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ENCOURAGING HEALTHY BODY-IMAGE:  
ARE PARENTS SENDING EFFECTIVE MESSAGES TO CHILDREN?

by

Anna R. Herrman

A Dissertation Submitted in  
Partial Fulfillment of the  
Requirements for the Degree of

Doctor of Philosophy  
in Communication

at

The University of Wisconsin-Milwaukee

May 2013

ABSTRACT  
ENCOURAGING HEALTHY BODY-IMAGE:  
ARE PARENTS SENDING EFFECTIVE MESSAGES TO CHILDREN?

by

Anna R. Herrman

The University of Wisconsin-Milwaukee, 2013  
Under the Supervision of Mike Allen, Ph.D.

This investigation tested and applied Bogenschneider (1996) Ecological Risk and Protective Theory to the process of body-image development. In order to understand what is considered risk and protective behaviors, qualitative directed content analysis was used to analyze the health experts' opinion. Twenty-three online brochures were analyzed, resulting in two protective themes (parents as educators and parents providing an appropriate environment) and two risk themes (negative role model behaviors and negative complimenting behaviors). From the themes, items were created and quantitative data was collected using paper/pencil surveys. Data collection resulted in 126 parent and 126 child responses. Results provide support for the Ecological Risk and Protective Theory. First, data show many ecological variables influence body-image development on cognitive, affective, and behavioral levels, including parental complimenting behavior, media and parental influence. Second, results support Bogenschneider's (1996) argument that risk and protective processes are not dichotomous; rather work together in health development. Specifically, findings show even though mothers implement protective behaviors, the risk behaviors employed by parents and the media counteract the preventive measures. Important practical implications emerge from the data as well. Data demonstrated children are not resilient

enough to overcome risky media messages and images, as media was found to impact body-image negatively on cognitive, affective, and behavioral levels. Thus, it is recommended parents need to spend greater time educating children about media literacy. In addition, results revealed mothers and fathers relayed gender-relevant messages to same-sex children. In terms of risk behaviors, mothers and fathers perpetuated societal stereotypical body norms to sons and daughters. Theoretical and practical implications and avenues for future research are presented.

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## **Chapter One**

### **Encouraging healthy body-image:**

#### **Are parents sending effective messages to children?**

Over one-half of teenage girls and one-third of teenage boys engage in fasting, skipping meals, use of diet pills, vomiting, taking laxatives, or smoking in order to lose weight (Neumark-Sztainer, 2005). The unhealthy weight control behaviors stem from social, emotional, and/or psychological issues (National Eating Disorder Association (NEDA), 2013). The prevalence of body-image and weight problems incites major concern for scholars, doctors, and psychotherapists. As such, weight concern represents a cultural phenomenon as people engage in extreme measures to fit the projected norm (NEDA, 2013).

A significant effort exists in understanding what socialization factors influence body-image disturbances (Stice, 2002). Researchers argue the predominant elements impacting body-image perception combine societal and interpersonal factors (Smolak, 2002; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Specifically, scholars coined media, peers, and family as dominant socio-cultural factors, known as the Tripartite Influence Model (Thompson et al., 1999). Media represents the primary societal influence impacting body-image perception (Thompson et al., 1999). Scholars argue the media relates to poor body-image by projecting desirable, yet unattainable body imagery (Cafri, Yamamiya, Brannick, & Thompson, 2005). After viewing the idealized images consumers internalize the desirable depictions and strive to achieve the perfected image (Smolak, 2002). Research documents the role of interpersonal influences on body-image as well (McCabe & Ricciardelli, 2003). Peers and families endorse body ideals,

directly and indirectly, often aligning with images projected in the media (Wertheim, Paxton, Schutz, & Muir, 1997).

Tests of the Tripartite Influence Model involve a number of different populations, including adolescent females (Kerry, van den Berg, & Thompson, 2004; Shroff & Thompson, 2006b), adolescent boys (Stanford & McCabe, 2005) and college females (van den Berg, Thompson, Obremski-Brandon, & Covert, 2002). Each study yielded similar results validating the Tripartite Influence Model scholars' prediction of the socio-cultural variables (peer, family, and media) influencing body-image dissatisfaction and eating disorder behaviors (i.e., restrictive eating and bulimia; Kerry et al., 2004; Shroff & Thompson, 2006b; Stanford & McCabe, 2005; Thompson et al., 1999; van den Berg et al., 2002). Supporting the Tripartite Influence Model scholars' assumptions of influence, Ecological Risk and Protective theorists recognize that human development occurs through socialization (Bogenschneider, 1996).

Ecological Risk and Protective theorists argue the different levels of human ecology (e.g., peers, family, social institutions) help mitigate health-risk behaviors through employment of protective and risk processes (Bogenschneider, 1996). The protective aspect identifies processes that strengthen the likelihood of positive development by enhancing a child's ability to handle risk-filled situations (Bogenschneider, 1996; Kazdin, 1997). The risk model assumes health-risk behaviors, such as purging or fasting, can be prevented if risks are identified that lead to problematic behavior and eliminated (Hawkins, Catalano, & Miller, 1992). Bogenschneider (1996) asserts, for a child to develop positively and healthfully, both risk and protective processes must be employed.

Even though Bogenschneider (1996) argues multiple levels of human ecology impact a child's propensity to engage in health-risk behaviors; Brofenbrenner (1979) claims that the family signifies the predominant factor assisting in a child's development. Body-image scholars support Brofenbrenner's (1979) statement arguing that family, specifically parents, represents the principal interpersonal socialization agent influencing a child's body-image perception (Ata, Ludden, & Lally, 2006; McCabe & Ricciardelli, 2003). Through direct and indirect communication acts and behaviors parents shape how a child views the physical body (Ata et al., 2006; Byely, Archibald, Graber, & Brooks-Gunn, 2000).

The current study explores how parents influence a child's positive body-image development. The investigator first identifies what risk and protective factors parents *should* engage in that encourage positive growth of a child's body-image perception. Research currently identifies parental risk and protective factors that prevent eating disorders and obesity (Haines, Neumark-Sztainer, Wall, & Story, 2007; Neumark-Sztainer et al., 2007). The recommendations of risk and protective strategies; however, are based off of adolescent responses and scholarly speculation of what risk factors need elimination and what protective behaviors need implementation. The current investigation begins with the health expert's valuable knowledge to provide the basis for analyzing reported behavior. The investigator employed qualitative content analysis of brochures and web pages to gain understanding of the phenomenon through the lens of health experts.

The investigator then explored risk and protective approaches parents use to help positively influence a child's body-image perception. Current literature concentrates on

how parents negatively influence a child's body-image perception, ignoring appropriate behaviors and communication acts parents enact. Data was collected from parent/child dyads and subjected to statistical analysis. The researcher sought to gain the under-represented parent's perspective. Costa, Jessor, and Donovan (1989) argue that parents serve as an important role model for health behaviors and communicate expectations about health behaviors; thus, understanding how parental communication encourages positive body-image growth is imperative.

Another valuable perspective is the child's. This investigation measures the child's body-image perception on a cognitive, affective, and behavioral level (Banfield & McCabe, 2002). Additionally, the child responded to questions examining how parents, peers, and the media influenced body-image perception. Although the main goal signified examining positive parental influence on a child's body-image perception; according to the Ecological Risk and Protective Theory other facets of influence (media and peers) should not be ignored (Bogenschneider, 1996). The child's viewpoint assisted in understanding whether the parent's behaviors encourage or discourage healthy body-image development.

The investigator first outlines the literature on the conceptualization of body-image, health consequences of body-image, the Ecological Risk and Protective Theory, and media, peer, and parental communication behaviors that impact a child's body-image. Next, the investigator describes the methodological steps taken to conduct a study of experts and expert materials, followed by a detailed description of the results and a discussion on the questionnaire. The next chapter details the methods for study two

followed by a chapter presenting results of study two, which evaluate the research questions. Finally, implications, limitations and future research avenues are discussed.

