionnaire (BFPQ; Hallinan, Pierce, Evans, DeGrenier, & Andres, 1991). The results supported social comparison theory. In general, social comparison theory

suggests that culture may play a larger role in males' body image concerns than previously thought. However, one shortcoming of social comparison theory is that it fails to explain why some people are more impacted by culture than others (Agliata & Tantleff-Dunn, 2004). To address this, researchers have used the self-discrepancy and the self-schema theories.

Status generalization theory. Status generalization theory evolved from sociological theories that address how external status characteristics influence social interaction and outcomes in task-oriented groups (Brezina & Winder, 2003). Like social expectancy theory and implicit personality theory, status generalization theory predicts that people hold more positive expectations for attractive than unattractive others.

Parent influence. The drive for muscularity found in adolescent males is often a product of parental pressure to achieve the muscular ideal (McCabe & Ricciardelli, 2003a, 2011; Muris, Meesters, Van de Blom, & Mayer, 2005; Ricciardelli & McCabe, 2001, 2003b, 2004; Ricciardelli, McCabe, & Banfield, 2000). Although both the mother and the father have been found to influence perceptions of ideal muscle size (Ricciardelli & McCabe, 2001), some research studies suggest that fathers, in particular, strongly influence adolescent males' body image and strategies to increase muscles size (McCabe & Ricciardelli, 2003a). Research studies have supported that mothers' encouragement to lose weight predicts eating problems, such as binge eating, dietary restraint, and normative weight loss (Ricciardelli & McCabe, 2001, 2004). While messages from

mothers were associated with changes in food related behavior, messages from fathers were more likely to be related to exercise behavior.

Peer influence. Peers are another powerful force that influences adolescents' body image (McCabe & Ricciardelli, 2001b; Ricciardelli & McCabe, 2003a). Adolescents remain greatly occupied by what others, particularly peers, think of them (McCabe & Ricciardelli, 2001b). Messages from male peers have been found to shape exercise behavior, suggesting same-sex role modeling may be occurring (Pope et al., 2000). The process of peer influence appears to operate through direct messages and encouragement from peers rather than simply by observing peer behavior (Vincent & McCabe, 2000).

Adolescents' body images may be more affected by interactions with peers while young children may be most influenced by parents (Tantleff-Dunn & Gokee, 2002). One of the most striking differences between childhood and adolescence is that by the end of adolescence peer interactions become very important.

Appearance-related teasing is one of the powerful predictors of muscularity concerns among adolescents (Vartanian, Giant, & Passino, 2001). In addition to direct peer influences, peer popularity seems to be another reason why adolescent males try to gain muscle size (McCreary & Sasse, 2000, 2002). Studies have shown that perceived pressure from parents and peers to increase muscle size was associated with weight and muscle gain strategies in adolescent males (Ricciardelli & McCabe, 2004; Smolak, Murnen, & Thompson, 2005). McCabe and Ricciardelli (2003a) found that perceived

pressure to increase muscles from mothers, fathers, and male friends predicted adolescent males' strategies to gain muscles in both 8 and 16 months.

Cultural Factors

For several decades in Western countries, the media, have promoted an ideal muscular body through advertisements, television, and specific muscle-related magazines (Pope et al., 2000). Media reflect Western cultures' acceptance of a narrow range of body shapes (Grogan, 2008). However, Eastern counties may have different ideal body images (e.g., small body size and shape for the female ideal body) from Western countries because of the cultural differences. Poorer cultures, thinness may be seen thinness as a sign of malnutrition, poverty, and infectious disease and increased weight may be viewed positively as indication of health and wealth (Grogan, 2008).

Media. Media imagery may be important in producing changes in the ways that the body is perceived and evaluated, depending on the viewer's perception. In recent research (Agliata & Tantleff-Dunn, 2004; Berg et al., 2007; Blond, 2008; Botta, 2000; Wykes & Gunter, 2005), the proliferation of unrealistic images in the media has been examined as an important contributing factor to poor body image among men. For instance, magazines promoting fitness and muscularity can be found in any grocery store throughout the country. Like the print media, both television and movies also promote the muscular ideal. Television and movie stars such as Arnold Schwarzenegger, Sylvester Stallone, and Jean-Claude Van Damme, reflect the muscular ideal (Daniel & Bridges, 2010).

Psychology researchers have conducted surveys to investigate the link between media exposure and body dissatisfaction by asking participants to complete body dissatisfaction questionnaires. Results showed that the more frequent they were exposed to the media, the more they were dissatisfied with their body.

Despite the apparent impact media have on females' body image, little research has attended to the effects of media exposure on males' body image (Agliata & Tantleff-Dunn, 2004; Wykes & Gunter, 2005). In the 1990s, the male body became more "visible" in the popular media. Men are increasingly surrounded with media images of masculine perfection not just in the gym but also in advertisements, on television, and in the movies (Agliata & Tantleff-Dunn, 2004; Wykes & Gunter, 2005).

Farquhar and Wasylkiw (2007) examined how men are presented in popular media and the effects of such presentations on male adolescents' self-evaluations. In content analyses of male models in advertisements in *Sports Illustrated,* study one showed that media ideals increasingly emphasize aesthetic versus performance attributes of men. In study two, male adolescents (N = 107) were randomly assigned to view either images of male ideals emphasizing aesthetic attributes, images of male ideals emphasizing performance attributes, or neutral images. The results showed that viewing media ideals that emphasized aesthetic attributes contributed to negative self-evaluations whereas viewing media ideals that emphasized performance attributes contributed to positive self-evaluations.

Hargreaves and Tiggemann (2004) examined the effect of exposure to images of idealized beauty in the media on adolescent girls' and boys' body image. Adolescents (285 boys and 310 girls) with a mean age of 14.3 years (SD = 1.4) viewed 18 television commercials containing either images of the thin ideal for women, images of the muscular ideal for men, or non-appearance television commercials. They measured body dissatisfaction pre- and post-viewing using four instruments: the Visual Analogue Scales (VAS, Heinberg & Thompson, 1995), the Appearance-related Social Comparison Questionnaire (Tiggemann & McGill, 2004), the Appearance Schemas Inventory (ASI, Cash & Labarge, 1996), and the Physical Appearance Comparison Scale (PACS, Thompson, Brannick, & Sacco, 1991). Results revealed that exposure to idealized commercials led to increased body dissatisfaction for girls but not for boys. Idealized commercials led to increased negative mood for both girls and boys. The results suggested the immediate impact of the media on body image is both stronger and more normative for girls than for boys, but that some boys may also be affected.

Race/Ethnicity. Until recently, most contemporary research on body image and race focused specifically on differences between Black and White Western women (Neff, Sargent, McKeown, Jackson, & Valois, 1997; Ricciardelli, McCabe, Williams, & Thompson, 2007; Spurgas, 2004). Although much of the research on women's body image has supported the hypothesis that Black women exhibit healthier, more realistic perceptions of their bodies than White women, a growing body of research has indicated that Black and White women's physical self-perceptions are becoming increasingly more

homogenous (Celio, Zabinski, & Wilfley, 2002). There is less work on ethnic differences in men's body image, although there is general agreement that African-American men report higher levels of body-image satisfaction than White men (Mayville, Katz, Gipson, & Cabral, 1999).

Socioeconomic status. Research on bodybuilders suggested that before 1980, bodybuilders came overwhelmingly from working-class backgrounds. However, since 1980, more men who hold white-collar jobs have become involved in bodybuilding (Klein, 1993). Working-class men may build muscles to compensate for their relative lack of financial resources, whereas middle-class men may do so because of the realization that having financial resources is no longer enough to attract women who increasingly have their own financial resources.

Gender. Various authors have suggested that sociocultural pressure on women to attain an unrealistically slender ideal leads to dissatisfaction, eating disorders, and cosmetic surgery (Grogan, 2006; McCreary & Sasse, 2002; McCreary, Sasse, Saucier, & Dorsch, 2004; Murnen, Smolak, Mills, & Good, 2003). Research on body image in men has a more recent history. Pope et al. (2000) have suggested that men are under increasing pressure to attain and maintain a slender but muscular body, while other authors have linked men's body dissatisfaction with problems such as low self-esteem, depression, eating disorders, and the use of anabolic steroids. Social pressure on men is different from pressure on women (Grogan, 2006; Pope et al., 2000). Men and boys are, on average, usually wanted to become more muscular (Grogan 2006; Grogan & Richards,

2002; McCreary et al., 2005; McCreary, Karvinen, & Davis, 2006), whereas women and girls typically wanted to be thinner (Grogan, 2006; Grogan Evans, Wright, & Hunter, 2004). Therefore, data derived from women and girls cannot be generalized to men. It is clear that men experience the drive for muscularity more strongly than women (Gray & Ginsberg, 2007).

Body Image in Physical Education and Physical Activity

Researchers in the field of physical education have argued that body images portrayed in the media influence students' views of the body, their participation in physical activity, and physical development (Azzaarito, 2009, 2010a, 2010b, 2012; Azzarito & Kirk, 2013; Azzarito, Munro & Solmon, 2004; Azzarito & Solmon, 2005, 2006a, 2006b, 2009; Azzarito & Sterling, 2010; Azzarito, Solmon, & Harrison, 2006; Evans & Davies, 2004; Oliver, 2001, 2013; Oliver & Hamzeh, 2010; Oliver & Lalik, 2001, 2004). Investigating students' social construction of the body is becoming important because schools play a fundamental role in the regulation of students' bodies and the promotion of healthy lifestyles. For adolescent males, participation in physical education and physical activity plays an important role in socialization and peer popularity (Burgess, Grogan, & Burwitz, 2006; Ricciardelli, McCabe & Ridge, 2006). Burgess and his colleagues (2006) found that adolescent males who had the highest levels of physical activity reported more positive body image and were more satisfied with both their physical appearance and their weight. However, research examining the impact of physical activity on adolescent males' body image dissatisfaction and physical self-

perceptions has been limited (Burgess et al., 2006). More research is needed to identify how conceptualizations of body image related to participation in physical activity and sport.

Critical Theories Related to Body Image

Researchers seek to explain how the body is conceptualized in school, especially in physical education (Azzarito, 2010; Azzarito & Solmon, 2006a, 2006b, 2009; Oliver, 2001, Oliver & Lalik, 2004; Oliver & Hamzeh, 2010). For example, Oliver (2001) argued that the body is at the center of a range of power relationships in school. There are three major critical theories on body: Feminist poststructuralist theory, Foucault's technologies of self, and Bernstein's body perfection code.

Feminist poststructuralist theory. Feminist poststructuralists have investigated and challenged modern assumptions about the body (Azzarito & Solomon, 2005, 2006a, 2006b; Azzarito, Solmon, & Harrison, 2006; Wright, 2000). In other words, feminist post-structuralism offers tools to deconstruct fixed ideas about men and women and masculinity and femininity that underpin cultural practices surrounding physical activities (Azzarito et al., 2006).

By viewing the body as socially constructed, feminist post-structuralism can extend understanding of adolescents' social construction of the body in physical activity settings. For example, employing feminist poststructuralist theory and a qualitative ethnographic design, Azzarito and Solmon (2006a) investigated how high school female students identified themselves with body images in fitness and sport magazines and how

their constructions of physical culture related to their negotiations of physical education practices. Twenty-one ninth-grade students (9 girls and 12 boys) were selected based on a) the gender and ethnic diversity of each class; b) different body sizes and shapes; c) different skill levels observed during the field notes; and d) different levels of student engagement in each physical education class observed. Data were collected from observations, formal and informal student interviews, and informal conversations with teachers.

The results showed that students' body narratives reflected notions of comfortable, bad, and borderland bodies that influenced students' physical activity preferences and engagement in physical education. First, three girls and nine boys perceived themselves as comfortable with their bodies. In contrast to comfortable bodies, six girls and three boys expressed dissatisfaction with their bodies based on self-surveillance on their bodies. Additionally, six girls and one boy rejected dominant gendered discourses about the body. This study suggests that most of the boys in the study (six out of seven) viewed physical education practices as a technology to maintain or achieve the male ideal body.

Foucault's technologies of self. Michel Foucault (1977) has had a major influence on the re-conceptualization of power in the social sciences. Foucault (1988) defined the technologies of self as follows.

> To permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in

> order to attain a certain state of happiness, purity, wisdom, perfection, or immortality (Foucault, 1988, p. 18).

In contrast to the objectifying process, Foucault explained that technologies of the self emerge in the process of subjectification, the forming of oneself as a subject within power relations. Foucault (1988) was particularly interested in how people learn to problematize their identities by becoming more self-reflexive. Results showed that the critically self-aware individuals questioned what seemed "natural" and inevitable in their identity (Markula & Pringle, 2006). Since the early 1990s, scholars have engaged in analyses of technologies of self in relation to body (Duncan, Al-Nakeeb, & Nevill, 2009; Markula & Pringle, 2006; Thorpe, 2008). The analyses concentrated on how weight management gains status and power (Markula & Pringle, 2006; Markula, Burns, & Riley, 2008). Interpreting Foucault's work in the context of physical activity, bodies are regulated by a range of disciplines. Foucault suggests that physical educators need an acute awareness of the ways in which their activities are reproducing inequalities in schools and a sense of the possibilities for reducing those inequalities.

Bernstein's body perfection code. Bernstein is another scholar who has contributed a theoretical background in body pedagogy (Bernstein, 2000, 2001). Bernstein used body perfection code to construct particular representations of weight, health, and body, and discussed how these codes can have negative implications for the relationships young people develop both with their own and others' bodies, weight and diet (Evans & Davies, 2004, Evans, Davis, & Wright, 2004; Evans, Rich, Allwood, &

Davies, 2008). Body perfection code is a form of educational code that provides a way of understanding how wider social forces and trends relating to body perfection are embedded in the cultures and structures of schools, and ultimately internalized as distinctive forms of embodied consciousness (Bernstein, 2000, 2001). An individual's character, value, and sense of embodied self come to be judged essentially in terms of body weight, size, and shape.

People define whose and what bodies have status and values by the perfection code and constitute acts of inclusion and exclusion that define relationships between individuals within and outside of schools (Rich & Evans, 2005, 2008). For example, Rich and Evans (2008) argued that perfection code has meaning to particular body types and behaviors and is embedded in educational practices that are specifically focused on body matters in physical education and physical activity. They also noted that perfection code is endemic in practices that extend way beyond the formal curriculum. They infuse the subcultures and informal structures of schools (e.g., playground structures and lunch breaks) so that within these contexts, the body emerges as a project to be managed, regulated, and measured in much the same way as academic work in school classrooms.

Body Pedagogy

Body research is traditionally characterized by a positivist approach where researchers describe and verify body issues, denying their own involvement in the construction of body. For example, medical research on obesity has focused on establishing a link between an increased prevalence of cardiovascular disease and

increased Body Mass Index (BMI). On the other hand, psychologists have increasingly started to measure the impact of attitudinal, cognitive-behavioral, and sociocultural factors on body image (Grogan, 2008; Rich & Evans, 2005; Riley, Burns, Frith, Wiggins, & Markula, 2008). The medical and psychological studies support that the cure for body weight problems can be based on correcting individuals' attitudes towards themselves.

In contrast to medical and psychological frameworks that de-contextualize and individualize weight issues, critical and social constructionists focus on sociocultural forces as having effects on the individual's body (Rich & Evans, 2005). In other words, while the medical and psychological frameworks consider how sociocultural factors impact an individual's behavior, critical and constructionist scholars locate this impact within a larger framework of relations of power. Therefore, critical theorists have examined how discourses of body size exemplify and produce particular understandings of weight and body management that create different kinds of selves and ways of being in the world that enable and constrain certain actions and behaviors (Evans et al., 2008; Gard & Wright, 2005; Markula & Pringle, 2006; Rich & Evans, 2008).

Rich and Evans (2008) were interested in how schools might play a role in constructing 'body pedagogies' (Evans & Davies, 2004; Evans et al., 2008). Body pedagogy is defined as any conscious activity taken by one person or organization, designed to enhance an individual's understandings of his or her own and/or others' corporeality (Evans et al., 2008). Their four-year study investigated how weight and health are represented within English schools and impacted on 40 girls and young women

who suffered from various forms of clinically defined eating disorders, depression, and over-exercising.

Rich and Evans (2008) found that for many of their participants, weight loss, dieting and participating in physical activity constituted techniques through which they could be recognized as demonstrating autonomy, self-control, and achievement. Therefore, making 'good' and 'bad' choices or reducing one's body size became a way for these young women to demonstrate that they were a good people. All of the young women in the research reported that a narrow definition of health associated with weight loss had emerged and was reinforced within both the formal and informal cultures of schools they attended. Health was represented reductively as strongly associated with body size and appearance so that the thin and slender body was taken to represent not only a state of good health but also a positive sign of self-control, virtue, and being a good responsible citizen (Rich & Evans, 2008).

Body as Curriculum

Scholars conducting feminist, critical, and post-structural research have begun to understand how race and gender influence students' embodiments and their activity participations (Azzarito & Solmon, 2006a, 2006b; Oliver & Lalik, 2001, 2004). Examining social constructions of the body has significantly expanded understanding of sociocultural influences on adolescent girls' and boys' participations in physical education classes (Azzarito & Solmon, 2005, 2006a, 2006b; Gorely, Holroyd & Kirk, 2003; Oliver & Lalik, 2004, Wright, 2000).

Oliver and Lalik (2001) examined a curriculum project focused on the body as an area for study and on storytelling, reflection, and critical analysis as legitimate learning processes. They used feminist and activist perspectives to examine the curricular processes used in work with four adolescent girls to help them. They investigated how the girls experienced their body experience, the themes of the body that emerged, and the curricular processes and strategies. They analyzed data in the form of students' free-writing responses, written stories, and journals.

Analysis of data revealed two major themes: being noticed and regulating their bodies. The girls experienced beauty as a means of being noticed by boys and accepted by girls. All four girls expressed dissatisfaction with their bodies and described active and strategic efforts to monitor, restrict, and control themselves while expressing resistance to bodily regulation through critiques of 'other' girls. The findings of the study suggested a need for inquiry-based, integrated physical education and language arts curricula based on girls' questions and concerns of the body. Thus, when the body does appear as the focus of study in school curricula, it is confined primarily to the areas of health and physical education. For example, when including the body as a focus of school study, curriculum developers have largely ignored girls' views and experiences of their bodies.

In a second study, Oliver and Lalik (2004) examined the development and implementation of a curriculum focused on girls' bodies drawing on post-structuralism. The purpose was to help adolescent girls name the discourses that shape their lives and regulate their bodies. The participants were 7 - 12th grade high school girls. The result

identified four themes: making the curriculum meaningful, offsetting task difficulties, sustaining ethical relationships, and lessening interference of research culture.

To make the curriculum meaningful, Oliver and Lalik (2004) used the girls' interests as the focus of their critique. Specifically, they designed the curriculum to reflect ways that girls learn to think about their bodies and the bodies of others from the images found in the magazines that they enjoy. To keep the critique centered on topics girls found important, the researchers asked students to look through the magazines and to select and categorize images and articles that captured their attention. The researchers also used photography to provide the girls with another alternative representational form that enhances their analytical efforts. The participants photographed places in their school that girls received both positive and negative messages about their bodies. The researchers reported that they struggled to help girls learn the processes of critique without imposing their own critiques on them. In spite of the difficulties of nurturing a radical curriculum in the school, the girls were successful in considering the conflicting messages they received about their bodies and physical activities.

In another study, Oliver and Hamzeh (2010) investigated five, 5th grade *mestizas'* girls' self-identified barriers to physical activity and strategies for challenging the barriers. They used girls' personal biographies, observations, girls' photos, individual and group analyses of the photographs, and student interview as data sources in this research. The researchers identified three themes: (a) barriers girls identified to their physical activity participation; (b) how the researcher worked with the girls to study their primary

self-identified barrier to physical activity; and (c) how the researcher helped the girls publicize their barrier to challenge the inequities in physical activity at their school. However, the research participants were only girls and the research results should not be applied to boys. Therefore, examinations of boys' conceptions of body image are greatly needed.

Masculinity

Hegemonic male spaces and the performance of masculinities remain dominant in physical activity contexts and the physical education curriculum (Azzarito, Solmon, & Harrison, 2006; Fisher & Shay, 2009). Levant et al. (2008) argued that masculinity is not an essential component of men; rather it is a historically situated norm or ideology that cultures use to create various meanings of being a man. The rapid rise in interest in the masculinity dimension of body image signifies a paradigm shift away from the dominant theme of fat, size, and weight dissatisfaction that dominated the body image research field until the mid-1990s (Cash, 2004; Thompson & Cafri, 2007). According to Thompson and Cafri (2007), articles with a focus on masculinity increased 731% in the period of 2000 through 2006 in comparison with the previous 7-year period (based on PsycInfo search of the terms muscularity or muscular body image or muscle dysmorphia).

Ricciardelli et al. (2006) examined the role played by sport in understanding adolescent males' views about their body. Semi-structured interviews were conducted with 40 adolescent males between the ages of 15 and 17 (Mean Age = 15.98, SD = 0.66;

Mean Body Mass Index = 22.49, SD = 3.80). The boys were primarily from Anglo-Saxon backgrounds living in Australia. Questions focused on body satisfaction (e.g., "How satisfied are you with your current weight?" and "What would you like to change?"), the importance of body image (e.g., "How important to you is the size of your muscles?"), and sociocultural influences from parents, peers, and the media (e.g., "What does your father say about your body size?"). The results were interpreted through four main themes associated with body and sport: the centrality of sport in boys' lives; the focus on body via sport; competition on the playing field; and the broader context of sport culture and masculinity.

In Ricciardelli et al.'s (2006) study, many adolescent males, at first were reluctant to focus on their body. However when the researchers discussed body through sport, adolescent males openly discussed what they liked and what they did not like about their bodies. In addition, an analysis of what males liked about their bodies and the aspects they wanted to improve further showed that these were synonymous with the attributes associated with being successful at sport. While competition in physical activity was a main theme identified across adolescent males' narratives, the nature of adolescent males' competitiveness should be understood within the wider culture of physical activity and masculinity. Ricciardelli et al. (2006) found that boys used their bodies through physical activity as a way of displaying their masculinity and as a way of demonstrating their strength as opposed to weakness.