### **Body-Image**

According to Heatherton and Polivy (1991) an individual's self-esteem consists of several elements: (a) academic, (b) social, and (c) body-esteem (see Rosenberg, 1965). Scholars argue that the physical body represents a significant element driving a person's self-esteem (Allgood-Merten, Lewinsohn, & Hops, 1990; Franzoi & Shields, 1984; Goldenberg, McCoy, Pyszczynski, Greenberg, & Solomon, 2000; Koff, Rierdan, & Stubbs, 1990; Thompson & Altabe, 1991; van den Berg, Mond, Eisenberg, Ackard, & Neumark-Sztainer, 2010). Franzoi and Shields (1984) conceptualize body-esteem as evolving from how one considers personal body-image or sense of physical self-worth. Level of physical self-worth might drive an individual to experience either favorable or unfavorable self-esteem (Goldenberg et al., 2000; Lowery et al., 2005). Goldenberg et al. (2000) describes a positive correlation exists between low body-esteem and low self-esteem in both sexes (see Henriques & Calhoun, 1999). Goldenberg et al.'s (2000) findings support that a person feeling poorly about his/her body is more likely to feel poorly about self.

Body-esteem spawns from body-image (Goldenberg et al., 2000; Lowery et al., 2005). Although vastly studied, body-image has multiple definitions (Banfield & McCabe, 2002). Scholars argue that body-image is multi-dimensional, not uni-dimensional (Banfield & McCabe, 2002; Thompson, 2004). Even though scholars agree upon body-image's multi-dimensionality, scholars do not agree on "the nature of the dimensions" (Banfield & McCabe, 2002, p. 373). Examples of body-image dimensions

existing include: (a) attitudinal, (b) cognitive, (c) behavioral, (d) perceptual, and (e) restrictive eating (Brown, Cash, & Mikulka, 1990; Cash, 1994; Cash & Green, 1986; Cash & Henry, 1995; Slade, 1994).

Multiple scholars have worked to better understand the multi-dimensionality of body-image and how body-image conceptualization impacts measurement (Banfield & McCabe, 2002; Pull & Aguayo, 2011; Thompson, 2004). Thompson (2004) put forth several recommendations for body-image researchers to follow when examining the construct. First, Thompson (2004) advises selecting body-image dimensions that meet the needs of the investigation. For example, if measuring behavioral body-image (e.g., anorexia) a behavioral measurement should be employed (Thompson, 2004).

The body-image dimensions used in the current study are affective, cognitive, and behavioral (Banfield & McCabe, 2002). Affective body-image represents the feelings an individual has towards the body (Banfield & McCabe, 2002). Specifically, items measuring affective body-image might concentrate on how one feels about level of physical attraction or body weight. Cognitive body-image signifies one's thoughts and beliefs concerning body shape and size (Banfield & McCabe, 2002). Cognitive body-image items measure one's thoughts of personal body-image, inquiring about the frequency one thinks about body size. Finally, behavioral body-image constitutes behaviors an individual engages in to alter body size and weight, such as purging or skipping meals (Banfield & McCabe, 2002).

The three dimensions were selected because the investigator's objective represents understanding how parental behavior impacts a child's body-image perspective. Affective and cognitive body-image allows the investigator to understand the

level of satisfaction a child currently has, as well as gain insight into current thoughts and feelings of the child towards the body. In addition, the behavioral dimension permits understanding of body satisfaction and what measures a child engages in to achieve the projected body norm.

Selecting the three dimensions meets the needs of Thompson's (2004) second recommendation of measuring "a broad range of pertinent body-image dimensions" (p. 9). Thompson (2004) warned; however, that the dimension must be examined with a proper and reliable measurement. Items from the Ben-Tovim Walker Body Attitudes Questionnaire and Banfield and McCabe's (2002) multiple construct scale were employed in measuring affective and cognitive levels of body-image (Ben-Tovim & Walker, 1991). The selection of BAQ was influenced as the measure has been shown to be a valid and reliable measure of body-image (Byrnes, Burns, & Bauer, 1995). Banfield and McCabe's (2002) items were chosen based on the internal reliability of each construct: (a) affective and cognitive ( $\alpha = .92$ ) and (b) behavioral ( $\alpha = .88$ ). Finally, items from the Body Attitudes Questionnaire (Ben-Tovim & Walker, 1991) and the Body Change Inventory (Ricciardelli & McCabe, 2002) were used to measure the behavioral aspect. Ricciardelli and McCabe's (2002) measurement stands as reliable as Cronbach's alpha was greater than .90.

### **Health Consequences of Poor Body-Image**

As mentioned, poor body-image represents a weight related problem highly prevalent in society (NEDA, 2013; Neumark-Sztainer, 2005). Problematic weight issues usually emerge as an individual experiences poor body-image (Shisslak & Crago, 2001; Shisslak, Crago, & Neal, 1990; Shisslak, Crago, Neal, & Swain, 1987; Shisslak, Crago,

Renger, & Clark-Wagner, 1988). Defining characteristics of body-image include how one: (a) sees him/herself in the mirror, (b) feels about his/her body weight, height, and shape, and (c) feels in his/her body (NEDA, 2013). A person with poor body-image feels uncomfortable, ashamed of the body and a sense of personal failure because the body does not fit typical standards (NEDA, 2013). Positive body-image leads an individual to celebrate body uniqueness and not obsess over food, exercise, and weight (NEDA, 2013).

The pervasiveness of negative body-image elicits attention because adverse health consequences stem from weight-related concerns (NEDA, 2013). Scholars purport one variable moderating body-image dissatisfaction and adverse health consequences constitute self-esteem (van den Berg et al., 2010). The relationship between body-image and self-esteem remains documented by several scholars (Allgood-Merten et al., 1990; Koff et al., 1990; Kostanski & Gullone, 1998; Thomspson & Altabe, 1991). For example, Kostanski and Gullone (1998) discovered that psychological well-being and perceived body-image dissatisfaction correlated. The scholars argued that a relationship existed between self-esteem and perceived body-image dissatisfaction, but was moderated by gender (Kostanski & Gullone, 1998). That is, there exists a greater relationship between self-esteem and body-image in females, rather than males (Kostanski & Gullone, 1998). Similarly, Van den Berg et al.'s (2010) results support Kostanski and Gullone's (1998). Van den Berg et al.'s (2010) conclusions; however, demonstrated that a correlation subsists between body-image dissatisfaction and self-esteem in all sexes, age, weight status, race and socioeconomic identities with no differences between sexes.

Scholars believe that people engage in health risk behaviors because of the correlation between body-image dissatisfaction and self-esteem (Kim & Kim, 2009;



Johnson & Wardle, 2005; Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; van den Berg et al., 2010). Eating disorders represent perhaps the most deadly outcome of negative body-image and very low self-esteem (Jaffee & Mahle, 1995). According to the Alliance for Eating Disorders Awareness Association (AEDAA, 2011a) 4 out of 10 Americans have either directly experienced an eating disorder or knows someone suffering from the mental illness. Eating disorders plague America with approximately 25 million American men and women impacted by the illness (AEDAA, 2011a).

The worst possible consequence of an eating disorder is death (Peters, 2010). Anorexia stands as the third “most chronic illness among adolescents” and the leading cause of death among all other psychological illnesses (AEDAA, 2011b). Anorexia constitutes riskiness as the person is at higher risk for death, slow heartbeat, low blood pressure, muscle loss, severe dehydration, memory loss, and Osteoporosis (AEDAA, 2011c). Bulimia represents a mental illness that affects upward of 19 percent of college-aged females (AEDAA, 2011d). Bulimic individuals are more at risk for dehydration, vitamin and mineral deficiencies, chronic kidney failure, rupture of the esophagus, and tooth decay (AEDAA, 2011e).

Another adverse effect of poor body-image represents weight loss obsession. According to Gustafson-Larson and Terry (1992) 46 percent of adolescents are either sometimes or very frequently on a diet. Nearly one half of teenage girls and one third of teenage boys use unhealthy dietary practices such as vomiting, skipping meals, and taking laxatives (Neumark-Sztainer, 2005) contributing to partial or full syndrome eating disorders (Shisslak, Crago, & Estes, 1995) or extreme weight gain in the future (Grodstein, Levine, Spencer, Colditz, & Stampfer, 1996). The detrimental outcomes of

negative body-image justifies identifying: (a) how to implement prevention methods to avert the possible health risk behaviors associated with poor body-image and (b) how parents, the predominant socialization agent, influence a child's body-image development.

### **The Ecological Risk and Protective Theory**

The theorist, Bogenschneider (1996) formulated the Ecological Risk and Protective Theory (ERPT) by combining two pronounced health risk models: (a) risk-focused model and (b) protective process approach. The risk-focused model (Hawkins et al., 1992) is deemed as one of the most popular and successful prevention models in health research. The risk-focused model was developed to understand prevention methods pertinent to heart and lung disease (Hawkins et al., 1992). Hawkins et al. (1992) argued that “problems can be prevented by identifying the processes that increase the risk of these problems and then eliminating them or mitigating their effects” (Bogenschneider, 1996, p. 128). Bogenschneider (1996) purports that identifying risk processes holds extreme importance as eliminating certain risk processes aids human development.

Socialization agents should identify ecological risks that may threaten a child's development (Kazdin, 1997). Bogenschneider (1996) argued that health-risk behaviors can be prevented if processes are identified that lead to the problematic behavior and eliminated (Hawkins et al., 1992). Related to body-image development, parents might reframe from diet conversations when around a child. By modifying this communication behavior, the parents eliminate one risk that might increase a child's negative body-image perception. Bogenschneider (1996) suggests that parental risk factors leading to a number of problematic adolescent behaviors are the following: (a) poor parental monitoring, (b)

distant, uninvolved, and inconsistent parenting, and (c) unclear family rules, expectations, and rewards.

Werner (1990) described that scholars must use language carefully when applying the risk-focused model. Werner (1990) holds that risks do not generate or produce a causal relationship with the developmental outcome. Rather, if certain risks are not eliminated or addressed the possibility of negative childhood developmental outcome increases significantly (Bogenschneider, 1996; Werner, 1990). Another important aspect of the risk-focused model represents the number of risks present in a child's life. Cowen (1983) noted that child development is not necessarily impacted negatively by one risk. Instead, negative child development occurs as the number of risks prevalent in a child's life increases (Cowen, 1983). Bogenschneider (1996) explained that if children are exposed to few risks the chances of the child engaging in risky behaviors in the future diminishes; however, as more risks permeates a child's lifestyle than the chances of experimenting with risky behaviors increases.

The second perspective informing the ERPT comes from the protective processes model (Bogenschneider, 1996). The protective processes model surfaced as scholars questioned why some children with risk-ridden lives develop positively and choose to disengage from risky behaviors (Werner, 1990). The children choosing not to engage in risky behaviors, despite their tumultuous live experiences, are characteristically resilient or stress resistant (Werner, 1990). In other words, the children are extremely motivated to succeed in spite of the negative circumstances.

The protective element identifies processes that strengthen the likelihood of positive development by enhancing a child's ability to handle risk-filled situations

(Bogenschneider, 1996; Kazdin, 1997). For instance, parents might reinforce the importance of an active lifestyle by promoting a child's participation in sports or engaging in family walks. A parent reinforcing a non-sedentary lifestyle emphasizes the significance of physical activity and provides children with ways to live a healthy lifestyle. Protective factors encourage child development by increasing competence and eliminating the likeliness of engaging in problematic behaviors. According to Rutter (1987), the benefits of employing protective factors manifest most in high risk situations. Bogenschneider (1996) identified children in a close relationship with at least one family member as a protective factor against problematic future behaviors.

Rutter (1987) contended that protective processes and risk processes should not be dichotomized. Several researchers argue the protective and risk processes be viewed separately because the two models are incompatible (Bernard, 1993; Johnson, 1993) and independent, not dependent (Morse, 1993). Bogenschneider (1996); however, argues the two models work together in explaining why children engage in risky behaviors. The claim projects that risk processes motivate an outcome; whereas behaviors learned from protective processes function when a child encounters a risk filled situation (Bogenschneider, 1996; Rutter, 1987). Bogenschneider (1996) thus proposed the ERPT in order to “contribute to a richer, more comprehensive theory that overcomes limitations of each separate model” (p.130). The two models, in tandem, provide deeper insight into the process of child development and offer a better explanation of how risk-filled situations are handled (Bogenschneider, 1996). The two models seemingly balance the developmental process because “reducing risks curtail the extent of protection individuals need, whereas efforts to bolster protective processes enable youth to deal with more

risks” (Bogenschneider, 1996, p. 130). Bogenschneider (1996) maintains that in order to understand child development both risk and protective processes require examination.

Another prominent feature of the ERPT involves the recognition that human development occurs through socialization (Bogenschneider, 1996; Brofenbrenner, 1986, 1989). One of the main propositions of ERPT constitutes people develop through relationships and social interaction (Bogenschneider, 1996). As such, ERP theorists argue that the different levels of human ecology may mitigate health-risk behaviors.

Bogenschneider (1996) integrates Brofenbrenner’s (1979, 1986) ecological theory of human development, which suggests that child development is influenced by a number of socialization factors including macro (i.e., institutions) and micro levels (i.e., peers, family). Brofenbrenner (1979) identifies the economic system, political system, and cultural media as dominate macro institutions fostering child development. Community elements such as the school play an integral role in a child’s development as well (Brofenbrenner, 1979).

Even though cultural institutions and the community impact child development and perception of risk-behavior; Brofenbrenner (1979) claims that the family signifies the predominant factor assisting in a child’s development. In relation to sources of risk and protection for adolescent risk-behavior engagement the family constitutes the leading socialization factor impacting adolescent behavior and development (Vakalahi, 2001). Vakalahi (2001) further argues that the family “is the core system in an adolescent’s life” (p. 34). Because of the integral role parents play in a child’s development, parents have a profound impact on whether a child engages in health risk behaviors and fosters child development.

## **Applications of ERPT**

Research explores risk and protective factors parents employ in a variety of health-risk contexts (Allen, Donohue, Griffin, Ryan, & Mitchell-Turner, 2003; Dekovic, 1999; Johnson et al., 1990; Lord, Eccles, & McCarthy, 1994; Lynch, 2001; Neumark-Sztainer et al., 2007; Pugliese and Tinsley, 2007). For instance, Dekovic (1999) looked at the importance of peers and family on internalizing (e.g., depression, psychosomatic symptoms) and externalizing (e.g., drug abuse, aggressive behavior) problematic behaviors (Dekovic, 1999). The effects sizes were small, but parental support (risk factor), parental monitoring (protective factor), and an adolescent's attachment to the parents (protective factor) impacted how an adolescent externalized or internalized problematic behaviors (Dekovic, 1999). Lord et al. (1994) explained familial behaviors might also affect a child's transition to junior high school. The scholars found when parents created a family environment supporting autonomy and democratic problem-solving children had higher self-esteem and overall enjoyed the junior high experience much more than parents who were not familiar with a junior high schooler's needs (Lord et al., 1994). A well-attuned parent with a child's needs for greater autonomy also leads a child to be more resilient and mature (Lord, et al., 1994). The maturity, high self-esteem, and resiliency might help children to appropriately externalize problematic behaviors, instead of using drugs and aggressive behaviors (Dekovic, 1999).