The results imply that physical activity provide adolescent males with context for discussing their body image. In addition, boys used physical activity as a forum for competing with other males, both through playing sport and by using sport performance to make favorable social comparisons about their body size. It also implies that the sporting context provide adolescent boys with an acceptable and nonthreatening medium for explicitly discussing and comparing their bodies with their peers.

Gym culture. The American social theorist, Kenneth J. Saltman, in his article The Strong Arm of the Law, contends that "gym" culture is concerned with a great deal more than the pursuit of the body beautiful. According to Saltman (2002), bodybuilding magazines exist to persuade those participating in a gym culture to purchase dietary supplements and fitness and training videos. Gym culture, like military culture, is a disciplinary culture given that there is a desire and a determined effort by bodybuilders to construct bodies (Frosh, Phoenix, & Pattman, 2001). Saltman's (2002) examination of the desires of the militarized body builder leads inevitably to the question of whether such desires can be reduced.

Body Image Methodologies

Inventories designed to measure body image were almost nonexistent before 2000 (Thompson & Cafri, 2007). In the last ten years there has been an increase in the number of new and revised psychological measures developed to assess dimensions of body image (Grogan, 2008). In this section, the Drive for Muscularity Scale (DMS) was reviewed.

Drive for Muscularity Scale (DMS)

McCreary and Sasse (2000) developed the DMS to measure muscularity in body image. The DMS represents motivation to become more muscular. The DMS was developed as a 15-item, self report measure of how muscular individuals are or want to be, as well as the behaviors that they engage in to become muscular (McCreary, 2007, 20011). Each item on the DMS is scored on a 6-point Likert-type scale ranging from always (1) to never (6). The DMS is included in the appendix G. The DMS has two subscales: A muscularity-oriented body image subscale and a muscularity behavior subscale. McCreary et al. (2004) pointed out that item 10 ("I think about taking anabolic steroids.") showed very little variability in samples of high school students and may be deleted from the scale, resulting in a common set of 14 items.

Many researchers examined reliability for the DMS (Cafri & Thompson, 2004; Davis, Karvinen, & McCreary, 2005; McCreary et al., 2004; Tod, Norrison, & Edwards, 2012). Results of these studies showed that the DMS has demonstrated alpha reliability estimates ranging from .85 to .91. McCreary et al. (2004) reported corrected item-total correlations of .37 to .65. Finally, Cafri, and Thompson (2004) reported high 7- to 10-day test-retest correlations in a sample of men: .93 for the entire scale, .84 for the muscularity attitudes, and .96 for the muscularity behaviors (McCreary, 2007). In sum, the DMS has shown consistently good reliability in both the 15-item and the 14-item versions (with the steroid use item removed).

Visual Ethnography

Scholars have developed various qualitative research genres (e.g., ethnography, phenomenology, grounded theory, case study, and action research) to examine lived experience. Among these genres, ethnography is the hallmark of qualitative inquiry (Marshall & Rossman, 2011). Derived from anthropology and qualitative sociology, ethnographers study human groups, seeking to understand how they collectively form and maintain a culture. Cultural analyses focus on actions and interactions within groups. Culture describes "the way things are and prescribes the ways people should act" (Rossman & Rallis, 2003, p. 95). Classical ethnography has been enriched by variations (e.g., performance ethnography, critical ethnography, and visual ethnography) (Marshall & Rossman, 2011). Emerging from the basic principles of ethnography and visual anthropology, visual ethnography is increasingly being accepted as a method and methodology for conducting qualitative research (Chaplin, 2004; Pink, 2007). Historically, videos and photographs were not easily included in books, journal articles, or dissertations. However, with the advent of digital photographic techniques, it has become much easier to reproduce high quality photographs to depict cultural events.

Currently, visual recordings of events at research sites and participants' interactions are becoming increasingly common, as is the inclusion of digitized illustrative photographs in a written report (Hyde, 2005). While observations and interviews are typical tools in classical ethnography, researchers recently have used visual tools (e.g., photography and video) to understand research participants' in-depth

perspectives (Banks, 2001; Phoenix, 2010; Pink, 2007). Photography can inspire people to represent and articulate embodied and material experiences that they usually cannot recall in verbal interviewing. More generally, visual explorations produce useful data for understanding how people experience their social and material environments (Banks, 2001; Pink, 2007). Explorations are inextricably interwoven with personal identities, lifestyles, schools, and cultures and societies.

Video and photographic tools now are used in many disciplines including communication, cultural studies, anthropology, and kinesiology (Azzarito, 2010b, 2012; Azzarito & Kirk, 2013; Hyde, 2005; Mizen, 2005; Packard, 2008; Rose, 2007; Yates, 2010). The publication of research using visual methodologies is also growing in journals such as *Visual Studies* and *Body Image: An International Journal of Research*. Scholars focus on visual media as sites for analysis and use the production of visual representations to depict their analyses.

Ethnographers should be self conscious about how they represent themselves to informants and consider how their identities are constructed and understood by the people with whom they work (Pink, 2007). Subjective understandings can have implications for the knowledge that is produced from ethnographic encounters between researchers and informants. A collaborative method assumes that researcher and informant are consciously working together to produce visual images and specific types of knowledge through technological procedures and discussions. It may empower informants and can serve to challenge existing power structures that impinge on the lives of both informants

and ethnographers (Pink, 2007). For example, Hyde (2005) examined a collaborative approach to photographing children "sharing control over the process of visually representing children's lives, their stories and their faces" (p.172). He argued that this approach is relevant to social scientists as a research methodology.

Visual ethnography can be especially pertinent in examining the ways the body is experienced and evaluated from multiple perspectives (Azzarito, 2010b, 2012; Azzarito & Kirk, 2013; Oliver, 2001; Oliver & Lalik, 2004; Yates, 2010). Body image is not a fixed concept, but changes through new information. Grogan and Richards (2002) argue that current estimates of body image are largely based on quantitative, questionnaire-based research that explains little about "why men are dissatisfied and how this dissatisfaction affects their behavior in relation to exercise and diet" (p. 21).

The use of visual diary methods is becoming increasingly common in ethnographic research. In this method, researchers give informants a disposable or a digital camera to take pictures of events or individuals in their daily lives that are relevant to the research questions. At the end of the photography period, participants return cameras to the researcher for processing/printing. Informants' photographs often allow the researcher access to participants' lives he or she cannot participate in. Researchers follow the photography period with an interview to ask participants to elaborate on the meaning of the events in the pictures.

Mizen (2005) asked children to use disposable cameras to create photographic diaries of their school contexts. He interviewed the participants about their photo diaries

and then asked them to produce a second photo diary. The second stage was crucial to participants because they became more intimately involved in creating an amateur auto-ethnography. The final stage of the research was built on these diaries and interviews. The researcher and the participants collaborated to produce a composite photographic image from photographs. These composite images contribute to the research process by giving the participants the opportunity to select and emphasize aspects of their domestic environment.

Jones (2004) indicated that children's involvement in research has evolved from being regarded simply as objects of study to sharing their own insights as researchers in the study. He argued that the researcher's knowledge about children is incomplete unless it takes into account the knowledge that children have of themselves. However, it might be that some children are unable to participate as planned or develop different areas of interest. Jones (2004) pointed out that barriers to children's participation include lack of knowledge, skills, interests, or abilities for particular tasks or limited time for the project. Therefore, children's involvement in the project should be clarified.

There are a few research studies examining body image in physical education using visual ethnography. Oliver and colleagues examined girls' experiences of their body images using magazine images (Oliver, 2001, 2013; Oliver & Lalik, 2001, 2004; Oliver & Hamzeh, 2010). Magazines are cultural channels through which adolescents communicate meanings of their bodies. Magazine images can help adolescents reveal meanings about the body that are difficult to express through written or verbal language

alone. Oliver and colleagues' research results suggest that understanding girls' interpretations of health-related magazine images are important to understanding how they construct body meanings.

Laura Azzarito is another leading scholar who has investigated body image using visual methodology in physical education research (Azzarito, 2010b, 2012; Azzarito & Sterling, 2010; Azzarito & Kirk, 2013). Azzarito (2010b) argued there is a need for researchers to adopt fresh methods to enable young people to "speak" meaningfully about their experiences and ways of knowing about the body in physical activity contexts. She proposed that innovative visual methodologies could further research on the body as a "seen" phenomenon in kinesiology. For example, Azzarito (2012) revealed the visual dimensions of embodiment as expressed by young people of different ethnic backgrounds in the local contexts of their lives. The visual participatory ethnographic research was conducted in inner-city, state-funded schools in the Midlands region of the UK. The participants were over 60 student-researchers, aged 14-15, who used digital cameras to create visual diaries entitled *Moving in My World* to express their thoughts, feelings and ideas, and to 'speak for themselves' about their knowledge of their own bodies, sharing their embodiments. What moving in their worlds meant to young people varied significantly based on cultural background differences, gender negotiations, and opportunities for engagement with physical activity. The student-researchers' visual diaries captured heterogeneity of meanings about the moving body that young people

construct and represent in their creation of the hybrid physical cultures of their daily lives.

Hargreaves and Tiggermann (2006) examined adolescent males' ideas and terminology regarding their body image. The participants were 28 boys aged 14 to 16 years from an Australian public high school. A semi-structured focus group methodology was chosen to encourage participants to discuss the questions with each other, providing access to participants' own concepts in their own language. The key question used to explore adolescent males' body image was, "Do guys your age care about what they look like?" and "How do guys your age generally feel about the way they look?" Adolescent males were asked to describe their ideal appearance ("What do you think the ideal male looks like?") before the influence of mass media was addressed, both indirectly ("Why do some men and boys wish to be more muscular?") and directly ("Do guys compare their appearance to friends/media?"). Finally, adolescent males were asked whether body image was a topic they normally talked about ("Do boys ever talk to other people about these sorts of things?"), and when relevant, why body image was not a topic they choose to discuss. Each focus group lasted approximately 50 minutes.

The results revealed that adolescent males did not value or worry about their appearance, except when they were trying to impress girls. Each group indicated a general desire to be toned, muscular, and strong, although they were motivated by a variety of reasons (e.g. performance in sport, self-defense, and being attractive to girls).

For mass media influence, the participants reported they were not much affected by the media, although the media were used as a source of information about fashion.

Most adolescent males felt it was important to look like peers and to look like close friends in particular. In addition, physical appearance and body image were not considered appropriate topics for conversation by adolescent males, partly because they are not important, and partly for fear of appearing 'gay' or 'girlie'. However, a small number of boys did report higher levels of body image concern and attempts to modify their appearance. The results indicated those adolescent males might underestimate the media's effect on body image because they were reluctant to discuss their feelings about body image (Hargreaves & Tiggemann, 2006). In addition, the adolescent males did not report feeling threatened by muscular-ideal images perhaps because, unlike older men, their bodies were still growing toward the muscular ideal.

Pink (2007) argued that, "subjectivity should be engaged with as a central aspect of ethnographic knowledge, interpretation" (Pink, 2007, p. 49). She argued that it is impossible to observe and record 'reality'. For instance, just because something appears to be visible, it does not necessarily mean it is true. Analysis should focus not only on the content of images but also on the meaning that different individuals give to those images in different contexts (Pink, 2007).

It is important to consider how visual methods will be interpreted by individuals in the cultures in which research will be conducted as well as be assessed how well visual methods suit the aims of research (Keller et al., 2008; Pink, 2007). Photographs taken by

the participants are critical data in the visual diary. However, the meanings of photographs are subjective. The same photographic image may have a variety of embedded meanings at different stages of ethnographic research. Therefore, images are contingent on how they are situated, interpreted, and used to invoke meanings and knowledge that are of ethnographic interest. In other words, it is more useful to examine how people's definitions of the visible content and form of photographs attach them to particular ideologies, worldviews, and identities. By redefining the photographs' contents as individual images with situated meanings, the connections between images are constructed rather than 'given' or 'natural' (Gauntlett & Holzwarth, 2006; Pink, 2007).

In summary, visual ethnography is a relevant methodology to investigate adolescents' body images. While images should not necessarily replace words as the dominant mode of research, images should be regarded as an equally meaningful element of ethnographic work (Pink, 2007). Therefore, a challenge for visual anthropology in the 21st century is no longer the question of whether it will be accepted by the mainstream, but of how visual ethnography can connect with and contribute to mainstream anthropological debates (Pink, 2007).

Research Design Critiques

In critiquing research methodologies, Thompson and Ven der Berg (2002) have addressed some methodological issues that researchers should consider using questionnaires. First, the researcher should have a clear sense of the body image topic of interest (e.g., which aspect of body image is relevant, which dimension is relevant).

Second, because many measures are validated on adult samples only, typically composed of Caucasian college female, researchers should consider relevant gender and ages in validation studies. Third, limitations of questionnaires measuring aspects of body evaluation include a lack of questions asking men why they are dissatisfied, and how their dissatisfaction affects the rest of their lives (Grogan, 2008). However, qualitative research investigating body image also has methodological limitations. For instance, Smolak (2004) pointed out that the extant qualitative research has remained largely descriptive and is marked by methodological problems.

According to Smolak (2004), it is necessary to develop better measures of body image, especially in young children. There also are limitations on the types of body image that can be validly measured. While researchers have begun to develop more gender sensitive measures of body image, there is still little research demonstrating the appropriateness of measures for use with various ethnic groups. Social norms are believed to affect judgments of other people's bodies as well as one's own body. For instance, ethnic and cultural groups sometimes differ in terms of what type of body is considered attractive or desirable. Therefore, further research is needed in this area.

Considering the limitations of quantitative and qualitative methodologies, a mixed method design was used in this study. The DMS was selected for use in this study, while other body image inventories (e.g., the MRNI-A-r, the AMIRS, the MAMS) were not selected for a variety of reasons. MRNI-A-r inventory (Brown, 2002) were not consistent with the research questions because the subscale category, the avoidance of femininity,

was not appropriate for males. The AMIRS was not selected in the study because it had only one dimension (male norms) and focused solely on interpersonal relationships rather than body image, making the AMIRS not a good choice for this study. The MAMS was excluded from this study because of the particular concern for the heterosexism subscale. Items in this subscale were not consistent with the research questions and may generate undo concern from parents and school personnel.

CHAPTER III

RESEARCH METHODS

A mixed method design was used in this research to understand the nature of male students' body images, cultural influences on body image, and ways in which adolescent males' conceptions of body image impact physical activity. This chapter describes nature of the projected methodology as it relates to (a) research setting and participants; (b) data collection and management; (c) data analysis procedure; and (d) trustworthiness and transferability of the research.

Research Setting and Participants

School District

This research was conducted in Spring County, the third largest school district in the state. The Spring County School district is among the 50 largest districts in the country, serving more than 72,500 students across 124 schools in urban, suburban, and rural areas. Two of the 23 middle schools in Spring County were selected for this research based on these schools' demographic data (i.e., average school size, percent of free/ reduced meal eligibility, and race/ ethnicity) and the researchers' physical education class observations. The two selected middle schools had similar demographics, including race/ethnicity, percent of students eligible for free/reduced meals, average school size,

and the nature of the physical education class. Table 3.1 summarizes the relevant demographics for the Spring County Schools (SCS) and the selected middle schools.

Table 3.1

Comparison of Spring County School Demographic with the Two Selected Middle Schools

Race/Ethnicity	SCS	Allan MS	Beacon MS
Black	41%	36%	44%
White	37%	44%	33%
Hispanic	12%	3%	11%
Asian	6%	10%	7%
Others	4%	7%	5%
Free/Reduced meal	55%	51%	58%
Average school size	775	1120	845

The researcher visited these two middle schools as a research assistant in the *Science of Healthful Living* project. The researcher had observed the two middle schools' physical education programs as well as interviewed students and met with the physical education teachers regularly during the 2012-2013 academic years. The characteristics of the physical education programs in these two schools are addressed in the following paragraphs.

The Physical Education Setting

The physical education programs in Allan and Beacon Middle Schools (MS) had both similar and unique characteristics. Specifically, Allan MS followed an A/B day schedule with each class 75 minutes in length. Students received single gender physical education with male teachers teaching male students and female teachers teaching female

students. The physical education teachers team-taught two classes (about 100 students) each period in a large main gymnasium and a third class (about 50 students) in the small gymnasium. A typical lesson began with students dressed in physical education attire sitting in their squad lines waiting for roll call. After five minutes of roll call, students completed warm-ups (e.g., jogging, push-ups, squats, and high knee jumps) for about fifteen minutes. The main part of the lessons typically included varied activities (e.g., jogging) and games/sports (e.g., football, soccer, dodgeball, and modified basketball). Male and female students' lessons frequently were different (e.g., content, management, and lesson structure) during a given class period. After about 30 minutes of instruction, students were allowed to choose activities described as "open gym" (e.g., free basketball and soccer games). Sometimes, students had open gym for the entire class period. Some students often did not participate in physical activity and others sat on the bleachers and socialized during the physical education class period.

Beacon MS also followed an A/B day schedule, although with shorter 40 minutes class periods. The three physical education teachers team-taught three co-educational classes together as one group (~70 students) in a large gymnasium. The early arriving students typically began the lesson with "open gym" for the first 10 minutes while waiting for the rest of their classmates to get dressed and enter the gymnasium. After roll call, students completed warm-ups (e.g., sit-ups, push-ups, and stretches) for five minutes. Once students finished warm-ups, the physical education teachers taught the lesson. The lesson content included both cardio activity (e.g., flag tag) and sports (e.g.,

volleyball and basketball). Sometimes the physical education teachers allowed students to have open gym (e.g., free basketball and soccer games). Similar to Allan MS, some of the students at Beacon spent the class period sitting on the bleachers and did not participate in physical activities.

The Teachers

Allan MS had three male and two female teachers. All five teachers were certified physical educators and held bachelor's degrees. Their teaching experiences ranged from 7 to 23 years. Beacon MS had two male and one female teacher. All three teachers also were certified physical educators with bachelor's degrees. Their teaching experiences ranged from 5 to 14 years.

The Students

From the demographic data presented in Table 3.1, it was clear that the student populations at both Allan and Beacon MS had approximately one third Black, and one third White students, and one third other minorities, including Hispanic and Asian students. The target population for this research was eighth grade male students regardless of ethnicity. In terms of gender, male students were chosen because there was a dramatic rise in concerns about adolescent males' body images. In addition, historically the study of body image has been largely restricted to adolescent girls. In terms of grade, eighth grade students were chosen because they were older and have had more physical activity experiences than sixth and seventh grade students and this experience might have impacted their conceptions of body images (RQ1). Additionally, targeting eighth grade

students was important because they were more likely to have been influenced by popular media and peers (RQ2). Further, eighth grade students might be better able to understand visual diary methodology, compared to sixth and seventh grade students. Thus, eighth graders were expected to be able to articulate the relationships between body images and physical activity preferences (RQ3).

The Researcher

The researcher was a doctoral candidate pursuing a post-graduate degree in Physical Education Pedagogy. The researcher earned B.S. and M.S. degrees in South Korea and had worked as a physical education teacher at the Gandhi alternative high school for a year in South Korea. The researcher also worked for four years as a general manager at the *Civil Network for Justice in Sport* (CNJS) that was the only Non-Governmental Organization in Sport in South Korea. As a general manager at the CNJS, the researcher advocated for human rights of student-athletes and social justice in sport to improve negative sporting culture, including behaviors such as violence in athletes and coaches. The researcher wrote a thesis about *Critical Discourse Analysis about Korean Student Athletes Human Rights* in Korea University in South Korea. This experience led the researcher to focus his research interest on relations between students' constructions of physical body image and their preferences in physical activity.

For the 2011-2013 years, the researcher worked as a research assistant with many middle school physical education teachers and students in the *Science of Healthful Living*

curriculum intervention study, gaining experience collecting and analyzing lesson observation and interview data.

Research Sampling

The two middle schools enrolled a total of 321 (Allan = 168, Beacon = 153) eighth grade male students during the 2012-2013 academic year. Research sampling followed a series of steps. First, the Drive for Muscularity Scale (DMS) was administered to 36 (Allan = 11, Beacon = 25) male students who agreed to participate in this study (see Appendix G). Second, a second consent and parental permission forms (see Appendix C) were distributed to these students. Nineteen students did not return their consent and assent forms. Therefore, a total of 17 (Allan = 5, Beacon = 12) students participated in the second phase of study. Third, four students (Allan = 1, Beacon = 3) were randomly selected for the pilot study. Although 13 students completed the first interview and began the visual diary process, five students were dropped during the visual diary phase because they did not return their cameras by the deadline. In sum, a total of eight students (Allan = 4, Beacon = 4) completed the interview and visual diary methodologies.

Research Design

Following the sampling process, this research was conducted using a visual ethnographic case study design because it permitted an in-depth contextualized examination of male students' body images. Phase I examined eighth grade male students' drives for muscularity using DMS. Thirty-six students (Allan = 11, Beacon = 25) completed the DMS. All 36 students were invited to participate in phase II, and 17

(Allan = 5, Beacon = 12) agreed. Phase II consisted of a pilot study, a pre-visual diary interview, a visual diary, and a post-visual diary interview. Table 3.2 illustrated the general timeline for these procedures.

Table 3.2

Timeline for Dissertation Progress

	Week						
Procedure/Methodology	Entry	1	2	3	4	5	6-
Collected First Assent and Parent Permission Forms (N=36)	X						
Administered the DMS		X					
Collected Second Assent and Parent Permission Forms (N=17)		X	X				
Pilot Study (N=4)			X				
Pre-Visual Diary Interviews (N=13)				X			
First Visual Diary (N=11)				X	X		
Second Visual Diary (N=8)					X	X	
Post-Visual Diary Interviews (N=8)						X	
Data Analysis and Dissertation Writing							X

The IRB applications were created to explain the research purpose, procedures, and potential benefits and risks for participation in this study and submitted to the university's Office of Research Integrity and the Spring County Schools (SCS). After two rounds of revisions, the IRB approvals from the two institutions were obtained (see Appendix A). Two assent and parental permission forms were created and stamped by the University's Office of Research Integrity (see Appendix B and C). In addition, oral recruitment statements were read to students and invitation letter to parents were created (see Appendix D and E).