Lynch (2001) examined risk and protective factors in relation to adolescent sexual promiscuity (East, Khoo, & Reyes, 2006; Miles, van den Bree, Gupman, Newlin, Glantz, & Pickens, 2001; Taylor-Seehafer & Rew, 2000). Lynch (2001) identified family interacting and bonding as protective factors against sexual deviance. Families whom

interacted and bonded associated with more “maternal monitoring, a higher perception of maternal caring, and a stricter perception of maternal attitude toward sex and birth control” (Lynch, 2001, p. 103). Taylor-Seehaer and Rew (2000) further argued that when children felt connected to family due to familial bonding and interaction (Lynch, 2001) and viewed the adult role models as caring the chances of becoming sexually active at a young age dissipates (see Miles et al., 2001). East et al. (2006) contended; however, that strict protective parenting methods, such as voicing clear sanctions against teenage sex and teenage childbearing needs employment as well. Parents who used strict protective parenting methods were less likely to have pregnant teenage daughters (East et al., 2006). Interaction and bonding protected adolescents against substance abuse, specifically alcohol, which decreased the adolescent’s risk for sexual promiscuity (Lynch, 2001).

Specific to substance abuse, parental involvement and communication openness with a child serve as protective factors against substance abuse (Ennett, Bauman, Foshee, Pemberton, & Hicks, 2001; Johnson et al., 1990). Johnson et al. (1990) found a parent effectively involved and open with a child was less likely to abuse tobacco or marijuana. Ennett et al. (2001); however, argued that “it is important to take into account extent, content, timing, and family environment” (p. 49) when researching parent child communication and the impact on substance abuse (Allen et al., 2003). After surveying 12 to 14 year old boys and girls ( $N = 1,316$ ), Ennett et al. (2001) discovered that in order to prevent substance abuse parents need to initiate conversations with a child before the child actually experiments with tobacco or alcohol. Parents who held conversations with a child about substance abuse after the child had already used alcohol and tobacco were more likely to increase use (Ennett et al., 2001). Ennett et al. (2001) recommend when

parents initiate conversations with a child about substance abuse the parent avoid being too demanding because the language tone may lead to further rebellion. Instead, parents might use a “softer” tone pointing out potential harms of using alcohol or tobacco or have a cautionary discussion with the child about how the media portrays substance use, which teaches media literacy (Ennett et al., 2001). Similarly, Allen et al. (2003) conducted a meta-analytic review ( $N = 1,234,193$ ) investigating how peers and/or parents influence adolescents’ attitudes on using illegal substances (e.g., alcohol, tobacco, cocaine). Specifically examining how parents influence adolescent attitudes and illegal substance behaviors ( $N = 121,709$ ), Allen et al. (2003) discovered that parents do influence children about the decision to use substances. The scholars concluded that parents produce a profound effect on whether adolescent children use illegal substances (Allen et al., 2003).

Exploration of risk and protective factors connected to childhood obesity and eating behaviors also exists (Haines et al., 2007; Neumark-Sztainer et al., 2007; Pugliese & Tinsley, 2007). For example, Neumark-Sztainer et al. (2007) surveyed 2516 adolescent males and females to identify the prevalence of obesity, disordered eating behaviors, and weight concern. Weight-related outcomes significantly associated with family teasing, family meals, and media exposure (Neumark-Sztainer et al., 2007). Based on the results, Neumark-Sztainer and colleagues (2007) provided intervention recommendations circumventing weight problems. For instance, the scholars suggest that family mealtime is extremely important in aiding children with healthy dietary weight management practices (Neumark-Sztainer et al., 2007).

In addition, Pugliese and Tinsley (2007) conducted a meta-analysis on parental risk and protective factors that influence a child’s willingness to engage in physical



activity. The scholars examined parental modeling, encouragement, instrumental behavior, parental support/influence, and parental work habits in relation to a child's ( $M = 12.75$ ) level of physical activity. Overall, modeling associated weakest with a child's physical activity, but was moderated by a child's age. Pugliese and Tinsley (2007) argued that a parent's level of physical activity or sedentary behavior impacted older adolescents because older children are more aware of parental physical activity. A parent's encouragement ( $r = .17$ ) and instrumental behavior ( $r = .13$ ) were significantly related to a child's physical activity, age not signifying a moderator (Pugliese & Tinsley, 2007). A parent's encouragement in the form of persuasion, promotion, or prompting a child's activity constitutes a protective factor (Pugliese & Tinsley, 2007). Through encouragement parents teach children that an active lifestyle is necessary for health maintenance. Moreover, parents who facilitate or provide opportunities for a child to be active (i.e., instrumental behavior) led children to engage in more physical activity (Pugliese & Tinsley, 2007). Facilitating opportunities signify a protective factor because parents are indirectly communicating the importance of physical activity by transporting children to the sports activity or purchasing the necessary sports equipment (Pugliese & Tinsley, 2007).

Research identifies parental behaviors that constitute risk and protective factors in preventing eating disorders and obesity (Haines et al., 2007; Neumark-Sztainer et al., 2007; Pugliese & Tinsley, 2007). The recommendations of risk and protective strategies; however, are based off of adolescent responses and scholarly speculation of what risk factors should be eliminated and what protective behaviors need to be employed within

the family. Although these contributions are extremely significant, research fails to highlight risk and protective factors as recommended by experts within the field.

Rothman and Kiviniemi (1999) argued that certain phenomenon or “patterns of behavior will lead to a particular health problem” (p. 44). For instance, children with a negative body-image perception facilitate severe problems such as eating disorder behaviors, obesity, and depression (Grodstein et al., 1996; Neumark-Sztainer, 2005; NEDA, 2013; Shisslak et al., 1995). The adverse effects of negative body-image necessitate the identification of risk and protective factors. Thus, it is argued that risk and protective factors be identified to understand how to healthfully encourage a positive body-image. By exploring risk and protective processes associated with body-image, parents can enact the recommended behaviors that facilitate healthy body-image development and avert future child risk behavior. Accordingly, the following two research questions are advanced:

*RQ1: What protective processes should parents engage in to help a child gain a positive body-image?*

*RQ2: What risk processes should parents reduce to improve a child's body-image?*

### **Socialization Agents and Body-Image**

Thompson et al. (1999) proposed the Tripartite Influence Model (TIM) to guide understanding of what variables influence body-image perception development. The three primary variables identified and that form the TIM represents media, peers, and parents (Kerry et al., 2004; McCabe & Ricciardelli, 2001a; Shroff & Thompson, 2006b; Stanford & McCabe, 2005; Thompson et al., 1999; van den Berg et al., 2002). The model was put

forth under the assumption that media, peers, and parents constitute the primary influence variables that impact later development of body-image and eating dysfunction (Thompson et al., 1999). In addition, Thompson et al.'s (1999) research revealed that internalization of societal ideals of appearance and heightened appearance comparison tendencies signify two mediational links bridging the influence variables with body-image dissatisfaction. The following sections highlight the literature describing each of the influence variables impact on male and female body-image perception and development.

### **Media Influence and Body-Image**

The media has received significant amount of scholarly attention in testing how media correlates to body-image satisfaction. The importance stems from the destructive effects media has on body-image and self-esteem development (Sahlstein & Allen, 2002). For example, Sahlstein and Allen's (2002) meta-analysis argues that women were more likely to encounter difficulty in achieving high self-esteem than men due to women experiencing lower levels of body-esteem resulting from media consumption. According to the TIM, mass media influences negative body-image perception because the media frequently uses models and actors that further promote the perfected cultural body ideals (Thompson et al., 1999). As such, beginning at a young age people consume the prototypical body types and shapes of skinny females and muscular males (Furnham, Badmin, & Sheade, 2002). TIM scholars assume that media consumption leads men and women to compare themselves to the idealized images displayed (appearance comparison) and the internalization of unrealistic beauty standards illustrated in

television, magazines, films, and advertisements (internalization of societal standards; Thompson et al., 1999; van den Berg et al., 2002).

Most studies focus on how the thin-ideal impacts male and female body-image. However, Harrison (2000) posed an interesting question: what does the thin-ideal mean? The scholar argued that the thin-ideal is portrayed two ways: (a) showing the desirability of thinness and (b) demonstrating the undesirability of fatness (Harrison, 2008). Harrison (2008) stated that the media projects undesirable images of overweight individuals by depicting them as untrustworthy, lazy, and unhappy. The scholar examined how overweight media images impacted male and female body-image (Harrison, 2008). After surveying adolescents ( $n = 366$ ), results revealed exposure to fat television characters, not thin characters predicted bulimic symptoms in females and body image dissatisfaction in males (Harrison, 2008).

Harrison's (2008) findings parallel with Harrison and Cantor's (1997) results. Harrison and Cantor found that female college students eating disorder symptoms were only associated with viewing television shows with obese characters. Few studies exist exploring the phenomena of why obese images predict body image dissatisfaction and eating disorder tendencies. Fouts and Burggraf (1999); however, speculate that the stigma attached to obese television characters might play a role. The scholars observed that fat female characters were more likely to be criticized by male characters; whereas thin female characters were praised by male characters (Fouts & Burggraf, 1999; Fouts & Burggraf, 2000).

Literature suggests that the media plays a more important role in transmitting thin ideals to girls more so than boys (Vincent & McCabe, 2000). In examining the role of

media exposure in eating disorder behavior, Harrison (2000) surveyed 366 male and female adolescents. Harrison's (2000) results showed that exposure to thin-ideal magazine content was only significantly related to an increase in anorexic behavior in females ( $r = .18$ ), not males. Additionally, interest in body-improvement television ( $r = .30$ ) and magazine content ( $r = .28$ ) was significantly correlated with female body-image dissatisfaction but not for males (Harrison, 2000).

Similarly van den Berg et al. (2007) found that only the female participants were more likely to engage in media body comparison which correlated with body-image dissatisfaction ( $n = 2516$ ). McCabe, Ricciardelli, and Ridge's (2006) thematic analysis revealed similar results. Twenty-three of the 40 female participants voiced they received negative messages from the media. For example, one female stated "They [the media] don't normally have anyone above a size 10, it's kind of saying 'you should be this size;' they should be presenting different sizes" (McCabe et al., 2006, p. 20). The excerpt demonstrates that because the media generally does not show average or plus-size models, the portrayal of the thin-ideal generates a feeling of inadequacy (McCabe et al., 2006). Only six of the 40 male participants made comments about the media, with one comment symbolizing how the media negatively impacted body-image (McCabe et al., 2006).

Barlett, Vowels, and Saucier (2008) explained that age might account for the non-significant correlation between media viewing and male body-image in some of the studies. Barlett et al. (2008) conducted a meta-analysis on studies exploring media exposure and male negative body-image concerns. First, Barlett et al. (2008) wanted to gain an understanding of the relationships between the two variables. The scholars found

15 correlational studies ( $n = 4,324$ ) with the meta-analytic results revealing a significant negative correlation ( $d = -.19$ ). The results suggest that males do feel pressure from viewing the mass media, which significantly correlates to negative self-image (Barlett et al., 2008). However, Barlett et al. (2008) reports age moderates the relationship such that a stronger relationship between college aged participants' negative body image and the media than among younger age groups (Barlett et al., 2008).

Barlett et al. (2008) explored experimental studies ( $k = 10$ ), where the investigators randomly provided muscular or non-muscular stimulus to male participants completing body-image questionnaires ( $n = 755$ ). Barlett et al. (2008) reports a significant negative correlation ( $d = -.22$ ), demonstrating that negative body-image related to viewing muscular male bodies. In the experimental meta-analysis age was not a moderator variable demonstrating that exposure to muscular male images has a negative effect on male body-image at all ages (Barlett et al., 2008). Some scholars speculate that male negative body-image stems from peers and family members (van den Berg et al., 2007); however, Barlett et al.'s meta-analysis supports that the media contributes to male body-image dissatisfaction.

Three meta-analyses on the relationship of female body-image to media exposure exist (Grabe, Ward, & Hyde, 2008; Goresz, Levine, & Mornen, 2002; Holmstrom, 2004). The most recent meta-analysis, Grabe et al. (2008), reviewed 77 experimental and correlational articles, resulting in a sample size of 15,047 females. The scholars found support for all three of the hypotheses (Grabe et al., 2008). First, the results demonstrated that female body-image dissatisfaction is associated with media exposure of the thin-ideal ( $d = -.28$ ; Grabe et al., 2008). The significant negative correlation suggests that by

viewing the idealized female body in the media, females experience more body dissatisfaction (Grabe et al., 2008).

Goresz et al.'s (2002) meta-analytic results parallel with Grabe et al.'s (2008). When examining experimental studies, Goresz et al. (2002) found a significant negative correlation ( $d = -.31$ ) indicating that female body-image was significantly lower after viewing thin images rather than after viewing average or overweight media images. Second, media exposure correlated with females internalizing the thin-ideal ( $d = -.39$ ). The negative correlation demonstrates that frequency of media exposure relates to females internalizing the portrayed beauty standards (Goresz et al., 2002). Finally, female eating disorders were associated with media use ( $d = -.30$ ). The scholars observed when females utilize media displaying the thin-ideal there is an increase in eating disorder behavior (Goresz et al., 2002).

Documentation exists that all forms of media influence body-image, scholars have spent a considerable amount of time examining the role of magazines in body-image development (Bisell & Chung, 2009; Harrison, 2008). Durham (1998) suggested that magazine images display "mainstream ideologies" (p. 102) of female and male beauty standards and consequently the images become a body comparison tool. More recently, Homan, McHugh, Wells, Watson, and Kin (2012) discovered exposure to thin and fit images produced more negative feelings about bodies when compared to media models that were normal weight and toned. The participants were college women considered average weight, after the scholars calculated participant BMI (Homan et al., 2012). Homan et al. theorized that thin and fit images made the women more self-conscious about their bodies because the women were making comparisons. According to Festinger

(1954), upward comparisons occur when a person is comparing him/herself with someone who is perceived as superior. The thin and fit media images were considered superior because the models were thinner than the participants in return led to a heightened sense of body-image dissatisfaction (see Botta, 2003; Harrison, 2000; Harrison & Cantor, 1997).

The majority of literature highlights that the media has an adverse effect on both male and female body-image development. Seemingly, scholars identify the media impacting female body-image development more so than males (McCabe et al., 2006; van den Berg et al., 2007). Important to note; however, is that male body-image perception is influenced by the media as well (Barlett et al., 2008).

### **Peer Influence and Body-Image**

A significant amount of research exists exploring peer impact on male and female children, adolescent, and college student body-image perception (Levine & Smolak, 2002; Shroff & Thompson, 2006a). Much of the literature focuses on how peers shape female body-image. Females are of particular interest because of the importance female cliques assign to dieting, eating, and weight (Taylor et al., 1998). Although females have received a considerable amount of attention, evidence supports that male body-image is also impacted by peer teasing and verbal criticisms (Ata., 2007; Jones & Crawford, 2006; Levine & Smolak, 2002; Paxton, Eisenberg, & Neumark-Sztainer, 2006). Scholars; however, maintain that parental communication has a stronger association with male body-image development more so than peer communication (Standford & McCabe, 2005). Scholars identify the following variables as ways in which peer relationships motivate body-image development: peer discussion, peer pressure, peer criticism,



perception of rejection on appearance, and social comparison (Jones, 2004; Jones & Crawford, 2006; Park, DiRaddo, & Calogero, 2009).