The purpose and data collection procedure in the study were explained to all physical education teachers and the principals in the two target middle schools. Letters of support were obtained from all of them. Data were collected for five weeks in the two middle schools. Specific data collection and analysis procedures are described in the following sections.

Data Collection and Management

Before administering the Drive for Muscularity Scale (DMS), eighth grade physical education class enrollment lists for the 2012-2013 school years were obtained from the participating teachers. In addition, the purposes of the study and research procedures were explained to the participants and the first student assent and the parental permission forms were obtained. Participation in the research was voluntary. Students were informed of their rights to decline or withdraw from participation. A total of 36 students completed the DMS. Second assent forms and parental permission forms were

distributed to these 36 students prior to collecting interviews and visual diary data. A total of 17 students participated in the interviews and visual diary. Four students were selected to participated in the pilot study to make sure that interview questions and the visual diary guide were relevant. Five students were dropped from the study prior to the second visual diary and the second interview because they did not return their cameras by the deadline. In sum, a total of eight students completed data collection.

All participating schools in this study are assigned pseudonyms to maintain their anonymity. An identification number was assigned to each individual participant throughout the research to maintain the participants' confidentiality. After obtaining class lists, students' assent, and parental permission forms, the forms were stored in a locked file cabinet in a locked research laboratory at the University of North Carolina at Greensboro.

Drive for Muscularity Scale (DMS)

The DMS was administered to a total of 36 students who provided assent and parental permission forms. Students were informed of the purpose of the questionnaire and instructed to respond honestly and independently. They also were informed that there were no right or wrong answers to the questions, and their responses would remain confidential with no influence on their grades. The students were asked to sit quietly in a personal space in the gymnasium and a pencil and questionnaire were distributed to each participant. There were 14 questions in the DMS and it took approximately five to ten minutes for the students to complete.

DMS data management. The DMS data were organized and entered into a SPSS 18.0 database by students' identification number, school, teacher name, and class.

Interviews

Qualitative researchers have relied extensively on in-depth interviewing to gather insights into participants' perspectives on a range of topics. Marshall and Rossman (2011) described qualitative interviews as a construction site of knowledge where individuals discuss themes of mutual interest to them and the researcher. Patton (2002) categorized interviews into three general types: (a) the informal, conversational interview; (b) semi-structured interview; and (c) the standardized and structured interview. In this study, because body image was a sensitive and difficult topic to discuss for some male adolescents, semi-structured interviews were used to provide a relative structure followed by probing questions as needed to ask students to elaborate or provide more detail. Pre- and post-visual diaries and individual interview were conducted with students at each school. All interview data were captured using a digital recorder to obtain the exact words of the participants and transcribed immediately after interviews.

Individual interviews permitted researchers to capture participants' perspectives with deep access (Patton, 2002). For this study a set of open-ended interview questions were created (see Appendix H and I) followed by probes based on the research questions in the study and the review of the literature on body image. The interview questions were written in adolescents' words to make sure they understood the questions.

Before the interview and the visual diary, a second assent and parental permission form were distributed to 36 students who took the DMS and 17 of the assent and parental permission forms were returned. Then, the first four students who returned their assent and parental permission forms were asked to pilot the interview questions and visual diary guide. Interview questions and visual diary guide were revised based on the results of pilot study.

During the interview, an interview guide was used to ensure that similar questions were asked across interviewees. The individual interviews were conducted twice, prior to and after the two-week visual diary period. Interviews were conducted in a quiet public place. The purpose of the interview was explained. An individual interview was started with informal conversations to create a comfortable environment. The pre-visual diary interview questions were based on the four different types of body image pictures collected from popular youth male magazines (see Figure 4.1 - 4.4).

Post-visual diary interviews were conducted after the completion of the two-week visual diary period. In the post-visual diary interviews, structured individual interviews were conducted with each participant using a 'photo-feedback' technique (Harper, 2002, 2003). Each student received a printed color copy of his photographs and was asked to comment on the pictures (Mizen, 2005). Printed color copies of the photographs from each student's visual diary were laid out randomly on a table before each participant, allowing him time to see and to react to the images (Azzarito, 2012; Azzarito & Kirk, 2013; Burke, 2005). The interview questions were followed by probing

questions to gather participants' interpretations of their visual diaries, eliciting reflections on and personal narratives about their photo images. Conversations covered the following topics: (a) students' cultural backgrounds and views of their body experiences; (b) students' meaning-making about the photographs included in their visual diaries; (c) descriptions of place and/ or people in photographs and their relevance to their body experiences and practices; and (d) their views on the process of taking photographs, decision-making and using the cameras to express their body experiences.

Interview data management. Interviews were transcribed on the same day of each interview. The interview data were transcribed and saved as a separate file with the interviewee's identification numbers. All text files were saved in a Word document format. All interview data were secured in a locked file cabinet in a locked research laboratory at the University of North Carolina at Greensboro.

Visual Diary

The purpose of students' visual diaries was to understand adolescent males' conceptions of body image (RQ1), the impact of sociocultural influences on their body images (RQ2), and how particular body image conceptions impacted their physical activity preferences (RQ3). Visual diary data were the outcome of the 'combined intentions' of both the researcher and the participants, and their negotiations. Thus, the participants in this study became co-researchers; photographers of their subjective experiences with the opportunity to critically reflect on their embodiments. In other words, the researcher places "the cameras in the hands of those who are experts of their

own lives" (Thompson & Cafri, 2007, p. 26) to enable young people to speak for themselves about their knowledge of their bodies. Therefore, in this research the visual diary captured inspiring stories of adolescent males' ways of 'seeing', talking about, and reflecting on the significance of physical activity in their everyday lives (Azzarito, 2012).

In this study, the participants produced the visual diary data following the pre-visual diary interview. A student-oriented visual diary guide (see Appendix F) was developed to ensure that all students followed the same procedure to produce the visual diary. To develop the visual diary guide, a number of steps were followed. A set of guiding questions was given to the participants to assist them in using disposable cameras. Participants were encouraged to think creatively as they made photo diaries that reflected their conceptions of sport and fitness physical activities. The main guiding questions (e.g., "What do you think is the ideal guy's body?") were included in the instructional sheet for the visual diary creation.

Protocol. A total of 13 participants from the two middle schools were asked to create visual diaries. Each participant was instructed using visual diary guide to take up to 15 photographs using the first disposable camera. Disposable cameras were selected because they were easy to operate and cost effective. Since the return of the second assent and parental permission forms delayed the start of this research phase, participants were asked to return their first camera within four days instead of a week. All the photographs from the first set of camera were printed out and feedback given to the participants about the photographs. After the feedback was given, a second disposable camera was

distributed to each participant and returned again after four days. All the photographs from the second set of cameras were printed and used for post-visual diary interviews. In the process of visual diary creation, a total of five students dropped out because they did not return either one of their disposable cameras.

Visual diary data management. Visual diary data and all photographs the participants took were collected and labeled with the participants' identification numbers. All photographs were transformed to digital files, all faces were blurred, color printed, and secured in a locked file cabinet in a locked research laboratory at the University of North Carolina at Greensboro.

Data Analysis

To answer the following research questions, quantitative and qualitative methods were used to analyze the instrument, the interview and the visual diary, respectively.

(1) How did adolescent males describe their body image?

(2) What sociocultural factors affected the development of adolescent males' body image?

(3) How did particular conceptualizations of body image impact adolescent males' physical activity preferences?

Drive for Muscularity Scale (DMS)

Descriptive statistics were used to analyze the DMS from each school. The item responses for each subscale were added and the total raw score was divided by the

number of items to compute raw scores for the inventory. Then, dependent t-tests were used to compare the DMS scores on the behavior and attitude subscales.

Interviews

The student interviews were systematically evaluated for any recurring themes and patterns using content comparison analysis. The transcriptions were open coded line by line with codes conceptually clustered around category dimensions and properties focused on body image. The interview data were read repeatedly to familiarize the researcher with the contents. Open coding procedure was used iteratively to identify relevant data categories. Codes and emerging categories were constantly compared across events, behaviors, and words. The codes were grouped according to conceptual categories that reflected commonalities among codes. Axial coding was used to generate interpretations of the categories, properties, and dimensions identified during open coding (Corbin & Strauss, 2007). The codes were clustered around points of intersection (Marshall & Rossman, 2011). Open and axial codes entailed uncovering patterns, themes, and categories (Patton, 2002). As a result, central themes were developed in relation to the research questions.

Visual Diary

Visual diary analysis consisted of several steps. First, given that visual ethnography recognizes a reflexive approach (Pink, 2007), the researcher tried to understand the individual and the broader cultural discourse in which the participants made photographs meaningful. Second, inductive and deductive analyses were conducted

examining participants' discourses as represented through visual images using qualitative software (NVivo 10). An increasing number of software packages for qualitative data archiving and analysis now accommodate digital photographs and video. For example, NVivo has been used widely for visual data analysis (Dicks, Mason, Coffey, & Atkinson, 2005). Analyzing photographic data using NVivo 10 allowed the researcher to organize and analyze photographic data thematically. Third, photographs were categorized using post-visual diary interview data to generate an integrated profile.

Triangulation

Triangulation refers to "the act of bringing more than one source of data to bear on a single point" (Marshall & Rossman, 2011, p. 252). Data from different sources, multiple cases, diverse informants, and data-gathering methods can be used to answer the research questions from different points of view. In this study, themes were created across the data sources (DMS, interviews, and visual diary). Findings were discussed relative to contemporary theories and research about body image.

Trustworthiness and Transferability of the Research

Trustworthiness

Trustworthiness is a moral value considered to be a virtue (Lincoln & Guba, 1985). The purpose of trustworthiness in qualitative inquiry is to support the argument that the inquiry's findings are believable and of significance. Historically, concern with trustworthiness or goodness of qualitative research was central to experimental sciences. In the post-modern era, however, a range of methods to conceptualize soundness has

emerged (Marshall & Rossman, 2011). For example, Lincoln and Guba (1985) argued that trustworthiness could be increased using the three alternative constructs: credibility, dependability, and confirmability (p. 301).

Credibility. Credibility of qualitative research depends on "the use of rigorous methods of fieldwork, on the credibility of the researcher, and on the fundamental appreciation of qualitative methods" (Marshall & Rossman, 2011, p. 250). To increase credibility, Lincoln and Guba (1985) urged qualitative researchers to be in the setting for a long time period (i.e., prolonged engagement), share data and interpretations with participants (i.e., member checks), and discuss their emergent findings with critical research colleagues to ensure that analyses are grounded in the data (i.e., peer debriefing).

First, prolonged engagement requires that the investigator be involved with a site long enough to detect and take account of distortions. Lincoln and Guba (1985) argued that distortions could never be overcome unless the inquirer begins as an accepted member of the group. The researcher regularly visited the Allen and Beacon MS to observe physical education classes and interview students as a research assistant in the *Science of Healthful Living* project during the 2012-2013 year. The researcher was familiar with the physical education teachers and the students in the two middle schools through this experience.

Second, member checking is a crucial technique for establishing credibility (Lincoln & Guba, 1985). Member checking is both informal and formal, and it occurs continuously. In this study, the participants were asked to review transcriptions of their

interview data and review visual diary data for clarifications. The participants were asked to assess the extent to which the researcher captured the participants' views reliably and interpreted the events correctly.

Third, peer debriefing is "a process of exposing oneself to a disinterested peer in a manner paralleling an analytic session" (Lincoln & Guba, 1985, p. 308). The task of the debriefer is to ensure that the investigator is as fully aware of his or her posture and process as possible. It is clear that the debriefer must be someone who knows a great deal about both the substantive area of the inquiry and the methodological issues. The researcher consulted with two peer reviewers to control his own bias in interpreting data. The peer reviewers were asked to read data segments and themes and discuss differences with the researcher (Corbin & Strauss, 2007).

Dependability. Dependability refers to "the ways in which the researcher changes in the design created by an increasingly refined understanding of the setting" (Marshall & Rossman, 2011, p. 253). The dependability concept is different from that of reliability. Positive notions of reliability assume an unchanging universe where inquiry could be replicated. This assumption of an unchanging social world is in direct contrast with the qualitative assumption that the social world is always being constructed.

In this study, first, the protocols for each method (e.g., questionnaire, interview, and visual diary) were described in detail (see Data Collection and Management section in Chapter III). Second, the questionnaire, interview questions, and visual diary guide were designed carefully to make sure they were matched with the research questions.

Third, the researcher developed an in-depth understanding of the research participants by meeting with them regularly.

Confirmability. Confirmability refers to "the ways in which qualitative researchers can parallel the traditional concept of objectivity" (Marshall & Rossman, 2011, p. 253). The logic and interpretive nature of qualitative inquiry should be transparent to others thereby increasing the strength of the assertions.

Transferability

Transferability refers to "the ways in which the study's findings can be useful to others in similar situations, with similar research questions" (Marshall & Rossman, 2011, p.252). Generalizing qualitative findings to other populations, and settings is seen as a weakness in the approach by traditional canons (Marshall & Rossman, 2011). According to Marshall and Rossman (2011), however, qualitative researchers can respond to the traditional social science concern for replicability by keeping thorough notes in which each design decision and the rationale behind it are recorded and maintaining all data in a well-organized and retrievable form. These procedures can permit other researchers to inspect their procedures, protocols, and decisions. In this study, notes were taken during the data collection procedure to maintain transference.

CHAPTER IV

EIGHTH GRADE MALE STUDENTS' CONCEPTIONS OF BODY IMAGE AND ITS INFLUENCE ON PHYSICAL ACTIVITY

Abstract

It is well established that young individuals are highly concerned about their physical appearance. The ideal thin and muscular body is commonly portrayed in movies, magazines, and television. Although physical education researchers have examined adolescent females' body image, there has been little research focused on adolescent males' conceptions of body image. Using Foucault's Panopticon as a theoretical framework, the purpose of this study was to investigate the relationship between eighth grade male students' conceptions of body image and physical activity. This study was grounded in a visual methodology and employed a multiple case study design. Major data sources included semi-structured interviews, the Drive for Muscularity Scale, and visual diaries. The data were analyzed using the constant comparative method using NVivo 10 software. To enhance the trustworthiness of the study, triangulation of data sources was conducted. Two categories emerged from the data, conceptions of body image and the influence of body image on physical activity. The conceptions of body image category consisted of three subcategories, "I want to be strong," "I don't want to be too big, but big enough," and "I'm comfortable the way I am." For the category, the influence of

body image on physical activity, there were three subcategories: athletic pursuit, muscularity pursuit, and recreational pursuit. Data supporting the Panopticon were interpreted using the themes of Adonis Complex body dissatisfaction and Dionysian body satisfaction.

Keywords: conceptions of body image; panopticon; physical activity; muscularity

Introduction

Media portray of the ideal thin and muscular body has been extensive. Although it is likely to affect individuals of any age, it may have a profound impact on young individuals considering the developmental changes occurring to them. Young individuals are very sensitive to such ideal body images and tend to select physical activities that reflect and lead to the ideal body image (Oliver & Lalik, 2004).

Physical education researchers have primarily examined adolescent females' body image (Oliver 2001, 2013; Oliver & Hamzeh, 2010; Oliver & Lalik 2001, 2004). For example, Oliver and Lalik (2004) implemented an inquiry-based curriculum to investigate ninth grade females' body image and physical activity. The researchers asked the participating girls to review magazines and select pictures/articles they liked. Then, they asked the girls to sort the selected pictures/articles into beauty-related categories such as fitness, fashion, beauty, and body image products. The researcher also asked the girls to choose which category they found most interesting and to discuss the selected category with others. Within these discussions, girls expressed awareness about diet products and exercise as a form of weight loss. They also were able to recollect details of

their discussions, including the benefits and harms of specific images discussed. It seems that the curriculum was effective at increasing the students' awareness and ability to critique cultural images portrayed in the media.

Although body image research studies have tended to focus largely on females, there has been a growing interest in the conceptions of body image among adolescent males (Thompson & Cafri, 2007). As the muscular male body has become more visible in popular culture, such as movies, magazines, and television, adolescent boys have become more interested in the ideal muscular body. For example, when adolescent males regarded the muscular body as ideal, they chose to practice strength and weight training activities, such as push-ups, sit-ups, and bench press to increase their muscle mass (Hildebrandt, Langenbucher, & Schlundt, 2004; Hobza & Rochlen, 2009; Hobza, Walker, Yakushko, & Peugh, 2007; Ricciardelli & McCabe, 2004).

Masculinity Pursuit

Hauge and Haavind (2011) investigated how adolescent males' masculinities were experienced and constructed. They interviewed 14 students when they were 12 years of age and re-interviewed them yearly until age 15. From the interviews, three themes emerged: technically skilled male body, the strong male body, and the defending male body. First, the technically skilled male body theme indicated that many boys focused on competition and physical skills. For example, they regarded football as technique instead of play and playing football was viewed as a way for boys to constitute an adolescent masculinity. The mastery of competitive sports, such as football, could be

considered as a means for the boys to differentiate masculinities (Gill, 2008; Swain, 2006). Second, the strong male body theme indicated that boys tended to consider a strong male body to be a desirable body. The participants reported that they often liked to bully weaker boys verbally to show off their physical strength. Third, the defending male body theme reiterated that masculinity could defend one's self when exposed to potential threats caused by other groups of boys.

In another example, Ricciardelli, McCabe, and Ridge (2006) investigated the construction of the adolescent male body through sports. They found that the sporting context provided adolescent males with a non-threatening medium for explicitly discussing and comparing their bodies with others. A significant number of adolescent males in this research were eager to discuss their body images when asked within the context of sports. The findings suggested that physical activities were a means for adolescent males to express their masculinity.

The Panopticon of Physical Activity

Foucault defined Panopticon as "the existence of a whole set of techniques and institutions for measuring, supervising, and correcting the abnormal." (Foucault, 1977, p.195). It is a "representation of architecture that consists of a tower at its center with windows looking down on a peripheric building that is divided into separate rooms." (Markula & Pringe, 2006, p.43). The supervisor in the tower observes each room without being noticed by the individuals in the room. Foucault's (1977) concept of the Panopticon has become the leading metaphor for analyzing surveillance.

According to Turner (1997), Foucault's concept of governmentality is positioned within power that operates through social surveillance system. The relationship between power and knowledge was one of Foucault's main concerns. The genealogy of organizations as social machines produced elaborate discourses of information in which human subjects were a necessary part of the material. In *Discipline and Punish* (1977), Foucault examined punishment as a technique for the exercise of power. He argued that schools consisted of hierarchical structures in a way similar to the prisons in Foucault's metaphor. Surveillance mechanism and disciplinary practices embedded in institutions (e.g. schools, hospitals, prisons, and gymnasiums) normalized individuals into useful, docile bodies (Markula & Pringe, 2006).

The disciplinary effect exemplified by the Panopticon is strengthened through the media presentation of the perfect body image. The ideal body image portrayed in the media and fitness industry has been operated as a Panopticon that controls individuals' social surveillance of the body. For example, practicing weight control to achieve the ideal thinness continues to be a common concern for women in developed countries (Markula & Pringle, 2006). In this sense, the fitness industry could be seen as part of the disciplinary Panopticon machine in society similar to the prison, hospital, school, or factory that Foucault identified as inherent in many 18th century disciplinary institutions.

As an extension of Foucault's Panopticon theory, research studies have examined how the sporting body has been disciplined into a docile body in physical education (e.g., Azzarito 2012, 2013; Dworkin & Wachs, 2009; Markula & Pringle, 2006). Because body

image is often socially constructed (Azzarito, 2012, 2013; Oliver, 2001; Oliver & Lalik, 2004, Oliver & Hamzeh, 2010), the ideal body image is related to body shape and size constructed as thinness and fatness.

The purpose of this study was to examine the relationship between eighth grade male students' conceptions of body image and physical activity. This study specifically investigated how eighth grade males describe their body images and how eighth grade males' body images impact their physical activity participation. The results can inform teachers and teacher educators about adolescent males' visual and verbal narratives of body image while also assisting them to understand how adolescent males' body image may impact their physical activity preferences.

Methods

Research Design

This research employed a mixed method design and a visual ethnography format to examine adolescent males' conceptions of body image and its impact on the selection of physical activities. The researcher selected the visual ethnographic case study design because it permitted an in-depth contextualized examination of eighth grade male students' body images. Specifically, the design used the *Drive for Muscularity Scale* (DMS) followed by ethnographic interviews and photo diaries to develop case studies of adolescent males' body images. Adolescent males were interviewed and then given cameras to take photographs of the physical activities in which they were interested. In a

follow-up interview, adolescent males viewed their photographs and responded to interview questions regarding body image.

This study was approved by the school district's and the university's Institutional Review Boards. Student assent and parents' permission forms were obtained prior to completing the DMS and again prior to the interviews and photo diary segments of the study. To maintain confidentiality, pseudonyms are used for all schools and students participating in the study.

Research sampling and participants. Eighth grade male students participating in this research attended Allan and Beacon Middle Schools. Both schools were located in the Spring County School District in the southeastern region in the United States. They were selected for this research based on the schools' demographic data (i.e., average school size, percent of free/reduced meal eligibility, and race/ethnicity) and similar characteristics of physical education classes (see Table 3.1). Demographically, Allan and Beacon Middle Schools were representative of other schools in the Spring County School District. Both Allan and Beacon Middle Schools had similar ethnic populations (approximately one third Black, one third White, and one third Others) with similar free/reduced meal participants (Allan = 51%, Beacon = 58%). In addition, the physical education programs in the two middle schools had similar multi activity-based physical education classes.

The two middle schools enrolled 321 (Allan = 168, Beacon = 153) eighth grade male students during the 2012-2013 academic year. Research sampling followed a series

of steps (see Table 3.2). First, the DMS was administered to 36 (Allan = 11, Beacon = 25) male students who agreed to participate and provided parental permission for this study. A second permission form was distributed to these 36 students' parents requesting permission to conduct an interview with these participants. Thirteen of the original 36 boys agreed to be interviewed and to use cameras provided to create a visual diary of their physical activities. During this phase of the study, five students who had been interviewed did not return their cameras within the time limit and thus only their DMS and first interviews contributed to the data. In sum, eight students (Allan = 4, Beacon = 4) participated in the DMS, the interviews, and visual diary methodologies (see Table 4.1). Among the eight students, there were four white, three Black, and one Hispanic student. The participants' favorite physical activities varied from sport (e.g., baseball, basketball) to fitness (i.e., weight lifting).