The first influence strategy, peer discussion, represents verbal conversations about weight related issues. Jones and Crawford (2006) further explained that the conversations “reinforce the value and importance of appearance to close friends and promote the construction of appearance ideals” (p. 258). Multiple scholars have investigated how peer conversations mold body-image satisfaction (Jones, 2004; Jones & Crawford, 2006; Jones, Vigfusdottir, & Lee, 2004; Phares, Steinberg, & Thompson, 2004; Rodgers, Paxton, & Chabrol, 2010; Vincent & McCabe, 2000). Phares et al.’s (2004) study of 141 elementary students demonstrates how peer conversations influence body-image beginning at a young age ( $M = 9.23$ ). The questionnaires required participants to respond to how frequently individuals interacted with peers about body and food related issues. Phares et al. (2004) found negative body-image perception significantly correlated with conversations about weight and food concerns in boys ( $r = .26$ ) and girls ( $r = .49$ ). Even though girls exhibited more concern about body-image issues, the study exemplifies that both sexes speak about weight and eating concerns and internalize the messages.

Similar results emerged when surveying high school students. Jones and Crawford (2006) found that girls discussed appearance more frequently than boys; whereas boys talked more about strategies to change body appearance ( $n = 415$ ; see Jones et al., 2004; Moreno & Thelen, 1995; Paxton, 1996). The scholars learned when females and males discuss what they can do to look their best as well as their ideal body, body-image dissatisfaction heightens (from  $r = .30$  to  $r = .19$ ; Jones & Crawford, 2006). As mentioned males engaged in more frequent conversations entailing techniques to build

muscle and weight lifting, but the diet/muscle talk did not significantly correlate to body-image dissatisfaction ( $r = .09$ ; Jones & Crawford, 2006). When conversing with peers, Vincent and McCabe (2000) pointed out that the quality of the friendship did not affect how the message was received. Regardless of the relationship status (i.e., good versus bad), weight discussion among friends still directly influenced body-image and eating disorder behavior (Vincent & McCabe, 2000). The finding is significant as it demonstrates no matter what the relationship quality is, discussion about weight issues remain salient and impacts how one perceives his/her body.

Peer pressure exemplifies another means of peer influence. Peer pressure entails verbal commentary suggesting alteration of body size or weight (Jones & Crawford, 2006). Messages implying peer disappointment in body size, such as “you could lose some weight,” have serious consequences for the recipient’s body-image (Byely, Achibald, Graber, & Brooks-Gunn, 2000; Field., 2001). For example, Field et al. (2001) discovered that peer pressure had a serious effect on body-image disturbances, strategies used to lose weight, and eating disorders in boys and girls. Ata et al. (2006) also noted that males and females receive different types of peer pressure messages. The scholars examined 177 participants and learned that males received more messages related to gaining muscle mass and increasing the size of the upper chest, while female recipients felt more pressured to lose weight in order to fit the thin-ideal (Ata et al., 2006). Shomaker and Furman (2009) provided further support for the influence of peer pressure, as the scholars argued that their data “contests the traditional assumptions that pressure to be thin is exclusively relevant for girls” (p. 103). Rather, the male participants in Shomaker and Furman’s study indicated they felt pressure to be lean (not muscular),

while the females still experienced pressure to be thin. The literature demonstrates that even though both sexes receive peer pressure messages, the messages contain different content.

Scholars have explored the influence of criticism on body-image as well (Herbozo & Thompson, 2006; Jones et al., 2004; Kostanski & Gullone, 2007; Meyer & Gast, 2008; Paxton et al., 2006; Shomaker & Furman, 2009; Thompson et al., 2007). Thompson, Herbozo, Himes, and Yamamiya (2005) identified criticism as sending nasty or cruel commentary to another person (i.e., teasing). Herbozo and Thompson (2006) tested negative teasing frequency and observed when females were criticized more for body appearance, they also viewed their bodies more negatively ( $r = .22$ ). Wertheim et al.'s (1997) qualitative analysis revealed that adolescent girls were most frequently teased by girlfriends, boyfriends, and popular girls. The scholars noted that teasing was mainly directed towards overweight girls while because the girls were overweight the popular crowd disliked and ridiculed them (Wertheim et al., 1997). The ridicule made the participants want to alter physical appearance in order to fit in. Thompson et al. (2007) also explored the negative effects of criticism in an overweight and at risk for becoming overweight female sample. The scholars results confirmed Herbozo and Thompson's, as they found that the overweight and at risk participants received significantly more negative comments about weight which led to lower body-esteem (Thompson et al., 2007).

Teasing impacts younger populations too. Paxton et al. (2006) discovered that teasing was a significant predictor of low body-esteem in males and females. The scholars conducted a five year longitudinal study which began in early adolescence and

ended in pre to late adolescence (Paxton et al., 2006). The results illustrate the harmful implications of teasing, as body-esteem was consistently low throughout the two time periods when participants indicated they were criticized for personal appearance (Paxton et al., 2006). Kostanski and Gullone (2007) study also support the damaging impact of teasing, as children listed hurtful comments such as *fatty boomba*, *fatso*, and *pumba* as lowering body-image satisfaction.

Appearance-based Rejection Sensitivity (Appearance-RS) symbolizes another way peers impact body-image perception. Park et al. (2009) described Appearance-RS as a “heightened sensitivity to rejection based on personal appearance” (p. 108) which stems from the cultural emphasis on attractiveness. The scholar’s data demonstrated that Appearance-RS is experienced by both sexes (Park et al, 2009). Park et al.; however, found in a college sample that females experienced Appearance-RS more so than males,  $t(218) = 4.46, p < .001$ . Appearance-RS begins early, as Phares et al.’s (2004) data revealed that preadolescent children experience acceptance anxiety based on physical appearance. Scholars document that overweight children are more likely to experience Appearance-RS, as the participants claimed that acceptance would only occur when the proper body size of thinness or leanness was obtained (Jones & Crawford, 2006). Thompson et al. (2007) supported the previous notion as the overweight women who experienced Appearance-RS were also teased more about appearances. Thus, Thompson et al. (2007) argued that the acceptance anxiety occurs due to the amount of teasing received. The participants stated that if they were more attractive the teasing would stop and they would be fully accepted into the desired peer group (Thompson et al., 2007).

The final key peer relationship factor represents comparisons and modeling behavior. Social Comparison Theorists (SCT) argue that people have the inevitable drive to compare themselves to others (Festinger, 1954). SCT assumes that evaluations occur within an in-group and if discrepancies exist people strive to become compatible by eliminating any perceived differences (Festinger, 1954). The literature demonstrates that both sexes socially compare physical appearance with peers (Jones, 2001; Ricciardelli, McCabe, & Banfield, 2000). While both males and females use social comparisons, scholarship shows that females are more likely to make comparisons (Chen & Jackson, 2009; Jones, 2001; Jones & Crawford, 2006; Schutz, Paxton, & Wertheim, 2002; Vincent & McCabe, 2000).

Qualitative research also supports that males typically engage in less social comparisons than females. For example, McCabe, Ricciardelli, and Ridge (2006) interviewed male ( $n = 40$ ) and female ( $n = 40$ ) adolescents and found that nearly all females ( $n = 36$ ) compared themselves to friends; whereas only half of the male sample compared themselves to peers. The female participants in McCabe et al.'s (2006) study indicated they utilized upward comparisons more so than males, which made the females feel unhappy with personal appearance. The male participants engaged in strength and size comparisons, but never indicated that the comparisons had a negative impact on body image. Vincent and McCabe (2000) assert that modeling certain dieting/exercising behavior predicts body dissatisfaction for females. Investigators argue that by constantly comparing one's self to others, personal flaws become more noticeable which leads to negative body-image perceptions (Chen & Jackson, 2009) and the urge to model dietary and exercise behaviors.

Overall, the literature suggests that the various peer influence strategies lead to negative body-image in females and males. Although some strategies have a greater influence on females than males and vice versa, peers negatively impact how one views the physical body. The review highlights that within groups of friends, peers use certain strategies to exhibit the norms of attraction, as well as to make statements of disapproval and rejection.

### **Parental Influence and Body-Image**

Scholarship acknowledges the role of parent-child communication in a child's health-risk behavior (Kernis, Brown, & Brody, 2000; Riesch, Anderson & Krueger, 2006; Pugliese & Tinsley, 2007). One health-risk that parents tremendously influence is a child's body-image perception (Byely et al., 2000). Body-image signifies a health-risk because poor body-image correlates with depression, eating disorder symptomology, obesity, and low self-esteem (NEDA, 2013). Body-image development begins in the home as families, mainly parents, signify the first source of child socialization (Ata et al., 2006; McCabe & Ricciardelli, 2003). Parents may directly or indirectly influence a child's body-image development (Byely et al., 2000; Vincent & McCabe, 2000; Wertheim, Mee, & Paxton, 1999). Direct behaviors include verbal commentary, influence, and teasing, such as discussing body or health related issues or encouraging weight loss. Indirect behaviors constitute a child modeling parental dieting or expressing similar body-image dissatisfaction (Vincent & McCabe, 2000; Wertheim et al., 1999). Wertheim et al. (1999) maintained that parents engaging in strict dieting or infatuated with body related issues indirectly promote the cultural body ideals (see Byely et al., 2000).

Research investigating the role families play in body-image development generally focus on parents (Wertheim, Martin, Prior, Sanson & Smart, 2002). Rodgers, Paxton, and Chabrol (2009) analysis revealed that parental verbal commentary correlated with both son and daughter body-image dissatisfaction. Rodgers et al.'s (2009) study had young adults identify how frequently parents made verbal comments about weight. For example, participants marked how frequently a mother or father would say *if you want to look good you need to work out more* (negative comment). The negative comments had a stronger effect on daughters than sons (Rodgers et al., 2009). Daughters were more likely to engage in eating disorder behaviors and compare their bodies to others. The comments led the males to experience body-image dissatisfaction, but did not lead to eating disorder behaviors (see Abraczinskas, Fisak, & Barnes, 2012).

Positive commentary or encouragement provides another form of parental direct communication associated with body-image (Kluck, 2010; Rodgers et al., 2009). Rodgers et al. (2009) asked female and male respondents to specify the frequency of parental positive commentary (e.g., *you don't need to lose weight*) about weight, diet, or exercise. The results indicated that positive commentary had a negative impact on body-image for both sons and daughters, but the comments were only significantly correlated with female body-image disturbances (see Kluck, 2010). Kluck (2010) explained that parents utter positive weight, diet, and exercise comments to encourage, help, and support their children. The results demonstrate just the opposite. Kluck (2010) predicts that encouragement and positive commentary might indirectly communicate to the child that the current weight is unacceptable or socially undesirable reducing the levels of body image satisfaction. The comments may highlight the culturally desired body-image for

males and females, which further pressures sons and daughters to seek the perfect body (Kluck, 2010).

Parental teasing constitutes another direct interpersonal behavior that impacts body-image development (Ata et al., 2007; Keery, Boutelle, van den Berg, & Thompson, 2005; Kluck, 2010; Phares et al., 2004; Vincent & McCabe, 2000). Scholars note that children become the recipients of parental teasing at a young age (Phares et al., 2004). Phares et al. (2004) report that teasing impacts both male and female body-image; however, family teasing more strongly correlated with male body-image dissatisfaction, bulimic tendencies, and drive for thinness. Male respondents reported greater levels of depression and lower levels of global self-worth as result of the parental teasing (Phares et al., 2004). Even though males are teased more, Ata et al. (2007) argued that parents use different message content to tease children based on sex. The scholars found that parents tease daughters for being fat or out of shape; whereas parents teased sons for thinness or lacking muscle mass (Ata et al., 2007).

The literature demonstrates that parents engage in certain communication behaviors that are harmful to a child's body-image perception. Currently, the literature focuses on the child's perspective, not the parents. McCarthy, Holland, and Gillies (2003) argued that it is important to gain multiple perspectives on an issue, as multiple realities exist. Since parents serve as important role models for health behaviors and communicate expectations about them (Costa, Jessor, & Donovan, 1989), questions three and four are valuable as the data will provide scholars with an understanding of what parents are doing to encourage healthy body-image development.



Moreover, research more frequently considers harmful behaviors leading to negative body-image perceptions without reviewing what parents are doing to help encourage a child's positive body-image formation. Research questions three and four fill the void because the question explores positive body-image development. The majority of literature focuses on factors contributing to body-image dissatisfaction, not on what parental behaviors positively influence body-image development. Learning what communication acts and behaviors parents engage in permits scholars to understand how parents influence body-image development. Because body-image dissatisfaction and eating disorders are so prevalent in society (NEDA, 2013) the results will be helpful in understanding how the predominant socialization factor (i.e., parents; Brofenbrenner, 1979) contributes to or eliminates the problem. Therefore, the third and fourth research questions explore what parental behaviors are used to detoxify the home environment promoting a positive body-image for a child:

*RQ3: What risk behaviors are parents eliminating, in order to decrease a child's negative body-image perception?*

*RQ4: What protective behaviors are parents engaging in to promote a positive perception of a child's body-image?*

The questions signify extreme importance, as the data might yield results identifying that parents are a risk factor. Ecological risk and protective theorists argue that risk elements threaten a child's development (Bogenschneider, 1996). Parents might engage in behaviors *believed* to aid in the positive development of a child's body-image perception; however, the perceived helpful behaviors actually harm a child's body-image perception development. Thus, the parents stand as a risk element hindering the

development of a child's positive body-image perception. Research questions three and four permits a comparison of the parental responses to the specialists' responses in order to identify whether the risk and protective factors executed within the home are actually beneficial to the child's body-image development.

### **The Child's Perception**

The investigator seeks not only to gain the parent's perspective on how they positively influence a child's body-image, but also the child's view on how parent's influenced personal body-image development. According to Haines, Neumark-Sztainer, Hannan, & Robinson-O'Brien (2008) few scholars have studied both parental and child perspective of behaviors enacted in the home environment. Specific to body-image development, both Field et al. (2005) and Keery, Eisenberg, Boutelle, Neumark-Sztainer, and Story (2006) found discrepancies between the parental self-report and child's perception of direct and indirect behaviors parents engage in to influence a child's body-image development. The scholars discovered that a child's perception of what occurs in the home environment is a greater indication of body-image dissatisfaction than parents (Field et al., 2005; Keery et al., 2006; Haines et al., 2008). For example, Haines et al. (2008) found vast inconsistencies on parental self-report and the child's perception of direct behaviors. In particular, 23 percent of children indicated the parent commented on weight, 25 percent said the parent encouraged him/her to diet, and 30 percent noted the parent dieted (Haines et al., 2008). The parental responses were much different. Only 11 percent of the parents indicated they commented on a child's weight, 10 percent said they encouraged dieting, and eight percent responded that they personally dieted (Haines et al., 2008). The discrepancies found in the data suggest that both parental and child

perceptions need attention when examining communication behaviors in the home environment (Field et al., 2005; Keery et al., 2006; Haines et al., 2008). The goal of research question six signifies analyzing whether or not children see parental behaviors as positive or negative. As well as to better understand if the parental behaviors actually helped the child to develop positively. Research question five is introduced:

*RQ5: What is the child's perception on how his/her parents influence body-image development?*

Although the main objective of the analysis constitutes gaining understanding of how parents impact a child's body-image positively, the ERPT strongly recommends that scholars test multiple influence variables when gaining information on child development (Bogenschneider, 1996; Brofenbrenner, 1979, 1986). Bogenschneider (1996) argued "children are influenced first and foremost by their family, but also by their peers, school and work settings, and communities" (p. 129). To follow what Bogenschneider's (1996) theory argues, children will not only address how parents impacted body-image development, but how media and peers effected body-image perception as well. Because "human development is shaped by a myriad of processes" (Bogenschneider, 1996, p. 129-30), Bogenschneider (1996) asserted multiple influences be tested at once. Thus, research question six is put forth:

*RQ6: What influence variable (media, peers, or family) produces the greatest impact on a child's body-image perception?*

## **Chapter Two: Study One**

### **Data Collection Methods**

The Google search engine generated a list of online brochures and web pages addressing how parents encourage a child's positive body-image development. Combinations of the following keywords guided the search: (a) "body-image," (b) "family," (c) "positive body-image," (d) "parent-child communication," and (e) "body confidence." Web pages and brochures became included in the analysis when meeting the following criteria. First, the brochures and web pages addressed the issue of what parents can do to encourage a child's positive body-image development. Second, brochures and web pages only dated between the years 2000 and 2012 were considered. Finally, the brochures and web pages addressed all children, not gender-specific. The search resulted in 23 online brochures and web pages, with 52 pages of analyzable data (see Appendix A).