Table 4.1

Participants' Profiles in the Two Middle Schools

Name	School	Favorite Physical Activity	Race/Ethnicity
Adam	Allan	Baseball	White
Ben	Allan	Basketball	White
Charles	Allan	Skateboard	Black
Franklin	Allan	Dance	Black
Ethan	Beacon	Weight lifting	White

George	Beacon	Jogging	Hispanic
Hanson	Beacon	Weight lifting	White
James	Beacon	Weight lifting	Black

Note. Schools and students' names are pseudonyms.

Visual ethnography. Visual ethnography has been used in many disciplines including communication, cultural studies, anthropology, and physical education (Azzarito, 2012; Azzarito & Kirk, 2013; Hyde, 2005; Mizen, 2005; Pink, 2007; Prosser, 2007; Yates, 2010). Visual ethnography has provided useful data to researchers for understanding how young people experienced their social environments. For example, Azzarito (2012) conducted visual participatory ethnographic research in the United Kingdom in which 60 middle school students created visual diaries called, *Moving in My World* to express their own bodies. The results showed that students' different cultural backgrounds impacted their perceptions of their bodies and daily lives.

Azzarito argued that images play an important role in reproducing and maintaining established societal cultural practices. She also noted that "Individuals' embodied experiences are increasingly occurring through visual media, and thus the pedagogical aspect of images cannot be underestimated." (Azzarito & Kirk, 2013, p. 4). Therefore, because of the potential of visual diaries to assist young people to understand and describe their body images better, this dissertation study utilized visual ethnography to explore eighth grade male students' body image in depth.

Drive for Muscularity Scale (DMS). The DMS (see Appendix G) is divided into two scales, behavior and attitude, each with seven items. Each item on the DMS is scored on a 6-point Likert-type scale ranging from *always* (1) to *never* (6). The DMS has shown consistently good reliability and construct validity (Litt & Dodge, 2008; McCreary et al., 2004). The DMS has demonstrated alpha reliability estimates ranging from .85 to .91. Cafri and Thompson (2004) reported high 7- to 10- day test-retest correlations: .93 for the entire scale, .84 for the muscularity attitudes, and .96 for the muscularity behaviors (McCreary, 2007). In addition, McCreary et al. (2004) reported the construct validity using a combined sample of male and female high school students. The initial two factor exploratory analysis revealed that attitudes and behaviors formed separate lower-order subscales for the men but not for the women. Results showed that the two subscales were correlated at .43.

Data Collection

Drive for Muscularity Scale (DMS). The DMS was administered to 36 eighth grade male students during their regular physical education class time at the two middle schools. The participants were informed that their responses would remain confidential with no influence on their grades. The students were asked to sit quietly in a personal space in the gymnasium to complete the DMS. It took approximately five to ten minutes to complete all 14 items.

Interviews. Thirteen students, who returned the second parental permission form, were interviewed prior to the visual diary experience and eight who returned their

cameras were interviewed following the creation of their photo diaries. Interviews were conducted in a physical education teacher's office with an open door. The first interview took approximately 10-15 minutes while the second interview took approximately 20-30 minutes. All interviews were recorded and transcribed immediately after each interview.

In the pre-diary interview, students were shown four magazine pictures and asked about the males' body images in the pictures. The pictures were selected from two popular fitness and sports magazines, *Sports illustrated,* and *Muscle,* and each represented a different male body type or shape (i.e., toned and fit body, extremely muscular body, athletic body, and unfit body). Researchers have used magazines to examine adolescents' conceptions of body image. For example, Oliver and Lalik (2004) examined adolescent girls' body image using magazines. They suggested that magazines could reveal aspects of girls' body images that could not have been possible with verbal language. Figure 4.1- 4.4 illustrate the four pictures from the magazines.

Figure 4.1 Athletic body

Figure 4.2 Toned and fit body

Figure 4.3 Fit vs. Unfit body

Figure 4.4 Extremely muscular body

In the post-diary interview, students viewed the photographs in their visual diaries and described their conceptions of body image as depicted in the images. Pre-planned interview questions were used to elicit their conceptions of body image (e.g., "Can you choose two pictures that represent fit and unfit bodies respectively and explain why you chose them?" "How often do you participate in bodybuilding or physical activities?" and "Do you feel any barriers when you participate in physical activity because of your body weight, size, and shape?"). Follow-up questions were used as necessary. In the post-diary interview, students reviewed their photographs and elaborated on the meaning of the events in the photographs.

Visual diary. Following the pre-diary interview, students participated in the two-week photo diary phase of the study. Students received the first disposable camera and were instructed to take 15 photographs of their physical activities during week one. When the first round of cameras was returned at the end of week one, students received the second camera to take 15 additional photographs during week two.

Data Analysis

Drive for Muscularity Scale (DMS). DMS data were de-identified and entered into a SPSS 18.0 database by students' identification number, race/ethnicity, school, teacher name, and class. Scores ranged from *always* (1) to *never* (6). Descriptive statistics were used to analyze the DMS data. Raw scores for the DMS were computed by adding the item responses for each subscale (N = 7). The average DMS scores were summed and ranked from highest to lowest to compare students' drive for muscularity. Total score for each scale ranged of 14 (very high) to 84 (very low). Dependent t-tests were used to compare the DMS scores of behavior with attitude subscales.

Interviews. Students' interview data were captured using a digital recorder to obtain the exact words of the participants and transcribed immediately after interviews (Patton, 2002). The transcriptions were open coded line by line with codes conceptually clustered around category dimensions focused on body image. Data were analyzed using the constant comparative method (Corbin & Strauss, 2007) using NVivo 10 as an aid. The codes were grouped according to conceptual categories that reflected commonalities among codes. Then, axial coding was used to generate interpretations of the categories identified during open coding (Corbin & Strauss, 2007).

Visual diary. Visual diary data consisted of 30 photographs for each participant. Photographs were labeled with the participants' identification numbers and transformed to digital files with blurred faces to maintain participants' anonymity. Visual diary data were matched with the post-interviews to generate an integrated participant profile.

Triangulation of data sources, member checking, and peer debriefing was conducted to increase trustworthiness.

Results

Research examining adolescent males' body image has reported mixed results. For example, while Cash (2004) has suggested they hold fairly positive body image perceptions, Grogan (2008) counters, reporting growing evidence that many adolescent males hold negative perceptions about their body. Thus, it is important to contribute to the literature investigating adolescent boys' body (dis)satisfaction. Body dissatisfaction has been previously examined using the lense of Foucault's Panopticon theory (Azzarito, 2009). Foucault placed the body at the center of his 'genealogical' theoretical framework (Giulianotti, 2005). Foucault (1977) argued that modern physicians 'gazed' upon the body as an object and explained its pathologies through scientific discourse. Foucault's Panopticon suggests that people become embodied objects to be known, administered, normalized, and governed by institutions. In this sense, the social standard for men is focused on the muscular ideal, leading many adolescent males to develop a drive for muscularity. For example, adolescent males internalize the ideal muscular body image portrayed in the media and apply self-surveillance to themselves leading them to seek the ideal body image.

Descriptive Results

For an overall representation of the results, Table 4.2 summarizes the answers of the participants to the DMS, interviews, and visual diary.

Table 4.2

Participants' DMS, Interview, and the Visual Diary Results

Name	DMS		Category		Theme
	Mean (Behavior / Attitude)	**SD**	**Body Image Conception**	**Physical Activity Pursuit**	**Body Satisfaction / Dissatisfaction**
Adam	4.21 (4.71 / 3.71)	1.90	Not too big, but big enough	Athletic Sports	Dissatisfaction
Ben	4.14 (5 / 3.29)	1.40	Not too big, but big enough	Athletic Sports	Dissatisfaction
Charles	4.07 (2.29 / 5.86)	2.31	Big and strong	Muscular Strength	Dissatisfaction
Franklin	5.64 (5.86 / 5.43)	0.61	Comfortable	Recreation	Satisfaction
Ethan	1.79 (2.29 / 1.29)	1.26	Big and strong	Muscular Strength	Dissatisfaction
George	5 (4.86 / 5.14)	0.85	Comfortable	Recreation	Satisfaction
Hanson	1.86 (2.83 / 1.29)	1.36	Big and strong	Muscular Strength	Dissatisfaction
James	3.43 (5.71 / 1.14)	2.35	Not too big, but big enough	Muscular Strength	Dissatisfaction

Note. DMS scores ranged from *always* (1) to *never* (6).

Drive for Muscularity Scale (DMS)

Analysis of the DMS (N = 36) indicated that the average attitude drive for muscularity (M = 3.47; SD = 1.41) was significantly different than the average behavior

drive for muscularity (M = 4.39; SD = 1.15; $t_{35} = 3.36$, $p < .01$). In other words, although participants reported a strong drive to perform muscular strength exercises, most did not perform exercises to actually increase their muscular strength or size as they intended. Descriptive statistical results of the DMS data from 36 students are reported in Table 4.3.

Table 4.3

Descriptive Results for the Drive for Muscularity Scale (DMS)

Category	**Item**	**Mean**	**SD**
Attitude	1. I wish that I were more muscular.	3	1.62
Behavior	2. I lift weights to build up muscle.	3.22	1.77
Behavior	3. I use protein or energy supplements.	4.33	1.94
Behavior	4. I drink weight-gain or protein shakes.	4.92	1.69
Behavior	5. I try to consume as many calories as I can in a day.	4.28	1.32
Behavior	6. I feel guilty if I miss a weight training session.	3.92	1.99
Attitude	7. I think I would feel more confident if I had more muscle mass.	3.42	1.87
Behavior	8. Other people think I work out with weights too often.	5.08	1.48
Attitude	9. I think that I would look better if I gained 10 pounds in bulk.	3.5	1.62
Attitude	10. I think that I would feel stronger if I gained a little more muscle mass.	2.78	1.74
Behavior	11. I think that my weight training schedule interferes with other aspects of my life.	5	1.35
Attitude	12. I think that my arms are not muscular enough.	3.56	1.76

Attitude	13. I think that my chest is not muscular enough.	3.75	1.71
Attitude	14. I think that my legs are not muscular enough.	4.25	1.87
Behavior	Subscale Total	4.39	1.15
Attitude	Subscale Total	3.47	1.41
Total		3.76	1.69

Note. DMS scores ranged from *always* (1) to *never* (6).

On the attitude subscale (M = 3.47; SD = 1.41) in Table 4.3, items 1 (M = 3; SD = 1.62) and 10 (M = 2.78; SD = 1.74) indicated that the all-36 participants generally had a strong drive to be muscular (i.e., item 1) and stronger (i.e., item 10). Specifically, the participants were more dissatisfied with their upper bodies (i.e., item 12; M = 3.56; SD = 1.76 and item 13; M = 3.75; SD = 1.71) when compared to lower bodies (i.e., item 14; M = 4.24; SD = 1.87). However, the participants were not concerned as much about appearance (i.e., item 9; M = 3.5; SD = 1.62) and confidence (i.e., item 7; M = 3.42; SD = 1.87) compared to their drive to be muscular and strong.

On the behavior subscale (M = 4.39; SD = 1.15) in Table 4.3, item 2 (M = 3.22; SD = 1.77) indicated that a few participants occasionally lifted weights to build up muscles. They did not think that they exercised too often (i.e., item 8; M = 5.08; SD = 1.48). In addition, most participants did not report involvement in other muscularity-related behaviors, such as using protein (i.e., item 3; M = 4.33; SD = 1.94), drinking weight-gain shakes (i.e., item 4; M = 4.92; SD = 1.69), or consuming excessive calories (i.e., item 5; M = 4.28; SD = 1.32).

Conceptions of Body Image

The conceptions of body image can be categorized by body satisfaction and body dissatisfaction. The criteria for body satisfaction are often determined by the ideal body image regulated by society. For example, individuals may become dissatisfied with their body when they do not meet the ideal body image using the self-surveillance mechanism. Two categories emerged from the visual diary and interview data: conceptions of body image and influence of body image on physical activity. Within the conceptions of body image category, three subcategories emerged as a result of the data analyses: "I want to be strong," "I do not want to be too big, but big enough," and "I am comfortable the way I am." The first two subcategories reflected body dissatisfaction and the last subcategory reflects body satisfaction.

"I want to be strong" Three participants (i.e., Ethan, Hanson, and Charles) acknowledged that they wanted to be strong. For example, Ethan described an ideal body as a "perfect body":

Interviewer: Are you satisfied with your body?

Ethan: No. Because most people probably want to be a person who has a 'perfect body.' It's like a guy who has six packs and big biceps and chest you know…their muscles are like, you know, biggg! They look very strong. I want to be like that.

According to McCabe and Ricciardelli (2004c), one third of adolescent boys in their study were dissatisfied with their body shape and muscle size. In this study, this appeared to be true for Ethan. He was dissatisfied with his body because he did not have

“six-pack” abs, a “big chest,” or “big muscles.” The “perfect body” made a man “very strong.” He further explained that he worked very hard at weight training to increase his physical strength:

Interviewer: What do you do to gain more muscles?

Ethan: Weight lifting. I do a workout everyday to gain a big body. I lift dumbbells, do push-ups, and sit-ups. I like the bench press the most because it really works and is good for my chest. That’s my favorite thing to do. In this one [he pointed to Figure 4.5], I do push-ups. I do push-ups a lot. It also helps to burn calories.

Figure 4.5 “Push-ups everyday”

Figure 4.6 “Twisted crunch”

Ethan also reported that for him, being a strong man was a way to avoid being bullied by his peers.

Interviewer: Have you seen anyone that bullies others because of their body size and shape?

Ethan: Yes. The person [who] got bullied was weak and very skinny. The bully was kind of buff and strong.

Interviewer: Have you been bullied by others because of your body?

Ethan: Yes. They called me a fat person.

Interviewer: How did you feel?

Ethan: I didn't feel good…felt kind of hurtful.

Interviewer: Have you reported it to any of the teachers at school?

Ethan: No. It was not a big deal.

Interviewer: What do you think you could do to prevent body-related bullying?

Ethan: Help students to gain more muscles. I want to have bigger muscles. I am trying to workout everyday as much as I can.

Ethan's narrative of body image in his everyday life symbolized the notion of a "perfect body." It may have developed, in part, from his experiences of being bullied. Muscularity and athletic physicality often provide a high social status and popular form of masculinity among boys in the school culture (Azzarito, 2009). Male adolescents' views of body image and the pursuit of the ideal body image seem to affect them negatively and result in body dissatisfaction. Similar to Ethan, Hanson also indicated his value for a strong body:

> I want to have strong muscles in my arms like a pro bodybuilder. It makes me feel more confident and it looks better. I want myself to be looking good…and I think it makes me more confident. I want to get more muscles. It's a kind of cool to have a good body shape like six packs.

All 30 photographs in his visual diary showed him performing different lifts at home, such as lifting dumbbells for biceps, triceps, chest, and abdomen (see Figures 4.6 – 4.8). When he was asked to explain his visual diary, looking at the photographs below, Hanson elaborated:

> This is what I do all the time, everyday. I workout everyday. I am trying as hard as I can like until I die. I do like crunches, sit-ups, 6-inches, bicycles, and weight lifting stuff like that.

Figure 4.7 "Biceps workout with dumbbells" Figure 4.8 "Push-ups with dumbbells"

Hanson wanted to be "strong." Weight training was central to Hanson's life. According to Grogan (2008), many men use exercise to change the way they look. Bodybuilding is becoming more popular as a way for men to attain the Westernized muscular body. During the pre-interview, when Hanson chose the magazine picture, he equated obese individuals with laziness and unhappiness. Grogan (2008) explained that adolescents often judge people by their appearances. Individuals farther from the ideal body are more often negatively judged. In the pre-diary interview, he explained:

> I like the guy on the right [the guy after losing weight]. He got skinnier and looks happy. He could probably do more workouts. The guy on the left [the guy before losing weight] is just fatter. He looks lazy.

In another example, Charles indicated that he already achieved muscular body:

> Interviewer: Do you want to be like the guy in this picture [a toned, muscular football player]?
>
> Charles: I could say I'm already kind of like him. I'm pretty in shape and that's actually how you are supposed to be when you workout.
>
> Interviewer: What do you think about this picture [see Figure 4.9]?
>
> Charles: It's kind of cool. I feel like… flying.

His visual diary (see Figure 4.9 – 4.10) showed he possessed very strong power. Charles' case was consistent with previous research that adolescent males continue to become stronger even though they are already strong by societal norms (McCreary, 2011; Ricciardelli & McCabe, 2011).

Figure 4.9 "Fly high!"

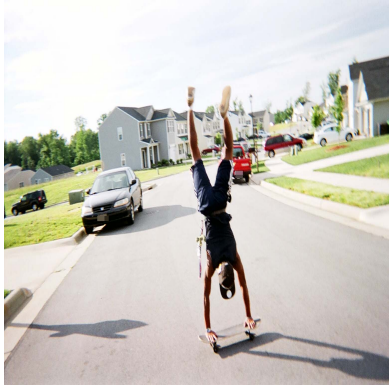

Figure 4.10 "Upside-down on the skateboard"

"I don't want to be too big, but big enough" The second subcategory within the conceptions of body image category was, "I don't want to be too big, but big enough." Three (i.e., Adam, Ben, and James) out of the eight participants acknowledged that they did not want to be too big, but big enough to play sports. During the pre-interview, the students were shown four pictures (see Figure 4.1 - 4.4) from male fitness magazines. The students were asked which they preferred and about the differences among the four pictures. Adam preferred the football player who had a toned muscular body. Adam responded:

> Adam: The guy in this picture [body builder] is extremely muscular and looks overly strong. He looks like… [he] takes steroids or something. I like the football player because he is not overly muscular like the guy on the left [body builder]. The football player looks like…he goes to the gym everyday and works really hard. I think… he is more likely to be diligent than the body builder.
>
> Interviewer: Ok. So, do you want to be like the football player?

Adam: I mean…I do want to gain some weight. But I don't want to gain weight too much. I mean…not too strong, but strong enough to workout…and I'm not overweight.

Adam wanted to have some muscles but he did not want to be overly muscular because it seemed unnatural as if he took steroids. Also he worried about becoming overly muscular. So, he did not participate in heavy weight training like bench press, but did push-ups often (see Figure 4.11). Adam considered that an extremely muscular body represented the characteristic of overconfidence because of muscularity. For that reason, he explained that he did not perform a lot of weight lifting.

Figure 4.11 "Push-ups"

Figure 4.12 "Biceps workout using band"

Ben confirmed Adam's perspective:

Ben: Umm…I would say I like this one [the football player] most because it's in the middle of everybody. He is not too skinny and not too big.

Interviewer: How about the pro bodybuilder?

Ben: He is extremely muscular and doesn't look natural. He is too big, which makes people scary. They gonna think he [the football player] is trying too much to impress people. He looks … like … overconfident. He is stronger than everybody.

As Adam and Ben pointed out, being extremely muscular was considered scary and unnatural. The 30 photographs in Ben's visual diary included only two weight lifting photographs (see Figure 4.12). Most of his photographs were physical activities such as skateboarding and playing basketball. He elaborated that the photograph in Figure 4.12 indicated "me doing a biceps workout using [an exercise] band. I don't do weight lifting a lot. Rather, I like skateboarding. It's fun." In another interview, James responded:

Interviewer: Do you think guys like to have bigger muscles?

James: It depends on how they look. If you are really thin, you want to have some muscles. Then, if somebody is already muscular, you don't want to be too big.

Although the thin and the muscular ideal body seemed to be direct opposites, Grogan (2008) suggested that boys were trying to increase muscles and lose weight at the same time. For example, boys may want to become slim in the waist with 'six pack' abdominal muscles and big upper body muscles. Grogan (2008) pointed out that most men aspired to muscular shapes characterized by well-developed muscles and a slim waist, compared to a thin or fat build. Overall, the second subcategory indicated that Adam, Ben, and James considered the slender, muscular body as their ideal body.

"I'm comfortable the way I am" George and Franklin were satisfied with their bodies. For instance, George indicated:

> I'm comfortable the way I am. I am satisfied with my height because I'm taller than most of my friends and family and I'm still growing. You know, everybody is different. I know that a lot of things are genetic. I can't do anything about genetics.

George acknowledged his body as it was. He did not think that comparing his body with the bodies of others was relevant because he thought everybody was different. Further, Franklin confirmed George's perspective about the ideal body:

> Interviewer: What do you think about the ideal body image?
>
> Franklin: I would say…there is no one ideal body image because everyone has different body types. I'm satisfied with my body. I don't care if someone is fat or not. They have the right to choose what they want to look like.

In general, the participants' responses for their conceptions of body image were varied from "I want to be strong," "I don't want to be too big, but big enough," to "I'm comfortable the way I am." The first two subcategories revealed that hegemonic cultural ideals of muscularity were popular among adolescent boys (Azzarito, 2009; Grogan, 2008). However, the third sub-category (i.e., "I'm comfortable the way I am.") demonstrated that two (i.e., George and Franklin) out of eight males, in this study, were satisfied with their body images. Franklin, in particularly, actually rejected the construct of the "ideal body."

Influence of Body Image on Physical Activity

The ideal body image often is encouraged or discouraged through a certain type of physical activity. For example, socially hygienic fitness regimes of discipline, such as a fitness center, emphasize muscular strength and fitness activities toward the ideal muscular body. Social surveillance systems operates in such a way that individuals 'gaze' at each other bodies to determine whether they satisfy their socially constructed view of the ideal body image (Arbour & Martin Ginis, 2006; Azzarito & Solmon, 2009). It seemed that the participants' conceptions of body image, in this study, were reflected in their physical activity choices. The second major category that emerged from open coding was the influence of body image on physical activity. Three subcategories within the influence of body image on physical activity category focused on the purpose of physical activity as athletic, muscularity, and recreational pursuits.

"Athletic pursuit" The participants' conceptions of ideal body image appeared to impact their physical activity participation. Adam and Ben considered being an athlete/ playing sports as an important factor influencing body image. Adam responded:

> I think being athletic is important because you can actually play sports. If you are athletic, you can get confident. I really like physical education because I can play sports and be physically active. I play a lot of baseball almost everyday. It is fun to play and I'm good at it.

In his visual diary, Adam included popular sports in the United States such as basketball and baseball (see Figure 4.13 – 4.15). He reported practicing baseball "almost

everyday." Figure 4.13 indicated batting practice in the evening. Figure 4.14 and 4.15 showed practicing basketball:

Interviewer: Most of your pictures show you practicing sports alone. Is there any reason for that?

Adam: I'm on the school baseball and basketball teams and I play games with others. But that's not enough. I practice skills by myself, too.

Figure 4.13 "Batting practice"

Figure 4.14 "3-point shooting"

Figure 4.15 "Dunk"

Adam's visual diary represented the notion of a 'sporting body' (Azzarito & Sterling 2010; Shilling, 2008). Azzarito and Sterling (2010) explored ways young people embodied their body-selves in their lives. Two main themes, sporting body-selves and the recreational body-selves emerged. According to the authors, the sporting body is pursued in a highly competitive, sport-driven environment both in and out of school and focuses on sport training, athleticism, and competition with the peers and other teams.

From the interview, Ben also thought that "being athletic" was important because "people always compare each other. So, if you are athletic…you can do a lot of stuff [sports] that other people can't." For Ben, different types of "advanced skills" in skateboarding made him feel "accomplished" (see Figure 4.16 – 4.17).

Figure 4.16 "Feel good on skateboard"

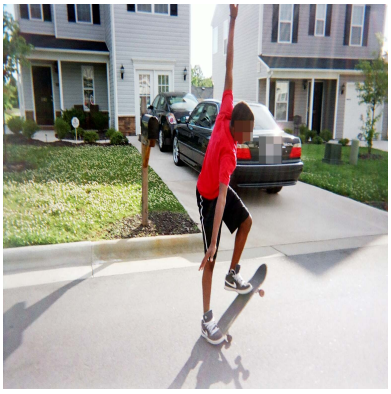

Figure 4.17 "Tricks on skateboard"

Among the 36 respondents who completed the DMS inventory, Adam (M = 4.21; SD = 1.9) and Ben (M = 4.14; SD = 1.4) scored higher than average (M = 3.76; SD =

1.69) indicating a low to medium drive for muscularity. The DMS results were consistent with their conceptions of body image (i.e., "I don't want to be too big, but big enough.") and its influence on physical activity preferences (i.e., "athletic pursuit").

"Muscularity pursuit" Four participants (i.e., Ethan, Hanson, Charles, and James) explained that they pursued muscularity through physical activity. As consistent with the "I want to be strong" category, Ethan and Hanson pursued muscularity. For example, their visual diaries (see Figure 4.1 - 4.4) showed that they worked hard on weight training to gain more muscle mass. In another example, 23 out of 30 photographs taken by Charles represented his effort to become more muscular (see Figure 4.18 – 4.19).

Figure 4.18 "Pose with big biceps"

Figure 4.19 "One handed push-ups"

Charles also addressed his effort during the interview:

> I am trying to do weight lifting as hard as I can. I like one-handed push-ups. I do 15 on the right hand and 10 on the left hand. I do weight lifting

> and there is a wrestling practice like push-ups, sit-ups, and cardio vascular [activities].

Lastly, James addressed his interests in a muscular body:

> I want to show off to others how tough I am. I want to have bigger muscles in my chest and arms like him [the weight lifter in the magazine]. He is like legendary.

When James was asked to explain the reason, he said, "I'm kind of skinny." However, he showed off his body in his visual diary (see Figure 4.20 – 4.21).

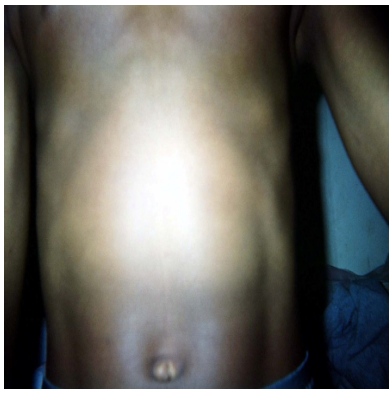

Figure 4.20 "I want six packs"

Figure 4.21 "My biceps"

The previous research on the DMS found that there was a negative correlation between self-esteem and depression in adolescent boys, but not in adolescent girls (McCreary & Sasse, 2000). McCreary (2007) explained that people with a higher drive for muscularity are also at greater risk for abusing anabolic steroids and other supplements that purport an enhancement in muscularity.

The DMS analysis in this study also confirmed that they pursued muscularity. For example, Ethan's (M = 1.79; SD = 1.29) and Hanson's (M = 1.86; SD = 1.29) DMS scores were the two lowest scores among all 36 respondents, indicating they had very strong drives for muscularity in both behavior and attitude (see Table 4.2). In addition, the Charles' (M = 4.07; SD = 2.31) and James' (M = 3.43; SD = 1.14) DMS scores fell in the medium range, indicating a moderate drive for muscularity.

However, when divided by behavior and attitude subscales, Charles (behavior M_b = 2.29; attitude M_a = 5.86) and James (M_b = 5.71; M_a = 1.14) had opposite scores. Charles had a very low score on the behavior subscale, indicating a strong drive for muscularity behavior and a very high score on the attitude subscale, indicating a weak attitude drive for muscularity. His interview data supported a weak drive for muscularity attitude. Because he felt that he already had achieved a muscular body, he did not have a strong drive for muscularity attitude. On the other hand, James had very high score on the behavior subscale, indicating a weak drive for muscularity behavior and a very low score on the attitude subscale, indicating a strong drive for muscularity attitude. Consistent with his DMS scores, James reported in his interview that he wanted to show off but he thought he was weak.

"Recreational pursuit" Franklin and George primarily pursued recreational physical activities based on their body images. In his visual diary, Franklin took photographs of his neighbors (see Figure 4.22 – 4.23).

Figure 4.22 "Walk around neighborhood"

Figure 4.23 "Dancing on the street"

Franklin elaborated on his photographs during the interview:

> I was walking around the neighborhood, and I took that picture [Figure 4.22]. It looks like… two families walking together with kids on the bike and scooter. It is always fun to walk together. For this one [Figure 4.23], I'm dancing on the street. I like to dance and I always dance whenever possible.

George also took photographs of recreational physical activities around him (see Figure 4.24 – 4.25). In Figure 4.24, he took a photograph of his mother mowing the lawn. Similar to Franklin's walking around neighborhood photograph (see Figure 4.22), Figure 4.24 showed his family and neighbors' everyday lives. Figure 4.25 also pictured his brother playing on the trampoline in his backyard. Franklin and George did not pursue either athletic pursuit or muscularity, considering physical activities, themselves, as a way to satisfy their enjoyment needs. The DMS analysis also confirmed that neither pursued muscular strength or fitness activities. For example, Franklin's (M = 5.64; SD = 0.61) and George's (M = 5; SD = 0.85) DMS scores were second and sixth highest scores

among all 36 respondents, indicating they had very weak drives for muscularity in both behavior and attitude (see Table 4.2). Their conceptions of body image (i.e., "I am comfortable the way I am.") also confirmed their recreational pursuit.

Figure 4.24 "My mom mows the lawn"

Figure 4.25 "My brother playing on the trampoline"

The participants who were in the recreational pursuit category seemed to pursue activities they considered to be enjoyable. Wellard (2012) found that the bodily pleasure, fun, and enjoyment were important factors in sport participation. Bodily pleasure can be a significant reason for a continued participation in physical activity.

In summary, this research found there was a connection between the boys' perceptions of their body image and its impact on their physical activity choices. For example, Adam and Ben indicated their desire to be big enough but not overly muscular and aspired to be athletic and participate in sports. In their visual diaries, Adam played sports, such as basketball and baseball, while Ben enjoyed skateboarding. In another example, Charles, Ethan and Hanson who "wanted to be strong" used weight lifting to

pursue muscularity, while Franklin and George who were "comfortable with their body image," pursued recreational physical activities, such as walking around the neighborhood.

Discussion

Two themes, Adonis Complex body dissatisfaction and Dionysian body satisfaction, emerged from the data. Adonis Complex is a social phenomenon in which people become dissatisfied after comparisons to the ideal body image formed by society. The way individuals construct their perceptions of body is often controlled by social norms. Social norms appear to operate as a system of surveillance system to manage and control ideal perceptions of body image (Azzarito & Solmon, 2009). It is often impossible for adolescent males to achieve the ideal muscular body image, resulting in body dissatisfaction (Blond, 2008). One's body dissatisfaction is likely to result in negative behaviors, such as excessive weight lifting or taking steroids (Adams, Turner, & Bucks, 2005; McCreary, 2011). The Adonis Complex syndrome can be a useful theme to better understand some adolescent males' body image distortions and to minimize potential negative consequences, such as bullying, lowering of self-esteem, and the unhealthy use of supplementing substances.

Conversely, body satisfaction is closely related to the Dionysian ideal. The Dionysian ideal seeks to affirm life by seeking constant pleasure and embracing the world as it is (Carfi, Strauss, & Thompson, 2002). The Dionysian body satisfaction theme is often expressed in bodily pleasure through physical activity. In physical activity, the

way an individual develops a sense of his or her own bodily pleasure and happiness has received less emphasis (Wellard, 2012; Wright, 2004). Wellard (2012) suggests that participation in sports and physical activity should be a means to express intrinsic bodily happiness and pleasure. These two contrasting themes and their consequences for males' perceptions of body image will be discussed in detail in the following sections.

Adonis Complex Body Dissatisfaction

Pope and his colleagues (2000) described the Adonis Complex as "an array of usually secret, but surprisingly common, body image concerns of boys and men." (Pope, Phillips, & Olivardia, 2000, p.6). In Greek mythology, Adonis was half man and half god, the ultimate in masculine beauty. The Adonis Complex body dissatisfaction theme is supported by the "I want to be strong," "I don't want to be too big, but big enough," "muscularity pursuit," and "athletic pursuit" subcategories. Several examples of body dissatisfaction expressed by the boys in this study supported the Adonis Complex. Six participants (i.e., Ethan, Hanson, Adam, Ben, Charles, and James) acknowledged they were dissatisfied with their bodies. For example, Ethan and Hanson explained that they wanted to be stronger and pursued a more muscular body. To achieve the ideal muscular body, Ethan and Hanson were driven to repetitive behaviors such as frequent weightlifting. The need to be extremely muscular can potentially result in negative emotional and physical development (O'Dea, 2004; Olivardia, 2001, 2002). In fact, muscularity disturbances in body image have been suggested to produce similar results to that seen in anorexia. Individuals with anorexia perceive themselves as fatter than they

truly are, whereas men with Adonis Complex see themselves as smaller or weaker than others (Bergeron & Tylka, 2007).

Body dissatisfaction is often associated with body weight. Adolescent males feel dissatisfied with their bodies when their body weight does not meet the ideal body criterion (Blashill, 2011; Galioto & Crowther, 2013). Adam, Ben, and James acknowledged that they did not want to be too big, but big enough. They were focused on losing fat. They considered the ideal body image as a thin and muscular body. Similarly, Rolland, Farnill, and Griffiths (1997) found that approximately one-quarter of males 8 to 12 years of age made at least one attempt to lose weight and spent significant time wishing they had a flat stomach. It seems that adolescent males' body dissatisfaction is a common phenomenon. Muscle dysmorphia, an excessive preoccupation with perceived flaws in physical appearance, is potentially an extreme example of the Adonis Complex (Olivardia, 2001). Individuals' dissatisfaction with their body associated with an unrealistic body image may result in exercising excessively to produce a bigger chest or a flatter stomach.

Dworkin and Wachs (2009) indicated that it is common for adolescent males to have an unrealistic view of their body image. The authors also indicated that adolescent males with muscle dysmorphia often felt ashamed, especially when they perceived themselves as being too small, even when they were actually muscular by cultural standards. In this study, three participants, Ethan, Hanson, and Adam reported feeling ashamed of their body and afraid of becoming obese.

Adolescent males' conceptions of distorted body image often lead to physically aggressive behaviors, such as bullying others who do not fit the ideal body image (Gladstone, Parker, & Malhi, 2006; Klomek, Marrocco, & Kleinman, 2007; O'Moor & Kirkham, 2001). The findings from this study confirmed the use of bullying behaviors to marginalize other students, who were obese or lacked fitness or physical activity skills (Swearer & Doll, 2001; Swearer, Collins, Radliff, & Wang, 2012). For example, Ethan expressed fear of being bullied. He shared personal and hurtful experiences of being bullied and thought that the bullying incidents were predicated by his "inadequate" body size and shape. He believed that gaining more muscle could help him avoid being bullied and could assist other students prevent bullying behaviors. The Adonis Complex can affect adolescent males' body images and their physical activities, producing body dissatisfaction.

Dionysian Body Satisfaction

In Greek mythology, Apollo and Dionysus were both sons of Zeus. The Apollonian ideal was based on individuality and represented reasoning and logical thinking. By contrast, the Dionysian ideal was based on chaos, emotions, and instinct. The Dionysian ideal is closely related to one's satisfaction. It is Nietzsche who fully established the tension and dialectic between the Dionysian and Apollonian ideals to interpret human characteristics for ancient history and contemporary human culture (George, 2013; Stuckrad, 2010).

The Dionysian body satisfaction theme is supported by the "I'm comfortable the way I am" and the "recreational pursuit" subcategories. Two participants, Franklin and George, acknowledged acceptance of their bodies as they were and selected recreational physical activities without muscularity or athletic pursuits. For example, they expressed their satisfaction and comfort with their bodies and did not compare their bodies with others. Their conceptions of body image appeared to impact their physical activity behavior. Franklin and George pursued recreational activities (e.g., walking around neighborhood) rather than competitive sports or muscular strength activities. These two participants' conceptions of body images reflected the Dionysian ideal (Carfi et al., 2002).

Wright (2004) argued that enjoying bodily pleasure through physical activity provides invaluable experience. She pointed out that intrinsically hedonic values in physical activity play a fundamental part in school physical education programs. She elaborated that physical education should be seen as enjoyment. It is important to take into consideration the ways in which individuals create understandings of their own bodies regarding pleasure. Wellard (2012) emphasized that physical education teachers should help young people appreciate their body as they are and encourage them to participate in physical activities with happiness. The Dionysian body satisfaction theme implies that appreciating the body as it is, not comparing their bodies with others', and performing physical activities with pleasure are critical in young people's lives. Adolescent males need to find satisfaction in their appearance. Physical education

teachers can create welcoming environments that accept of a range of body sizes and shapes, increasing perceptions of safety for everyone

Conclusions

This study used Foucault's Panopticon as a theoretical lens to examine the conceptions of eighth grade male students' body image and their influences on physical activity. The Adonis Complex body dissatisfaction theme is grounded on self-surveillance mechanisms. For example, adolescent males are more likely to be dissatisfied with their body when they self-evaluate their body based on the unrealistic muscular body image regulated by contemporary Western society. On the other hand, the Dionysian body satisfaction theme revealed that adolescent boys who are satisfied with their body look for enjoyment in the activities they choose.

Foucault's Panopticon theory provides an insightful lens to examine adolescent males' conceptions of body image and its meaning for their physical activity choices. Societal surveillance may play an important role in adolescent males' conceptions of body image. It can create an ideal body image that is unrealistic and unattainable to the majority of adolescent males. Consequently, individuals who do not meet the ideal body image are more likely to be dissatisfied with their bodies. Further, body dissatisfaction may be associated with bullying behavior.

However, this research was inconclusive about why some participants seemed to be dissatisfied (Adonis complex) while others were satisfied with their conceptions of body image (Dionysian body). It is possible that sociocultural backgrounds and gym

culture play a significant role in how satisfied adolescents are with their conceptions of their body image. For example, socio-economic status could facilitate higher involvement in recreational activities and more positive conceptions of body image among adolescent males from wealthier backgrounds. Therefore, race/ethnicity, social class, and gym culture among adolescent males should be considered as important variables when examining conceptions of body image and its impact on physical activity behaviors.

CHAPTER V

SOCIOCULTURAL INFLUENCES ON MIDDLE SCHOOL MALE STUDENTS' BODY IMAGE IN PHYSICAL ACTIVITY

Abstract

The purpose of this study was to examine ways in which adolescent males constructed their body image through sociocultural influences in physical activity. Interviews and visual diaries were collected from eight eighth grade males in two middle schools located in the southeastern United States. The data were inductively and deductively analyzed using constant comparison. From the data analysis, three categories emerged: media influence, significant others, and indifference to sociocultural influences. The data were interpreted using three themes of hidden acceptance, lack of concern, and critical awareness. The results showed that sociocultural influences (e.g., media, parents, and peers) appear to impact adolescent males' conceptions of body image and their physical activity preferences.

Keywords: Body image; Media; Parents; Peers; Body Perfection; Social Comparison

Introduction

The ideal muscular male body has become more visible in the popular media in western countries since the 1990s (Grogan, 2008) and is commonly featured in popular magazines and television commercials (Leit, Gray, & Pope, 2002; Pope et al., 2000).

Further, recent studies have shown that media images have changed men's perceptions of their own bodies due to frequent exposure to ideal body images (Grogan, 2008; McCabe & Ricciardelli, 2004b, 2004c; Pope et al., 2000). Young adolescent males seem to be easily influenced by body image portrayal in the media because they are not mature enough to receive media message with critical awareness.

Previous research examining media portrayals of the ideal adolescent male body image suggests that media impact can positively or negatively affect males' constructions of body image (Sabiston & Munroe-Chandler, 2010). For example, when adolescent males view media ideals emphasizing performance attributes, these images contribute to positive self-evaluations, whereas viewing media ideals emphasizing aesthetic attributes contribute to negative self-evaluations (Farguhar & Wasylkiw, 2007). The proliferation of the ideal muscular body in the media also has been demonstrated to contribute to poor body image among adolescent males (Agliata & Tantleff-Dunn, 2004; Farquhar & Wasylkiw, 2007; Wykes & Gunter, 2005).

In addition to the media, significant others, such as parents and peers, also influence adolescent males' perception of body image (Ricciardelli & McCabe, 2001, 2003b, 2004; Ricciardelli et al., 2006). For example, Ricciardelli and McCabe (2001) reported that adolescent males' drive for muscularity is a product of parental pressure to achieve the muscular ideal. Similarly, adolescent males' perceptions of body image often are affected by interactions with their peers (Tantleff-Dunn & Gokee, 2002). McCreary

and Sasse (2000) concluded that peer popularity was a main reason why adolescent males tried to increase muscle mass.

Additionally, adolescent males' conceptions of male body image may affect their physical activity preferences. For example, previous studies have shown that perceived pressure to increase muscle size from parents and peers is associated with the frequency of muscular strength and fitness activities performed by adolescent boys (Ricciardelli & McCabe, 2004; Smolak et al., 2005).

Theoretical Background

Physical education researchers have used social comparison (Festinger, 1954) and body perfection code theories (Bernstein, 2000) to explain conceptions of body image during adolescence (Dworkin & Wachs, 2009; Evans et al., 2008; Markula & Pringle, 2006).

Social Comparison Theory

Social comparison theory (Festinger, 1954) proposes that individuals have a drive to evaluate themselves by comparing themselves with others. Based on the theory, two types of social comparisons are possible. Upward social comparison occurs when individuals compare themselves with someone whom they believe to be superior, while downward social comparison occurs when individuals compare themselves with someone they perceive as inferior. Festinger (1954) argued that upward comparison was associated with body dissatisfaction, whereas downward comparison was associated with body satisfaction.

Body dissatisfaction refers to dysfunctional, negative beliefs and feelings about one's weight and shape (Gray & Ginsberg, 2007) and often occurs when social comparison is unfavorable (Tantleff-Dunn & Gokee, 2002). Researchers found that exposure to the ideal body portrayed in the media is related to greater levels of adolescents' body dissatisfaction (Groesz et al., 2002; Leahey & Crowther, 2008; Morrison, Kalin, & Morrison, 2004). For example, Morrison and colleagues (2004) used social comparison theory as a theoretical framework to examine the frequency at which adolescent males and females are exposed to ideal body images in magazines and television programs. The authors concluded that, the more participants engaged in social comparisons, the more negative their perception of their body image became. In fact, several other studies also found body dissatisfaction to be positively associated with social comparisons among adolescents irrespective of gender (Adams, et al., 2005; Arbour & Martin Ginis, 2006; Morrison, Morrison, Hopkins, & Rowan, 2004).

Myers and Crowther (2009) examined the relationship between social comparison and body dissatisfaction using meta-analytic review. In addition to the association between body dissatisfaction and social comparison, they also found that appearance-based and physical performance-based comparisons were related to a drive for muscularity in men and boys. Drive for muscularity was associated with the engagement in more dangerous physical activity practices, including excessive weight lifting or use of anabolic steroids to achieve the muscular ideal body.

Body Perfection Code

Bernstein used the term, body perfection code, to express particular representations of health and body. Body perfection code is a form of educational code used to understand how societies value particular body images. According to Bernstein (2000), people commonly judge each other based on socially defined ideal body weight, size, and shape. Grounded on body perfection code theory, Rich and Evans (2008) interviewed 40 adolescent females who had eating disorders to examine their representations of weight and health. They found that participants had a narrow definition of health that was exclusively related to weight loss. Participants also argued that to be healthy, it was necessary to have the ideal body. They explained that to achieve the ideal body, stringent sociocultural norms on what to eat, how to exercise, and how much to weigh should be followed.

Body perfection code is closely related to the regulation of the body in society. Individuals become objects of surveillance (Foucault, 1977) in which the human body is regulated to fit the obesity discourse (Campos, 2004; Caprio & Genel, 2005; Gard & Wright, 2005). According to Gard and Wright (2005), obesity discourse assumes relationships with childhood inactivity, young people's diets, and claims about rapid rises in the levels of obesity. Obesity discourse places young people under constant surveillance and presses them toward monitoring their bodies. In such a regulated society, individuals can be dehumanized when they are constantly assessed and constructed based on the demands of body perfection code (Evans et al., 2008).

Considering social comparison and body perfection theories, the purpose of this study was to examine sociocultural influences on adolescent males' body image in physical activity. This study used a qualitative research design and included the use of interview and visual diary methodologies to answer two research questions: (1) What were the sociocultural influences on adolescent males' body image? and (2) How did sociocultural influences on body image impact their physical activity preferences?

Methods

Participants and Settings

The participants in this study were eight eighth grade males in two middle schools (i.e., Allan and Beacon) in the southeastern region of the United States. In each school, four students were selected for the interviews and the visual diary. All names are pseudonyms to maintain confidentiality.

Selection of middle schools was based on (a) the researcher's previous research experiences in Allan and Beacon middle schools and (b) characteristics of the physical education program in these two schools. As a research assistant in a large-scale middle school research study, the researcher had observed the physical education classes and interviewed students in both middle schools. Students in the two middle schools were approximately equally divided among black, white, and other minorities (see Table 3.1). Further, eighth grade students (see Table 4.1) were chosen because (a) they were more likely to have been influenced by popular media and peers than younger middle school students, and (b) they possessed the cognitive maturity to understand visual diary

methodology. Focus was placed on male students due to the limited availability of data explaining how sociocultural influences on body image impacted adolescent males' physical activity preferences.

The researcher followed several steps before collecting data. First, approvals were obtained from both the University's Office of Research Integrity and the School District's Institutional Review Board (see Appendix A). Second, support letters were obtained for the study from all physical education teachers and both schools principals. Third, eighth grade physical education class enrollment lists for the 2012-2013 school years were obtained from the participating teachers. The purpose of the study was explained to the students and parents in invitation letters (see Appendix D and E). Lastly, signed student assent and parental permission forms were obtained (see Appendix B and C).

Data Collection

The data collection procedures followed a four-step sequence of events. Participants were interviewed twice before and once after the completion of the visual diary. The first interview was used to collect pilot information. Once interview protocols were confirmed, pre-visual diary interviews were conducted. Students then took pictures for their visual diaries and participated in a post-visual diary interview. A more detailed explanation of procedures is provided below.

Interviews. Two semi-structured interviews (i.e., pre-visual diary and post-visual diary) were conducted with eight participants. All interviews were conducted in a quiet place (e.g., physical education teacher's office) during regular physical education classes.

The interviews were recorded using a digital recorder to facilitate accurate transcription of interview data. The interview questions were designed carefully to match the research questions (see Appendix H and I). In addition, an attempt was made to use language that was clear and engaging to adolescent participants (e.g., "How do guys your age feel about the way they look?"). All interviews started with an informal conversation to create a comfortable environment.

The interview was piloted with four participants prior to data collection to assess and revise interview questions. The pre-visual diary interview focused on sociocultural influences on body image using different body pictures from popular male teenager magazines (e.g., extremely muscular bodybuilder and toned muscular pro football player). Following the visual diary, the post-visual diary interview was conducted to examine the sociocultural impacts on participants' views of physical activities portrayed in the photographs they took. In the post visual-diary interview, participants were asked to describe their views of sociocultural influences on body image and physical activity. Participants reviewed their transcribed interviews to increase accuracy. Interview data later were matched to the participants' visual diary data (photographs) using NVivo 10 software.

Visual diary. The visual diary is an effective tool to address young people's opinions about sensitive issues such as body image (Azzarito, 2010b, 2012; Azzarito & Kirk, 2013; Azzarito & Sterling, 2010;). The purpose of student visual diaries in this study was to examine the impact of sociocultural influences on adolescent males' body

images and physical activity preferences. A student-oriented visual diary guide (see Appendix F) was distributed and explained to the participants to ensure that all students followed the same procedures. The visual diary guide provided the following information: (a) guiding questions to assist participants in using disposable cameras; (b) directions explaining how to take physical activity photographs; and (c) a reminder of the main guiding questions (e.g., "What do you think is the ideal guy's body?").

Two disposable cameras were distributed to the participants, during the first and second week, respectively, of data collection. During week one, students were asked to take 15 photographs of physical activity that they thought might be influenced by sociocultural factors, such as media, parents, or peers. At the end of the first week, students returned their cameras, and feedback about the photographs was given to each participant. For example, instructions about visual diary guide were emphasized to some participants took the similar pictures several times. During the second week of data collection, the second disposable cameras were distributed to the participants, and they were asked to take an additional 15 photographs. All photographs were labeled with participants' identification numbers, faces were blanked, and the pictures were transformed to digital files and color printed. The second interview was then conducted to permit the participants to explain their photographs. The participants were asked to name all photographs to reflect their interpretations of the activity and the sociocultural influence they had photographed.

Data Analysis

All transcribed interview data were compared to the original digital recording to increase accuracy. The researcher read the transcription several times to become familiar with the content and context (Corbin & Strauss, 2007). The titles each participant had assigned to each photograph were used to identify open codes and common categories. Categories reflected salient descriptors of events, actions, and behaviors that boys identified in their photographs. Following the open coding of interviews and photographs, axial coding was used to generate interpretive themes. Data trustworthiness was enhanced by combining interview and visual diary data (Lincoln & Guba, 1985).

Patterns, categories, and themes were inductively developed using a bottom up process organizing data into increasingly more abstract units of information until the researcher established a comprehensive set of themes (Cresswell, 2013). Then, deductively, the researcher reviewed the data to identify evidence to support each theme.

Peer debriefing was conducted to clarify the open and axial coding. Lincoln and Guba (1985) defined peer debriefing as a "process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (p. 308). In this study, two peer researchers were asked to review the open and axial codes and provide comments to minimize bias in interpretation of open and axial coding.

Results

Researchers have used a sociocultural perspective as one of the dominant theoretical frameworks for understanding body image (Tiggemann, 2011). Tiggemann contended that there are four common features in the sociocultural perspective on body image research:

> The sociocultural model holds that (1) there exist societal ideals of beauty (within a particular culture) that are (2) transmitted via a variety of sociocultural channels. These ideals are then (3) internalized by individuals, so that (4) satisfaction (or dissatisfaction) with appearance will be a function of the extent to which individuals do (or do not) meet the ideal prescription (Tiggemann, 2011, p. 13).

Data analysis revealed three overt categories: media influence, significant others, and indifference to sociocultural influences. Within the media influence category, there were two subcategories: media belief and media disbelief. The significant others category also reflected two subcategories: parent influence and peer influence. Table 5.1 summarizes the results of the interviews and the visual diary data for the participants.

Table 5.1

Participants' Interview and the Visual Diary Results

Name	**Category**			**Theme**
	Media Influence	**Significant Others**	**Indifference to Sociocultural Influences**	
Adam	Media belief	Parent influence	---	Hidden acceptance

Ben	---	---	Indifference	Lack of concern
Charles	Media belief	Peer influence	---	Hidden acceptance
Franklin	---	---	Indifference	Lack of concern
Ethan	Media belief	Parent and peer influences	---	Hidden acceptance
George	---	---	Indifference	Lack of concern
Hanson	Media disbelief	Parent influence	---	Critical awareness
James	---	Parent and peer influences	---	Hidden acceptance

Note. The categories of "Influences on Media and Significant Others" and "Indifference to Sociocultural Influences" were mutually exclusive.

Media Influence

The media is a pervasive channel transmitting the societal ideal male body that is often described as a muscular V-shaped body with well-developed upper body, flat but muscular stomach, and narrow waist (Tiggemann, 2011). Media commercials entice males to have a desire for the ideal muscular body. Among the four participants (i.e., Ethan, Adam, Charles, and Hanson) who revealed information about the media influence category, Ethan, Adam, and Charles provided information for the media belief subcategory, and Hanson provided information for the media disbelief subcategory.

Media belief. Media belief refers to uncritical acceptance of messages portrayed in the media. Body images portrayed in the media play a significant role during adolescence (Farquhar & Wasylkiw, 2007; Ricciardelli & McCabe, 2011; Wykes & Gunter, 2005). Most adolescents accept media messages uncritically (Agliata & Tantleff-Dunn, 2004), and so they may be particularly susceptible to the influence of the media.

Ethan, in this study, explained that television commercials were powerful in his life (see Figure 5.1 – 5.2). He responded:

Interviewer:	Do you think that TV commercials affect your regard for your body?
Ethan:	Yes. You can see six packs and sweet muscles on TV. They [television commercials] sometimes tell you how to build your muscles in a… fast way. So, I try to do what they say.
Interviewer:	Can you give me some examples?
Ethan:	Uhm… I bought 'Perfect Fitness' equipment. I can do a bunch of weight training with this at home, you know, chest, shoulder, and abs. You feel calories burning right away. … I want to be stronger and bigger. I can have more control so they [my friends] don't wrestle with me. Sometimes my friends wrestle each other.
Interviewer:	Do you envy the muscular guy as shown in TV commercial?
Ethan:	Yes. I want to have the same [muscular] result like him [the muscular guy]. I want to look better.

Figure 5.1 "TV shows ideal body"

Figure 5.2 "I want to be strong like the guy in TV"

Ethan seemed to identify with the ideal muscular body portrayed in the media. The drive for the ideal muscular body often leads to commercial consumption, such as purchasing fitness equipment. In another example of the media belief subcategory, Adam explained the media's influence on professional sports industry (see Figure 5.3 – 5.4):

Adam:	I think people enjoy watching baseball and basketball on TV. It's more fun than watching softball or somebody doing push-ups or something. It's a huge market and pro players get a lot of money.
Interviewer:	Is that [money] part of the reason why you want to be professional baseball player?
Adam:	Oh, sure. I want to be a famous pro baseball player and get money.

Figure 5.3 "Baseball game"

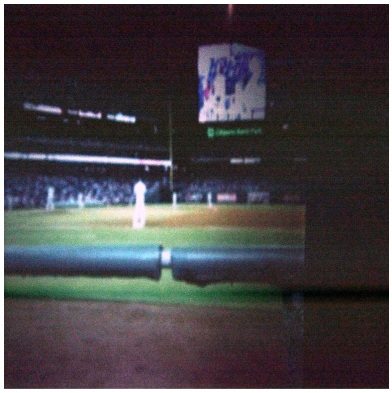

Figure 5.4 "Dreaming of pro baseball player"

Adam idolized a professional baseball player. He noted that professional baseball industry is a huge market that attracts people's attention. He wanted to be a hero like the professional baseball player in order "to be famous and get money." Charles also confirmed Adam's belief in the stories he heard and saw in the media. He responded, "A lot of skateboard markets sell shoes, energy drinks, and a fancy skateboard. There are a lot of skaters, signature shoes, and competition pictures in the magazine such as 'Skatemag.'"

Magazines that cater to outdoor adventure, sports, and cars are another influential media channel for adolescent males (Levine & Chapman, 2011). For example, Charles received updated skateboard industry product information regularly through reading *Skatemag* magazine. He included many skateboarding photographs (see Figure 5.5 – 5.6) in his diary and frequently mentioned *Skatemag* when he explained each photograph. Charles believed that *Skatemag* let him catch up with new skateboard products, trends, and learn more advanced skateboarding skills through the magazine.

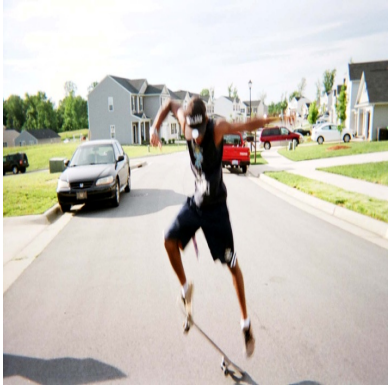

Figure 5.5 "Kickflip"

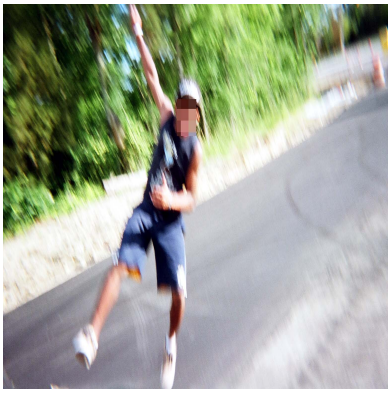

Figure 5.6 "Practicing skateboard skills"

Charles' interview and visual diary data confirmed his belief in the accuracy of media messages. For Ethan, Adam, and Charles, TV and magazines were cultural channels that influenced their perceptions about the fitness and sport industries and impacted their physical activity behaviors.

Media disbelief. Media disbelief refers to one's skepticism over messages portrayed in the media (Hargreaves & Tiggemann, 2006). Hargreaves and Tiggermann (2006) examined high school adolescent males' (N = 28) conceptions of body image. A semi-structured focus group methodology was used. Each focus group lasted approximately 50 minutes. The results revealed that most adolescent males indicated a general desire to be toned, muscular, and strong, although they were motivated by a variety of reasons (e.g. performance in sport, self-defense, and being attractive to girls). However, the researcher also reported that a small number of boys addressed higher levels of body image concern against the media and attempted to modify their appearance.

Although it seems common for most adolescents to accept the messages portrayed in the media without critically thinking about the ramifications and hidden intentions of the messages. Hanson seemed critical of the media. Unlike, Ethan and Adam, Hanson was skeptical of the accuracy of media claims in advertisements. He criticized television commercials advertising unhealthy foods demonstrating his awareness that not all commercials are truthful and beneficial for health:

Interviewer: Do you think that TV commercials affect how you look at your body?

Hanson: Yes. TV commercials show greasy food that makes people fat such as the pictures [Figure 5.7 – 5.8]. They [TV commercials] show soda and all kinds of stuffs.

Figure 5.7 "Cup cakes"

Figure 5.8 "Greasing food"

Hanson was critical of food commercials portrayed in television. Hanson pointed out that greasy food advertised in the media contributed to obesity and he was particularly suspicious about the quality of food advertised in the media. A large number

of photographs (see Figure 5.7 and 5.8) in his visual diary confirmed that he received food commercials about foods critically.

Significant Others

Body image development is a lifelong process inevitably influenced at different times by the significant others who play central roles in adolescent males' lives (Cash & Pruzinsky, 2002; Cash & Smolak, 2011; Smolak & Stein, 2006). Parents and peers introduce and reinforce sociocultural influences into adolescent males' lives that appear to impact their perceptions of body image (Ricciardelli & McCabe, 2003a). Adolescent boys are highly influenced by peer popularity and try to gain muscle size to be visible (McCabe et al., 2010). Tantleff-Dunn and Gokee (2002) argued that peer interactions influence adolescents' body images, while young children may be more likely to be influenced by parents. As in previous studies, this study showed that significant others, such as parents and peers, affected the participants' conceptions of body image and physical activity preferences.

Parent influence. Parents are significant others who influence their children's body image (Jones, 2011; McCabe & Ricciardelli, 2003a; Ricciardelli & McCabe, 2001, 2004). Studies have shown that both mothers and fathers play important roles. In fact, Ricciardelli and McCabe (2004) pointed out that mothers encourage their sons to lose weight while fathers are more likely to encourage them to exercise. Consistent with previous research (McCabe & Ricciardelli, 2003a; Ricciardelli & McCabe, 2001, 2003a, 2003b, 2004), four participants (i.e., Ethan, James, Hanson, and Adam) indicated their

parents influenced their conceptions of body image. For example, Ethan noted that his parents told him that, “If you become obese, you will get diabetes.” Ethan’s parents also wanted him to be physically active and to make sure that he was “Ok with sports.”

Parents also thought playing video games and using smartphones were considered part of sedentary lifestyles. They did not want their children to spend too much time being sedentary. For example, James pictured a gaming pad in his visual diary (see Figure 5.9). Even though James enjoyed gaming, his parents encouraged him to stop gaming and play outside. He said:

> Video games are my favorite. I play games for three to four hours a day. My parents are kind of…worried that I’m playing games too much. They are saying, ‘You should not just sit on the sofa and play games, watching TV, or playing on a computer.’ They want me to go outside and play sports. Then, I realized that I was spending too much time on games. I need to do something [workout].

Figure 5.9 “Video game is my favorite”

Figure 5.10 “Texting on a couch”

In another example of parental influence, Adam included a photograph of his sister's texting (see Figure 5.10) in his visual diary. He noted, "My parents always tell her to stop texting on the couch and go play outside." In summary, Ethan, James, Hanson, and Adam reported that their parents told them to eat healthy foods, encouraged them to be physically active, and wanted them to spend less time playing video games and using smartphones.

Peer influence. Peers are another source of influence that impacts adolescent's perceptions of body image (McCabe & Ricciardelli, 2001b; Ricciardelli & McCabe, 2001, 2003a, 2003b, 2004). According to Jones (2011), peer experiences in schools are embedded in a social hierarchy. Students identify popular students as the most prominent source of physical appearance pressure in school because the ideal body is evident in popular groups. Popular students at the top of the social hierarchy have greater access to the attention and resources of the school community.

In this study, Ethan, Charles, and James acknowledged that peers affected their body images and physical activity preferences. Ethan explained:

> Interviewer: How do you compare yourself with your friends when you do physical activity?
>
> Ethan: I can do muscle stuff [weight lifting] they [muscular friends] do. I don't get tired as quickly. It's important to look strong over other people…you know, have six packs, stuff like that.

Peers directly communicate their critiques of appearance via teasing (Jones, 2011) Appearance-related teasing (e.g., bullying others because of his body size/shape) often is caused by body comparison (Vartanian et al., 2001). When asked the reason why he wanted to look stronger than others, Ethan replied, "If I'm overweight, other guys may pick on me." Charles and James confirmed Ethan's concern that bullying behavior was related to comparison of one's body size and shape with others. For example, Charles explained, "It's always good to be bigger than other people [because] you don't get messed with. I am pretty muscular and feel confident with my body." Additionally, James pointed out:

Interviewer:	How do you think that bullying is related to a person's physical characteristics?
James:	I think it's related because sometimes people don't like what they look like. So, they just make fun of them and put someone down. They say sometimes like… 'fat' or 'too weak' …and people don't want to have a bunch of fat. A group of fat people usually doesn't interact with skinny people.
Interviewer:	What do you think you should do to prevent body-related bullying?
James:	I think you should tell people the result of bullying. What happens…like some people commit suicide… so some kids realize it's not good.

Research has shown that parents and peers play a significant role (Jones, 2011; McCabe & Ricciardelli, 2003a; Ricciardelli & McCabe, 2001, 2003a). Jones (2011) argued that parents serve as models for adolescent males to construct body image and

perform physical activities. He pointed out that parents' attitudes and evaluations of their own and others' bodies are critical influences to value or critique their bodies and others'. Exercise and diet of the parents serve as behavioral examples. Research on friendship, popularity, peer acceptance, and peer teasing indicated that adolescents' body image development is greatly influenced by peers (McCabe & Ricciardelli, 2001b).

Indifference to Sociocultural Influences

Even though previous research generally support that adolescent males are influenced by sociocultural influences, research indicates that adolescent males display less concern with their bodies (Grogan, 2008). Franklin, George, and Ben explained that sociocultural influences did not affect their conceptions of body image and physical activity preferences. Franklin argued that he did not envy others' bodies because he did not pay attention to them. He responded:

Interviewer: Do you have a friend who has a muscular body?

Franklin: Yes. He is very muscular and good at sports.

Interviewer: Do you envy him?

Franklin: I don't envy him much because he wants to show off. If you have it, you just have it. You don't have to show off. Be honest, I don't make an effort to be like that because I'm comfortable the way I am. So, I don't mind the media or my friends' influences trying to force me to look better.

Interviewer: What do you like to do in physical activity?

Franklin: I like running [Figure 5.11] and dancing [Figure 5.12]. I dance no matter what I'm doing. I have been dancing since when I was a little so like… you know, whenever I dance it

feels good and I really love to dance. I also run everyday. My strength is my legs and I have big feet. It helps me to stay fit and I don't like to be still. I run fast, but do not lift heavy weights.

Figure 5.11 "Running everyday"

Figure 5.12 "I dance no matter what I'm doing"

In another example, when George was asked his favorite physical activity, he said, "I like to play football and basketball with my friends. We don't compete with each other...I don't mind whether I win or not. We are just enjoying sports. I'm not a competitive person." (see Figure 5.13 – 5.14)

Figure 5.13 "Basketball with my friend"

Figure 5.14 "Playing football with friends"

Ben considered the muscular body image portrayed in the media as unnatural and fake. He noted:

Interviewer:	Can you think of a male movie star who has a great body?
Ben:	Arnold Schwarzenegger.
Interviewer:	What do think about his body?
Ben:	He has a great body. But I don't make an effort to be like him because that is too much for me. He looks unnatural. It's like … kind of a fake.

In summary, the results indicated that sociocultural influences (e.g., media, parents, and peers) on adolescent males' physical activities were diverse (Grogan, 2008; Pope et al., 2000). The media influence category indicated there were negative and positive media influences. Ethan, for example, tried to quickly increase muscle mass due to his exposure to media commercials, while Hanson questioned the messages about body image portrayed in the media. In fact, Hanson was able to identify and avoid unhealthy food portrayed in the media. The significant others category suggested that both parents and peers influenced adolescent males' conceptions of body image and physical activity preferences. Finally, the indifference to sociocultural influences category, represented by Franklin, George, and Ben, may represent a negative case. Franklin and George were not interested in others' bodies or the ideal muscular body portrayed in the media, while Ben thought that the ideal body image portrayed in media was a kind of a fake and unattainable.

Discussion

Three themes, hidden acceptance, lack of concern, and critical awareness emerged from the data. The hidden acceptance theme represents one's unconscious acceptance of sociocultural messages such as media, parents, and peers. Some adolescent males seem not to be critically aware of society normed ideal body images. Myers and Crowther (2009) argued that adolescent males are particularly vulnerable to making inappropriate body image related decisions because they are not sufficiently mature to reflect critically on the unrecognized and unintended sociocultural messages. The theme lack of concern represents adolescent males' indifference to sociocultural influences. A few research studies suggested that adolescent males are less concerned about their body image compared to adolescent girls and they do not wish to discuss their bodies openly (Grogan, 2008; Hargreaves & Tiggemann, 2006). The critical awareness theme represents one's reflection on sociocultural messages about the ideal body. Physical education scholars have examined how adolescents identified themselves with body images portrayed in the media and how their critical awareness can challenge media-distorted body images (Azzarito & Solmon, 2006a; Oliver & Lalik, 2004).

Hidden Acceptance

Hidden acceptance is a term borrowed from the term, hidden curriculum suggested by John Dewey (1917). The hidden curriculum refers to unintentional learning in school and social environment (Kohlberg, 1975). Hidden curriculum has been used extensively in educational literature since the special conference on the hidden

curriculum in school at Association for Supervision and Curriculum Development in 1969. Linda Bain was the first to examine the hidden curriculum in physical education (Bain, 1975). She stated, "qualitative studies describing the curriculum in action or 'life in the gym' provided a basis for examination of ideological issues" (Bain, 1990, p. 24).

As an extension of the hidden curriculum framework, Horn Jr. (2003) explained how children and adolescents unintentionally learn social messages during their interactions in school. Hidden acceptance is being used as a broad category that includes all of the unrecognized and unintended knowledge, values, and beliefs that are socioculturally influenced. A possible example of hidden acceptance would be for individuals to internalize that they are losers if they do not lose weight quickly after watching the show "The biggest loser."

The hidden acceptance theme is supported by three subcategories (i.e., media belief, parents, and peer influences). One of the most significant sources of hidden acceptance is the media (Hobza & Rochlen, 2009; Humphreys & Paxton, 2004; Wykes & Gunter, 2005). The way in which audiences interpret and sometimes blindly accept as true media representations of the body has been the focus of several studies (Agiliata & Tantleff-Dunn, 2004; Wykes & Gunter, 2005). Dworkins and Wachs (2009) argued that the media communicates to adolescent males now, more than ever before, that their bodies define who they are as men. In a market-driven society, individuals live in a media-saturated environment and accept the knowledge, values, and beliefs portrayed in media representations. Adolescent males are affected by both the easily recognizable and

the cleverly hidden body messages that they encounter (Arbour & Martin Ginis, 2006; Levine & Chapman, 2011). These media representations mediate the students' construction of meaning related to body image, as they engage in physical activities.

In addition, significant others, parents and peers, also play an important factor in regulating adolescent males' bodies (Cash & Pruzinsky, 2002; Cash & Smolak, 2011; Jones 2004; Ricciardelli & McCabe, 2003a). Adolescent males often accept their parents' perceptions of body image without critical awareness. For example, the parents of three participants (i.e., Ethan, Adam, and James) emphasized 'appropriate' public discourse concerning the 'right' attitudes against being sedentary, such as spending too much time on their smartphones or playing videogames. Adam also was influenced by peer popularity. He tried to increase his visibility by becoming more muscular. Further, Ethan and James acknowledged that bullying behavior was likely to be caused by comparing one's body with peers' body size and shape (Stanford & McCabe, 2005; Swearer & Doll, 2001; Swearer et al., 2012).

Adolescent males' body images are constructed, reproduced, and perpetuated through messages introduced and reinforced through the media and by significant others with whom they interact daily (Kehler & Atkinson, 2010). Society uses body perfection code to regulate and constructs definitions of acceptable and desired body size and shape. Often these pervasive messages label young people not meeting the perfection code as 'weak' and 'lazy.'

Becoming aware of the hidden acceptance messages that influence body image requires adolescent males to uncover hidden meanings and to critique the implications of those representations. To successfully resist these messages they must understanding the mechanisms that facilitate hidden acceptance of body image among adolescent males and in so doing may minimize negative physical behaviors such as bullying (Shilling, 2008).

Lack of Concern

Researchers have reported that adolescent males are typically less concerned about their body image than adolescent girls (Grogan, 2008; McCreary, 2011). For example, Grogan (2008) examined how adolescents' concerns about their bodies during adolescence differ based on gender. He reported that only one third of adolescent males were worried about their body images, while two thirds of adolescent girls expressed concern about their appearance, weight, and shape.

Three participants supported the lack of concern theme. Franklin, George , and Ben argued that the ideal body images reinforced by media, parents, or peers did not affect them. Franklin, for example, expressed that he did not make an effort to be muscular because the way he looked was not important to him. George also reported that he did not mind changing his body to reflect the muscular ideal. One of the possible interpretations for this lack of concern was that some adolescent males might not feel threatened by the ideal body image because they were still growing towards the muscular ideal. Another possibility was that these adolescent males thought body image was not a relevant topic and need not to be discussed. Ben viewed the ideal muscular body image as

fake, unrealistic, and unattainable. It is possible that Ben's perspective was influenced by upward body-related comparisons (Pila, Stramiris, Castonguay & Sabiston, 2014); therefore, he did not place importance on physical appearance and physical fitness.

Hargreaves and Tiggemann (2006) examined self-concepts associated with body images among 28 high school male students. After interviewing participants, the authors indicated that many adolescent males did not wish to discuss their bodies. Instead, they thought that physical appearance and body image were inappropriate topics for conversation by boys, partly because they were not important and partly for fear of appearing to be gay.

Critical Awareness

Critical awareness refers to a notion that relates to learner's ability to understand knowledge with careful consideration (Horn Jr., 2003). Critical awareness can be promoted by media literacy (Wykes & Gunter, 2005). Media literacy is the ability to access, analyze, evaluate, and create messages across a variety of media contexts such as televisions, magazines, and movies (Livingstone, 2004). To understand the negative effects of the media-driven hidden acceptance, it is necessary to understand and reflect critically on media messages about the ideal body. Hanson supported the critical awareness theme in this research. Hanson viewed food commercials portrayed in the media with skepticism. He understood and distrusted media commercials portraying unhealthy food options as desirable.

Given that young adolescents appear highly susceptible to media and significant other influences (Groesz et al., 2002; Hargreaves & Tiggemann, 2004; Yoon et al., 2003), the need for critical awareness provides an opportunity to teach media literacy and critical awareness to adolescents through school and community programs (Myers & Crowther, 2009). For instance, Levine, Smolak, and Hayden (1994) argued that teaching media literacy was effective in the prevention of adolescents' negative body images. Similarly, Holmqvist and Frisén (2012) examined positive aspects associated with appearance ideals among 14-year-old adolescents (N = 29). The authors suggested the importance of teaching adolescents both to be critical of media content and to provide them with alternative ways of thinking about appearance ideals, beauty, and attractiveness. In addition, Horn, Jr. (2003) examined effectiveness of critical awareness strategies to increase students' critical awareness of societal influence on messages about body image. Using critical awareness strategies (e.g., developing a critical vocabulary, critiquing the ideal body image portrayed in the media), adolescence can scrutinize ideal body images to uncover hidden acceptance messages and become more aware of the consequences and implications for their lives.

In fact, several curricula have been previously proposed to change the dominant hegemony of physical education class (Ennis, 1999; Oliver, 2001; Oliver & Lalik 2004). For example, Oliver and Lalik (2004) examined adolescent females' conceptions of body image using an inquiry-based body awareness curriculum. Results showed that girls expressed awareness about diet products and exercise as a form of weight loss. The

curriculum was effective in increasing students' awareness and ability to critique cultural images portrayed in the media. Physical educators can help adolescent males to understand the role of societal influences in controlling perceptions of male body image and assist them to accept their body image. When adolescent males acknowledge and accept their bodies, they may become less concerned about body image avoiding distortions dictated by society-produced muscular physical culture. Creating a curriculum that focuses on increasing awareness of body image can challenge dominant discourse and promote the images of the healthy masculine body.

However, this research did not explain the reason for differences in hidden acceptance, lack of concern, and critical awareness of body image among participants. Possible variables affecting conceptions of body image are race/ethnicity, social class, and gym culture. The sample size was too small for comparisons involving social background variables. Participants in the study were not asked to report their race, ethnicity, or social class. Finally, an evaluation of the gym culture in the selected schools was not conducted. It is recommended that future studies examine the effects of socio-economic background and gym culture on conceptions of body image.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Researchers in physical education have increasingly recognized the need to examine students' conceptions of body image in physical activity settings (Azzarito, 2010b, 2012; Oliver, 2013; Oliver & Lalik, 2001, 2004; Ricciardelli et al., 2006). Adolescents' body images seems to be closely related to their physical culture and physical activity preferences, and are heavily influenced by the media (Azzarito, 2009, 2012; Azzarito & Kirk, 2013; Azzarito & Solmon, 2006a; Azzarito & Sterling, 2010; Oliver & Lalik, 2004). The popularity of body image as a topic in physical education research has increased steadily in the last decade. Oliver and Lalik (2004), for example, investigated adolescent females' body image using teen magazines, while Azzarito (2009) examined adolescents' constructions of body image using Foucault's (1977) Panopticon as the theoretical framework. Several additional studies have focused on girls' conceptions of the ideal thin body image portrayed in the media as related to physical education and physical activity (Azzarito, 2009, 2010b, 2012; Azzarito & Kirk, 2013; Azzarito & Solmon, 2006a; Grogan, 2008; Oliver & Lalik, 2004).

Recent investigations of adolescent males' body image have identified different constructs with range of consequences that impact adolescents' physical activity

decisions. For example, adolescent males are more concerned with muscularity (Grogan & Richards, 2002; McCabe & Ricciardelli, 2001b) and are more likely to consume food supplements, participate in bodybuilding, and become addicted to weight management. Thus, it is important to identify how adolescent males' body image develops and how it affects physical activity preferences.

The ideal male body is commonly featured in the media as a muscular and fit body (Pope et al., 2000). To a large extent, interest in adolescent males' body image has been attributed to the growing trend associated with ideal bodies featured in popular magazines, television commercials, and movies (Pope et al., 2000). Additionally, significant others, including parents and peers, also have an impact on one's body image (Ricciardelli & McCabe, 2001, 2004; Ricciardelli et al., 2006). According to Ricciardelli and McCabe (2001), adolescent males' drive for muscularity is often a product of parental pressure to achieve the ideal muscular body. McCreary and Sasse (2000) also found that adolescent males drive to achieve the muscular body was originated from peer influence.

Researchers investigating body image in physical education and physical activity have analyzed body and embodiment discourses using Foucault's Panopticon and Bernstein's body perfection code as theoretical frameworks. The Panopticon is a symbol that depicts a hidden surveillance system. It consists of a tower at its center with windows looking down on individuals. The Panopticon suggests that others are constantly watching and making judgments on our every move (Markula & Pringe, 2006). From the

viewpoint of Panopticon, individuals are normalized to have useful and docile bodies as they adjust and change to accommodate societal influences and demands for conformity.

Body perfection code is another critical theoretical framework that has been used to explain regulated body image (Bernstein, 2000). Bernstein used body perfection code to express particular representations of health and body. Body perfection code imposes socially valued and approved conceptions of ideal bodies. According to Bernstein, people commonly judge others based on body weight, size, and shape. Body perfection occurs in every aspect of life and is sustained and reinforced through societal influences such as television commercials, magazine advertisements, and family and peer expectations.

Many adolescent males struggle with comparisons of their developing body with ideal body images. The conceptions of muscular and fit bodies are central to societal expectations. This can create sites of tension within sport, physical activity and physical education settings that can cause emotional conflict for adolescent males. This study examined eighth grade male students' conceptions of body image investigating the relationship between sociocultural influences on body image and physical activity preferences. Specifically, three questions addressed (1) adolescent males descriptions of their body image (2) sociocultural factors affecting adolescent males' body image development and (3) the extent to which particular conceptualizations of body image impacted adolescent males' physical activity preferences?

A mixed method design was used to collect and analyze both quantitative and qualitative data examining conceptions of body image in physical activity. The use of

multiple data collection strategies provided more complex analysis of social problems than any single method alone could accomplish (Cresswell, 2013). Two middle schools in the southeastern United States were chosen based on (a) characteristics of the physical education program, (b) school demographics, and (c) the researcher's previous research experience in the middle schools. The researcher had prior interview and observation research experiences in the two schools after working for two years in a longitudinal science-based curriculum implementation study. Prior to data collection, IRB approvals were obtained from both Spring County Schools and the Office of Research Integrity at the University of North Carolina at Greensboro.

Three data sources, the Drive for Muscularity Scale (DMS); visual diaries; and adolescent male interviews, were used to answer the research questions. The DMS consists of 14 items measuring adolescent boys' attitudes and behaviors associated with muscularity. The DMS uses a 6-point Likert scale (1 = *Always* to 6 = *Never*) divided into the behavior and attitude subscales. The DMS has consistently shown good reliability and construct validity. The DMS has alpha reliability estimates ranging from .85 to .91.

The purpose and procedures of the study were explained to all students in two middle schools and 36 first assent and permission forms were obtained. Thirty-six participants completed the DMS during their physical education class. The DMS data were analyzed using SPSS 18.0. Dependent t-tests were used to compare the DMS scores on the behavior to attitude subscales.

Seventeen of the original 36 students (Allan = 5, Beacon = 12) responded to interview questions examining their conceptions of body image. Eight students then completed a visual diary. Students took 15 photographs during the first four-day period, and upon return of the first camera, pictures were printed, students were given procedural feedback, and a second camera was distributed for students to take a second set of 15 photographs. At the end of the visual diary period, students were interviewed a second time and asked to explain and interpret their photographs. Interview questions focused on (a) students' sociocultural backgrounds and perceptions of body image; (b) descriptions of place and/or people in photographs and their relevance to their physical activity experiences; and (c) students' interpretations of their visual diaries.

Interview transcriptions were open-coded, and codes were grouped based on conceptual categories. Axial coding was used to generate thematic interpretations of the categories and dimensions identified during open coding (Corbin & Strauss, 2007). During this phase, the researcher attempted to the broader cultural discourse that was meaningful to each participant. Then, photographs were categorized using post-visual diary interview data. In addition, several steps were used such as member checking (Lincoln & Guba, 1985), peer debriefing (Corbin & Strauss, 2007), and triangulation to enhance and maintain the data credibility.

Findings indicated that eighth grade male students' conceptions of body image and its' impact on physical activity varied by sociocultural factors such as media, parents, and peers. Dependent t-test results showed that the average attitude drive for muscularity

(M = 3.47; SD = 1.41) was significantly different than the average behavior drive for muscularity (M = 4.39; SD = 1.15; $t_{35} = 3.36$, $p < .01$). In other words, the participants had a strong drive to perform muscular strength exercise, but did not perform as they intended.

Interview and visual diary data generated five categories further divided into 12 subcategories. The first three categories addressed the research question investigating boys conceptions of body image and included three subcategories: "I want to be strong," "I don't want to be too big, but big enough," and "I'm comfortable the way I am." The questions addressing the influence of body image on physical activity category consisted of three subcategories: athletic pursuit, muscularity pursuit, and recreational pursuit. The research question focusing on societal influences on boys' body image revealed the media influence category separated into subcategories of media belief and media disbelief. The second major category, significant others, identified parental and peer influence subcategories. Lastly, a third category, indifference identified negative cases in which a few boys resisted social influences. Further examination of the data and categories led to the development of five themes: Adonis Complex body dissatisfaction, Dionysian body satisfaction, Hidden Acceptance, Lack of Concern, and Critical Awareness.

Conclusions

Grounded on Foucault (1977)'s Panopticon and Bernstein (2000)'s body perfection code theories, five themes emerged:

1. The Adonis Complex body dissatisfaction theme emerged through the "I want to be strong," "I don't want to be too big, but big enough," "muscularity pursuit," and "athletic pursuit" subcategories. The Adonis Complex was used as a metaphor to explain a syndrome describing men who do not believe they are muscular enough. Six participants, Ethan, Hanson, Adam, Ben, Charles, and James seemed to demonstrate the Adonis Complex. These participants pursued the muscular body, thin and muscular body, and muscle dysmorphia. The findings from this theme are consistent with previous research studies showing that body dissatisfaction is common among adolescent males and it marginalizes individual students who are obese and lack fitness or motor skills.
2. The Dionysian body satisfaction theme emerged across the "I'm comfortable the way I am" and "recreational pursuit" subcategories. In Greek mythology, Dionysian constantly sought to affirm life through enjoyment and pleasure. In this study, Dionysian ideal was used as a metaphor to explain body satisfaction and exemplified the body image perceptions of two participants, Franklin and George. Both accepted their bodies as they were and selected physical activities based on the level of pleasure they found when participating. Acknowledging the body as it is and the enjoyment of physical activity have often been overlooked in physical education. Body acceptance

and physical activity enjoyment were critical in the lives of these two adolescents.

3. The hidden acceptance theme was supported by three subcategories of media belief, parent influence, and peer influence. Four participants, Ethan, Adam, Charles, and James, exemplified this theme. They each acknowledged and were impacted by conceptions of body image promoted by the media, parents, and peers (Evans et al., 2008; McCabe & Ricciardelli, 2003a; Markula & Pringle, 2006; Pope et al., 2000).
4. The theme, lack of concern, emerged from the category of indifference to sociocultural influences and may reflect negative cases in which adolescent males, exemplified by Franklin and George, resisted societal influences. These adolescent males may not have felt threatened by the muscular body images because they were still growing toward the muscular ideal.
5. The critical awareness theme emerged from the subcategory of media disbelief. Only Hanson critically received media-produced messages. This theme suggests the potential for some adolescent boys to acquire heightened levels of media literacy and critical awareness (Myers & Crowther, 2009).

Recommendations

The findings have significant theoretical and practical implications for physical education research. Based on the research findings from this dissertation, several recommendations are suggested. First, researchers should place a strong emphasis in

future studies on investigating adolescent males' conceptions of body image. Expanding research pertaining to adolescent males may lead to greater insight into bullying behaviors, body acceptance, physical activity preferences, and the use of innovative curriculum to increase critical awareness of body image.

Second, this dissertation research did not consider race/ethnicity as a variable. Although previous studies have taken into account race and ethnicity during investigations of body image conceptualizations in adolescents (Azzarito & Solmon, 2005, 2006a; Oliver & Hamzeh, 2010), they were conducted using female participants. Future research should consider race/ethnicity as a variable to examine adolescent males' body image and its impact on physical activity behaviors.

Third, because free and reduced meal (FARM) rates of the two middle schools were similar (Allan = 51%, Beacon = 58%) to FARM rates of the Spring County School (SCS = 55%), social class was not taken into account in the current study. Potential influences of social class to conceptions of body image and its impact on physical activity behaviors among adolescent males need to be further examined. Fourth, even though the researcher observed physical education classes in Allan and Beacon middle schools for two years in another project, there were no previous investigations of the gym culture in the investigated schools. Gym culture among adolescent males may be an important factor to examine masculinity and locker room behavior. Therefore, there is a need to examine relationships among gym culture, body image, and physical activity behaviors from adolescent males.

Further, this study has practical implications for physical education teachers and administrators. Physical education teachers and administrators could use the results from this study to select appropriate strategies to help adolescent male students understand the impact that media-distortion and significant others have on their conceptions of body image.

Lastly, this study used student-centered visual ethnography as a critical method to address sensitive and difficult topics, such as body image and bullying. It helped the eighth grade male students express their ideas and concerns regarding body image. From the methodological standpoint, the participants' photographs created opportunities for them to express their thoughts and feelings in ways that might not have been possible otherwise (Prosser, 2007). In this sense, visual diaries reveal sociocultural influences on adolescents' body images better than their verbal language does. Images are formed by the sociocultural context of the participants (Pink, 2007). Visual images such as photographs and magazine pictures should be considered as meaningful data in ethnographic work.

In conclusion, examining male students' body image can contribute to understanding how the conceptions of body image impact students' physical activity decisions, choices, and preferences. Therefore, further research on adolescent males' conceptions of body image, sociocultural influences (e.g., race/ethnicity, socio-economic status), and its' impact on physical activity preferences is strongly recommended.

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APPENDIX A

OFFICIAL APPROVAL LETTERS FROM GCS AND UNCG

Guilford
County Schools

April 25, 2013

Deockki Hong
7057 W. Friendly Avenue, Unit L
Greensboro, NC 27410

Re: 121382

Dear Deockki Hong:

The Guilford County Schools Research Review Committee has concluded that your proposal, *Eighth grade male students' conceptions of physical body image*, meets the requirements of state legislation and the current research policy of Guilford County Schools.

Committee approval does not guarantee access to schools or to individuals, nor does it imply that a study can or will be conducted. School principals have the final decision regarding the participation of their school in any research project. Students/parents and staff members decide independently whether they wish to participate and they may withdraw at any time. The committee expects that identities of individuals, schools, and the district will remain anonymous in all stages of the project.

Please present this letter upon initial contact with the principal. Contact me at 336-370-2346 if you have any questions.

Sincerely,
CGilbert
Carolyn Gilbert
Co-Chair, Research Review Committee

STRIVING. ACHIEVING. EXCELLING.
501 West Washington Street Greensboro, NC 27401 P 336.370.8100

THE UNIVERSITY of NORTH CAROLINA
GREENSBORO

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336.256.1482
Web site: integrity.uncg.edu
Federalwide Assurance (FWA) #216

To: Deockki Hong
Kinesiology, Dept of
7057 W. Friendly Ave, Unit L, Greensboro, NC, 27410

From: UNCG IRB

Authorized signature on behalf of IRB

Approval Date: 5/02/2013
Expiration Date of Approval: 5/01/2014

RE: Notice of IRB Approval by Expedited Review (under 45 CFR 46.110)
Submission Type: Initial
Expedited Category: 7.Surveys/interviews/focus groups,6.Voice/image research recordings
Study #: 13-0150
Study Title: Eighth Grade Male Students' Conceptions of Physical Body Image

This submission has been approved by the IRB for the period indicated. It has been determined that the risk involved in this research is no more than minimal.

Study Description:

The purpose of my dissertation research is to examine eighth grade male students' conceptions of body image and positive and negative behaviors that may result from males' perceptions of their own and others' body image. I will use the Drive for Muscularity Scale (DMS) to collect body image data from all eighth grade male students in two middle schools to identify eight male students (four/school) with highly positive and highly negative body images. I will interview these eight male students twice to examine their body image using physical activity pictures. I will distribute two disposable cameras to the eight male students to take 30 pictures (15/camera) for two weeks.

Study Specific Details:

Your study is approved and is in compliance with federal regulations and UNCG IRB Policies. Please note that you will also need to remain in compliance with the university Access To and Data Retention Policy which can be found at http://policy.uncg.edu/research_data/.

Regulatory and other findings:

This research, which involves children, meets criteria at 45 CFR 46.404 (research involving no greater than minimal risk). Permission of one parent or guardian is sufficient.

Investigator's Responsibilities

Federal regulations require that all research be reviewed at least annually. It is the Principal Investigator's responsibility to submit for renewal and obtain approval before the expiration date. You may not continue any research activity beyond the expiration date without IRB approval. Failure to receive approval for continuation before the expiration date will result in automatic termination of the approval for this study on the expiration date.

Signed letters, along with stamped copies of consent forms and other recruitment materials will be scanned to you in a separate

email. These consent forms must be used unless the IRB hasgiven you approval to waive this requirement.

You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented (use the modification application available at http://www.uncg.edu/orc/irb.htm). Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB using the "Unanticipated Problem/Event" form at the same website.

CC:
Catherine Ennis, Kinesiology, Dept of

APPENDIX B

STAMPED FIRST PERMISSION AND ASSENT FORMS

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
Parental Permission Form

GUARDIAN/PARENT RESEARCH INFORMATION AND CONSENT FORM
(STUDENTS UNDER 18- Selected to participate in Survey)

To be completed by the parent/legal guardian and school aged participant under 18 years.

Project Title: **Eighth Grade Male Students' Conceptions of Physical Body Image**

Principle Researcher: **Mr. Deockki Hong**

Participant's Name: _____

What is the study about?
The purpose of this research is to examine how eighth grade male students think about their body and their positive or negative conceptions of body image's impacts on their physical activity behaviors. Your child's participation is voluntary.

Why are you asking my child?
I am asking all 8th grade boys at your son's school to participate in this study. Understanding adolescent males' body image is very important because it may influence positive and negative self-concept and physical activity behaviors.

What will you ask my child to do if I agree to let him be in the study?
To determine eighth grade male students' body images, your child will be asked to respond to one short questionnaire. Expected time will be approximately 10 minutes.

Is there any audio/video recording?
No.

What are the dangers to my child?
The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. Your child's decision to participate will not affect his grade at the school. However, the survey questions could cause potential discomfort. This research will take place during regularly scheduled physical education class time, so your child will miss part of the class if they participate. If your child chooses not to participate in this study, they will participate in their regularly scheduled class activities.

If you have questions, want more information or have suggestions, please contact Deockki Hong (336-307-5959, d_hong@uncg.edu) and Dr. Catherine Ennis (336-256-8565, c_ennis@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study, please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351. We hope that the information about the conceptions of body image will be useful as a potential variable in increasing student's physical activity and decrease negative behavior in physical activity.

Are there any benefits to my child and/or society as a result of participation in this research study?
There are no direct benefits to students or to society. General findings (no names) may be shared with the Guilford County Schools (GCS), and researchers/practitioners in physical education. This may

UNCG IRB
Approved Consent Form
Valid 5/2/13 to 5/1/14

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
STUDENT ASSENT FORM

Study Title: **Eighth Grade Male Students' Conceptions of Physical Body Image**

My name is **Mr. Deockki Hong**

What is this about?

This is a research study. I would like to know how you think your body. I want to know how your physical activities will be affected by your thought of your body.

Did my parents say it was ok?

I have asked your parent(s) if it is ok for you to participate in this study and to sign a form like this.

Why me?

I would like you to take part because you are one of those eighth grade male students at this middle school. All your classmates have been invited to participate in the project.

What if I want to stop?

You can say "No" any time if you don't want to participate in each process of the project. You will not be punished if you say "no" and choosing not to participate will not affect your grade. Even if you say "yes" now and change your mind, you can stop, and no one will be mad at you.

What will I have to do?

You will be asked to respond one short survey. It will take approximately 10 minutes.

Will anything bad happen to me?

All the research will be conducted confidentially. Your name will not be attached to the survey. It will not affect your grade or standing in the school in any way. However, some of the questions may make you feel uncomfortable and you may skip any questions you do not want to answer. This research will take place during regularly scheduled physical education class time, so you will miss part of the class if you participate. If you choose not to participate in this study, you will participate in your regularly scheduled class activities.

Will anything good happen to me?

You might have the opportunities to think about your body and how your thoughts of your body affect you. It might be beneficial to you.

Do I get anything for being in this study?

You will not receive anything for participating in this study. However, participating in this study might be a good opportunity for you to think about your body.

What if I have questions?

You may ask me any questions regarding this study at any time. If you understand what I am asking you to do, please write or sign you name below.

_____ _____
Please Write of Sign your Name on this Line Date

UNCG IRB
Approved Consent Form
Valid 6/2/13 to 6/1/14

APPENDIX C

STAMPED SECOND PERMISSION AND ASSENT FORMS

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

GUARDIAN/PARENT RESEARCH INFORMATION AND CONSENT FORM
(STUDENTS UNDER 18- Selected to participate in Surveys, Interviews, & Visual Diary)

To be completed by the parent/legal guardian and school aged participant under 18 years.

Project Title: **Eighth Grade Male Students' Conceptions of Physical Body Image**

Principle Researcher: **Mr. Deockki Hong**

Participant's Name: _____

What is the study about?
The purpose of this research is to examine eighth grade male students' body image and their positive or negative conceptions of body image's impacts on their physical activity behaviors.

Why are you asking my child?
Understanding adolescent males' body image is very important because it influences positive and negative self-concept and physical activity behaviors. I selected students who represent their classmates based on their survey scores. Your child's participation is voluntary.

What will you ask my child to do if I agree to let him be in the study?
I will interview your child twice (20min/interview). Interviews will be conducted individually. Interview questions will be limited to discussions of how boys think about their body. I will provide two disposable cameras for the participants and ask them to take 30 pictures of physical activity outside of school for two weeks (15/week).

Is there any audio/video recording?
Interviews will be tape recorded to increase accuracy of recording students' answers. Because your child's voice will be potentially identifiable by anyone who hears the audio file, your child's confidentiality for things he say on the tape cannot be guaranteed although the researcher will try to limit access to the tape as described below.

What are the dangers to my child?
The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. Your child's decision to participate will not affect his grade at the school. However, some of the interview questions could cause potential discomfort/stress. I will provide a comfortable interview environment. Students may skip any question they do not wish to answer. If there is a case of a student needing counseling, I will let physical education teacher know and follow up with school guidance counselor for the counseling. Interviews will be conducted during the physical education class in physical education teacher's office with keep the door open. This research will take place during regularly scheduled physical education class time, so your child will miss part of the class if they participate. If your child chooses not to participate in this study, they will participate in their regularly scheduled class activities.

If you have questions, want more information or have suggestions, please contact Deockki Hong (336-307-5959, d_hong@uncg.edu) and Dr. Catherine Ennis (336-256-8565, c_ennis@uncg.edu). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study, please contact the Office of Research Integrity at UNCG toll-free at (855)-251-2351. We hope that the information about the conceptions of body image

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UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
STUDENT ASSENT FORM

Study Title: **Eighth Grade Male Students' Conceptions of Physical Body Image**

My name is **Mr. Deockki Hong**

What is this about?

This is a research study. I would like to know how you think your body. I want to know how your physical activities will be affected by your thought of your body.

Did my parents say it was ok?

I have asked your parent(s) if it is ok for you to participate in this study and to sign a form like this.

Why me?

I would like you to take part because you are one of those eighth grade male students at this middle school. I selected you because you represented your classmates based on your survey score.

What if I want to stop?

You can say "No" any time if you don't want to participate in each process of the project. You will not be punished if you say "no" and choosing not to participate will not affect your grade. Even if you say "yes" now and change your mind after you start the interview or take pictures, you can stop, and no one will be mad at you.

What will I have to do?

You will be interviewed twice during the physical education classes. It will take approximately 20 minutes, respectively. You will be asked to take 30 physical activity pictures outside of school with disposable cameras (15 pictures each week) that I will give you for two weeks.

Will anything bad happen to me?

All the research will be conducted confidentially. All the pictures will be blurred so that no one can be identified. It will not affect your grade or standing in the school in any way. However, some of the interviews questions may make you feel uncomfortable and you may skip any questions you do not want to answer. I will provide a comfortable environment to prevent any kinds of stress that may be caused by interviews. This research will take place during regularly scheduled physical education class time, so you will miss part of the class if you participate. If you choose not to participate in this study, you will participate in your regularly scheduled class activities.

Will anything good happen to me?

You might have the opportunities to think about your body and how your thoughts of your body affect you. It might be beneficial to you.

Do I get anything for being in this study?

You will not receive anything for participating in this study. However, participating in this study might be a good opportunity for you to think about your body. Interviews will be conducted during the physical education class in physical education teacher's office with keep the door open. It will take approximately 20 minutes. You can participate in the physical education class after interview.

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Valid 6/2/13 to 6/1/14

APPENDIX D

STAMPED TWO INVITATION LETTERS

1) A first invitation Letter to all (*n*=321) 8th grade male students for the *DMS* survey

Deockki Hong
7057 W. Friendly Ave, Unit L, Greensboro, 27410
(336) 307-5959
d_hong@uncg.edu

Dear Parents,

My name is Deockki Hong and I am a doctoral student at University of North Carolina at Greensboro. I am conducting a study about "Eighth Grade Male Students' Conceptions of Physical Body Image". I would like to know how your child thinks about the way he looks. I want to know how your child's physical activities will be affected by his opinion of body. I would like your child to participate because your child is one of those eighth grade male students at this middle school. Your child's classmates have been invited to participate in the project. I ask you if it is ok for your child to participate in this study.

Your child will be asked to respond one short survey. It will take approximately 10 minutes. All the study will be conducted confidentially. It will not affect your child's grade or standing in the school in any way. You and/or your child can say "No" any time if you and/or your child don't want to participate in each process of the project. Your child will not be harmed if he says "no" Even if he say "yes" now and change his mind after he participates in the study, he can stop and no one will be mad at him.

Your child will not receive anything for participating in this study. However, your child may have a good opportunity to think about his body. If he knows his body better, it will help him to increase positive physical behavior. The result of this project will be helpful to solve the educational problems such as bullying. You and your child may ask me any questions regarding this project at any time.

Thank you for considering my project.

Sincerely,

Deockki Hong
Department of Kinesiology
University of North Carolina at Greensboro

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2) A second invitation Letter to the selected (n=8) 8th grade male students for two interviews

Deockki Hong
7057 W. Friendly Ave, Unit L, Greensboro, 27410
(336) 307-5959
d_hong@uncg.edu

Dear Parents,

My name is Deockki Hong and I am a doctoral student at University of North Carolina at Greensboro. I am conducting a study about "Eighth Grade Male Students' Conceptions of Physical Body Image". I would like to know how your child think about the way he looks. I want to know how your child's physical activities will be affected by his opinion of body. I would like your child to take part because your child is one of those eighth grade male students at this middle school. I selected your child who represents his classmates based on his survey scores. I ask you if it is ok for your child to participate in this study.

Your child will be interviewed twice during the physical education classes. It will take approximately 10 minutes, respectively. Your child will be asked to take 30 physical activity pictures outside of school with disposable cameras that I will distribute for two weeks (15/week). All the study will be conducted confidentially. It will not affect your child's grade or standing in the school in any way. You and/or your child can say "No" any time if you and/or your child don't want to participate in each process of the project. Your child will not be harmed if he says "no" Even if he says "yes" now and change his mind after he participates in the study, he can stop and no one will be mad at him.

Your child will not receive anything for participating in this study. However, your child may have a good opportunity to think about his body. If your child knows his body better, it will help your child to increase positive physical behavior. The result of this project will be helpful to solve the educational problems such as bullying. You and your child may ask me any questions regarding this project at any time.

Thank you for considering my project.

Sincerely,

Deockki Hong
Department of Kinesiology
University of North Carolina at Greensboro

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APPENDIX E

STAMPED TWO ORAL RECRUITMENT SCRIPTS

1) Oral Recruitment Script 1

Directions: Stand in front of all students (sitting) making sure you have their attention. This will be done during regularly scheduled physical education class.

"My name is Deockki Hong and I am a doctoral student at University of North Carolina at Greensboro. I am interested in how you think your body. I want to know how your physical activities will be affected by your opinion of your body. I would like you to participate because you are one of those eighth grade male students at this middle school. All your classmates have been invited to participate in the project. I will ask your parents if it is ok for you to participate in this study and sign a form like this. You will be asked to respond one short survey. It will take approximately 10 minutes. All the study will be conducted confidentially. It will not affect your grade or standing in the school in any way. However, some of the questions may make you feel uncomfortable and you may skip any questions if you do not want to answer. You can say "No" any time if you don't want to participate in each process of the project. You will not be harmed if you change your mind and stop participating in the study. You will not receive anything for participating in this study. However, you may have a good opportunity to think about your body. If you know your body better, it will help you to increase positive physical behavior. I will give you a consent form for your parents to review and sign it if they would like their child to participate. After your parents have agreed you can participate, please review this assent form and sign it if you would like to participate. Please bring these two forms by next physical education class if you would like to participate. I will also give you an invitation letter and the study summary for you and your parents' information. You may ask me any questions regarding this project at any time at 336-307-5959 or d_hong@uncg.edu."

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2) Oral Recruitment Script 2

Directions: Make sure you are sitting with the selected students for interview and you have their attention. This will be done during regularly schedule physical education class.

"My name is Deockki Hong and I am a doctoral student at University of North Carolina at Greensboro. I am interested in how you think your body. I want to know how your physical activities will be affected by your opinion of your body. I would like you to participate because you are one of those eighth grade male students at this middle school. I selected you based on your survey score. Some of your classmates have been invited to participate in the project for the same reason. I will ask your parents if it is ok for you to participate in this study and sign a form like this. You will be interviewed twice during regularly scheduled physical education classes. It will take approximately 10 minutes, respectively. You will be asked to take 30 physical activity pictures outside of school with disposable cameras that I will distribute for two weeks (15 pictures of each week). All the study will be conducted confidentially. It will not affect your grade or standing in the school in any way. However, some of the questions may make you feel uncomfortable and you may skip any questions if you do not want to answer. You can say "No" any time if you don't want to participate in each process of the project. You will not be harmed if you change your mind and stop participating in the study. You will not receive anything for participating in this study. However, you may have a good opportunity to think about your body. If you know your body better, it will help you to increase positive physical behavior. I will give you a consent form for your parents to review and sign it if they would like their child to participate. After your parents have agreed you can participate, please review this assent form and sign it if you would like to participate. Please bring these two forms by next physical education class if you would like to participate. I will also give you an invitation letter and the

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APPENDIX F

STAMPED VISUAL DIARY GUIDE

Visual Diary Guide

Thank you for participating in this study. The purpose of visual diary is to explore what you think about body. You will be given two disposable cameras (one/week) to take pictures of physical activity, which will be your visual diary. Your job is to take total 30 pictures of physical activity outside of school for the two weeks. In each week, you can take maximum 15 pictures using the disposable camera. I will collect a first disposable camera, print out 15 pictures with blurred faces, and give you some feedbacks about the photos. Then, I will distribute a second disposable camera for you to take another 15 pictures.

You will take pictures of others' physical activity which is considered meaningful to you. For example, you may take pictures of physical activity in playground, after school sports, and/or physical inactivity such as watching TV at home. If you want to take pictures of others' physical activity, please notify them the pictures will be blurred so that nobody will be identified.

You can also ask your friends or family to take pictures of you when you do physical (in) activity in your everyday life. Your pictures will be blurred too so that you don't need to worry about privacy. Please think carefully about the purpose before you take pictures. Every picture should be related to your interest of body. I will provide picture examples.

You should not take pictures during the school hours. You may take pictures only after school is over. I will show you how to take pictures using the disposable camera. You can use flash function using press button front of the camera. Flash range is up to 10 feet. Please wind scroll to the right to take next picture. Press the shutter button on the top of the camera. You can identify how many exposures are left by the numbers on the top of the camera.

After a second week, I will print out the 15 pictures with blurred faces, and then talk about the pictures to know what you think of body in the post-interview. Please ask me (d_hong@uncg.edu) at any time if you have questions about visual diary.

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APPENDIX G

DRIVE FOR MUSCULARITY SCALE (DMS)

Instructions: Please read each item carefully and then, for each one, circle the number that best applies to you.

1 Always	2 Very often	3 Often	4 Sometimes	5 Rarely	6 Never
1	I wish that I were more muscular.				1 2 3 4 5 6
2	I lift weights to build up muscle.				1 2 3 4 5 6
3	I use protein or energy supplements.				1 2 3 4 5 6
4	I drink weight-gain or protein shakes.				1 2 3 4 5 6
5	I try to consume as many calories as I can in a day.				1 2 3 4 5 6
6	I feel guilty if I miss a weight training session.				1 2 3 4 5 6
7	I think I would feel more confident if I had more muscle mass.				1 2 3 4 5 6
8	Other people think I work out with weights too often.				1 2 3 4 5 6
9	I think that I would look better if I gained 10 pounds in bulk.				1 2 3 4 5 6
10	I think that I would feel stronger if I gained a little more muscle mass.				1 2 3 4 5 6
11	I think that my weight training schedule interferes with other aspects of my life.				1 2 3 4 5 6
12	I think that my arms are not muscular enough.				1 2 3 4 5 6
13	I think that my chest is not muscular enough.				1 2 3 4 5 6
14	I think that my legs are not muscular enough.				1 2 3 4 5 6

Note. Items 2, 3, 4, 5, 6, 8, and 11 form the DMS behavioral subscale. Items 1, 7, 9, 10, 12, 13, and 14 form the DMS attitude subscale.

APPENDIX H

PRE-VISUAL DIARY INTERVIEW QUESTIONS

RQ1	1. Do guys your age care about how they look? How do guys your age feel about the way they look? 2. (I will select two pictures from male fitness magazines. One picture represents a fit body and the other represents an unfit body.) Look at the pictures. What differences do you see in these two pictures? Which picture do you like better, and why? 3. (I will select two pictures from male fitness magazines. One picture represents vigorous physical activity and the other represents physical inactivity.) Look at the pictures. What differences do you see in these two pictures? Which picture do you like better, and why? 4. (I will show all four pictures from male fitness magazines to the participants.) Please look at these pictures. Of all of these bodies, pick the one that you think is the ideal body for guys. Explain why. How important is it for you to become like the guy in the picture? How will you feel if you are not able to become like the guy in this picture? 5. Do you think there is a one ideal body that is right for everyone? What do you think is the ideal guy's body? Please describe the ideal body for guys. How does your idea of an "ideal body" affect you? 6. Do you think that guys would like to have bigger muscles? Why or why not? 7. Do you think that guys would like to be more athletic? Why or why not? 8. Which one is more important to you: being muscular or being athletic? Please explain why. 9. How hard are you willing to work to achieve your fitness goals? Are there certain physical activities you think would really help you develop your

	"ideal body?"
RQ2	1. When you look at other people (e.g., peers, parents, and celebrities), do you compare your body size/shape with their bodies? Please explain why or why not. 2. Can you think of a male movie or video star that has a great body? What do you admire about his body? Have you made an effort to be like him? Do you think that you will ever be able to have a body that looks like his? 3. What do your parents say about your body? Have you heard your parents tell you to be more physically active, lose weight, and/or eat healthy food?
RQ3	1. How important is physical education to you and why? Do you like physical education and participate actively? Why or why not? 2. How important is physical activity and being active in your everyday life to you? Do you like to be physically active after school? How often do you participate in after school sports each week? 3. What physical activities do you like the most and which ones do you like the least? Why? 4. Do you think that it is good for you to increase the size of your muscles? Why or why not? What muscles do you want to increase the most and why?

APPENDIX I

POST-VISUAL DIARY INTERVIEW QUESTIONS

RQ1	(I will print out 30 pictures and show to the participants) 1. Can you choose one picture you like the most and the one you like the least and explain why? 2. Can you choose two pictures that represent fit and unfit bodies respectively and explain why you chose them? 3. Can you choose one or two pictures that include physical activities that you want to participate in and explain why? 4. Can you choose one or two pictures that you think might be important or more interesting to your parents and explain why? 5. Can you choose one or two pictures that you think might be important or more interesting to your peers and explain why? 6. Can you choose one or two pictures that you think might be important or more interesting to the media (e.g., Television commercials, movies, and magazines) and explain why? (Follow-up questions for 1-6) When did you take this picture? What was the person doing? Why did you take this picture? Can you explain more details about the picture? How does the picture(s) relate to your body? 7. Do you (dis)like your body? Why do you think so? What do you like about your body (e.g., height, weight, overall size, strength, fitness, endurance, and appearance)? Are you satisfied with your height, weight, muscles and/or sport skills and why or why not? What are the aspects you want to improve? 8. Please describe your ideal body.
RQ2	1. How do your parents encourage you to participate in physical activity? Which

	physical activity do they tell you to do? 2. How do you compare yourself with your friends when you do physical activity? Do you have a friend who has a "manly" body? Do you envy him and why not? 3. Do your friends think that you have muscular body? Do you think that you want to be stronger and bigger than your friends? Why or why not? 4. Maybe you (or your friend) can't have a great body. Can you respect your (or other's) body as it is? Why or why not?
RQ3	1. In what ways do you think that you have a "manly" body? Why/why not? 2. Do you think that you need to have a specific body type (e.g., skinny, thin, and muscular) to be manly? Could you please give me some examples? 3. What do you do to have a specific body type? How often do you participate in bodybuilding or physical activities? 4. Do you feel any barriers when you participate in physical activity because of your body weight, size, and shape? Have you had any trouble because of your body? If so, what was it and why do you think it happened? 5. How do you think bullying is related to a person's physical characteristics? 6. Have you seen anyone that bullies others because of their body size/shape and why? Have you called your peer a slur because of his body? If so, what was the slur? Why do you consider this word to be a slur? 7. Have you ever joked about, or bullied a boy because of his physical characteristics? What characteristics of his body were the causes? 8. Have you been called a slur because of your body? If so, what was the slur? Why do you consider this word to be a slur? Have you been joked about or bullied by others because of your body? What characteristics of your body were the causes? 9. What do you think you should do to prevent body-related bullying? 10. What do you think schools should do to prevent body-related bullying?