### **Data Analysis**

Qualitative content analysis served as the basis for analyzing the data (Hsieh & Shannon, 2005). According to Hsieh and Shannon (2005) qualitative content analysis constitutes "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (p. 1278). Qualitative content analysis aids researchers in creating recurring themes discovered in the data (Patton, 2002).

Online brochures and text represent the data analyzed. Selection of the data set occurred with the primary goal representing survey construction. The questionnaire will include risk and protective items that emerge as dominant themes, sub-themes, and

examples from the content analysis. The investigator selected qualitative content analysis of online brochures and text, as the method permits locating dominant themes through analysis and transferring the themes into items.

Three types of qualitative content analysis exist: (a) conventional content analysis, (b) summative content analysis, and (c) directed content analysis (Hsieh & Shannon, 2005). Conventional content analysis constitutes a method used when existing theory or research on the phenomenon is limited (Hsieh & Shannon, 2005). Conventional content analysts examine data without assumption or predetermined codes, instead allowing emergence of themes naturally (Kondracki, Wellman, & Amundson, 2002) using inductive inquiry. The investigator employed directed content analysis, not conventional because the search sought to identify particular theoretically defined attributes. The theoretical paradigm shaping the content analysis is the Ecological Risk and Protective Theory.

Summative content analysts quantify particular words in the data set and desires understanding contextual usage of words (Hsieh & Shannon, 2005). According to Hsieh and Shannon (2005) “quantification is an attempt not to infer meaning but, rather, to explore usage” (p. 1283). The second step of the summative approach represents latent content analysis, which constitutes interpreting the content (Holsti, 1969). The goal of latent content analysis represents understanding the contextual meaning of the quantified words. Summative content analysis was not selected because the technique analyzes the use of certain words within a context. Instead, the investigator used directed content analysis to explore how the key principles of Ecological Risk and Protective Theory apply to healthy body-image development.

The final approach, directed content analysis, represents analyzing text based on codes derived from existing theory (Hsieh & Shannon, 2005). Directed content analysis approach was employed because the Ecological Risk and Protective Theory (Bogenschneider, 1996) determined the investigator's codes. Potter and Levine-Donnerstein (1999) described, the deductive use of theory validates or extends a theoretical framework or existing theory (Hsieh & Shannon, 2005). According to Hsieh and Shannon (2005) the following signify key tenets of directed content analysis: (a) codes are defined before data analysis and (b) the codes are derived from theory. The application of the two tenets of directed content analysis is explored in the following sections.

### **Open Coding**

The investigator first open coded each individual case looking for very general themes relevant to the phenomenon under study (Hsieh & Shannon, 2005). Open coding or initial coding (Strauss & Corbin, 1990) represents a necessary step as coders must familiarize self with the data set (Green & Thorogood, 2009). Bailey (2007) argues that open coding not only familiarizes the coder with the data, but “breaks up multiple pages of text into more manageable segments that can be grouped together and used during later stages of analysis” (p. 128). The goal of open coding constitutes reading every line of the data and highlighting the lines thought as potentially useful for later analysis (Bailey, 2007). Thus, open coding is not a means of descriptive coding, rather a technique to obtain a general understanding of the data. As the investigator open coded, the investigator highlighted all passages relevant to the phenomenon in question. The

particular phenomenon under examination represents how parents assist children in developing a healthy body-image.

### **Focused Coding**

Next, the investigator re-coded the highlighted passages derived from the open coding with predetermined codes (Hsieh & Shannon, 2005; Thomas, 2006), known as focused coding (Strauss & Corbin, 1990). According to Strauss and Corbin (1990) focused coding or axial coding further reduces the data. Axial coding helps researchers draw parallels between themes and sub-themes (Strauss & Corbin, 1990). During the axial analysis, the investigator examined the data through the lens of the Ecological Risk and Protective Theory, with the mindset of answering the first proposed research question. The predetermined codes of “risk” and “protective” signify key principles of Ecological Risk and Protective Theory. To guide coding, risk factors were defined as toxic elements parents should eliminate from the home environment that hinder the development of positive body-image for the child (Bogenschneider, 1996). Any time the data referred to parents eliminating a phenomenon or behavior from the home environment or relationship, the passage was deemed a risk factor. Protective factors were defined as certain tools parents should provide children in order for the child to avoid health-risk behavior (i.e., poor body-image; Bogenschneider, 1996). Passages became coded as protective factors if the passage dealt with educational issues (i.e., parents as educators) or explained how parents could improve/create an environment conducive for developing a positive body-image (i.e., providing an appropriate environment).

**Protective sub-themes.** The investigator re-analyzed the protective passages to break down the main categories. Two protective themes predominated: parents as educators and parents providing an appropriate environment. Parents as educator was further elaborated by the following codes: (a) positive role models, (b) body diversity, (c) media literacy, and (d) reasons for weight gain. Each sub-code under parents as educator represents a sub-theme, as the text guided parents to engage in healthful behaviors, teach all bodies are acceptable (i.e., body diversity), help the children to understand how to view the media critically (i.e., media literacy), and explain why some individuals are bigger than others, as well as how puberty contributes to weight gain (i.e., reasons for weight gain).

All sub-codes offer explanations for protective factors parents should engage in. The first sub-code, parents as positive role models, encourages parents to engage in healthful behaviors in their personal lives. For example, data suggested that parents maintain an active lifestyle, which teaches a child to engage in similar behavior. The second sub-code, parents teaching children about body diversity, indicates parents should educate the child to respect different body sizes. Specifically, health experts recommend teaching children not all people come in one size. Parents teaching media literacy, the third sub-code, suggests that parents educate children on the falsities of bodies in the media. The final sub-code, reasons for weight gain, tells parents to discuss why people gain weight. For example, experts note parents should discuss how puberty alters a child's body, specifically in the breasts and hip area. The sub-codes express that by educating children on certain phenomenon; children appreciate personal body-image and understand why different body sizes exist. Ultimately, the sub-categories offer parents



tools and knowledge parents should provide a child that encourages healthy body-image perception.

The second protective theme represents parents providing an appropriate environment for a child to grow in. The second protective category was further broken down into three sub-categories: open communication (e.g., listening), complimenting (e.g., focus on a child's inner qualities), and healthy choices available (e.g., providing healthy food options). The first sub-code, open communication, encourages parents to relationally connect with the child. Specifically, experts recommended parents should engage in active listening when conversing with the child. Complimenting represents the second sub-code. The data indicated that parents should compliment a child's personality or other internal characteristics. The final sub-code, making healthy choices available, directs parents to provide healthy food choices for the child. For example, an array of healthy snacks should be available for a child. Each sub-category offers parents advice on creating an environment that fosters positive body-image development.

**Risk sub-themes.** The investigator re-analyzed the risk themes, which determined whether the predominant theme of "risk" could be further dissected. One predominant risk theme constitutes behaviors a role model (i.e., the parent) should not engage in. Three sub-themes were created explaining the behaviors: (a) negative commentary on personal body, (b) negative commentary on other's and child's body, and (c) avoiding certain food and dieting behaviors. Negative commentary on personal body, the first sub-code, describes that parents should not engage in self-criticism. For example, if a parent calls him/herself fat in front of the child, the child might model the behavior or believe that only certain body types are acceptable. The second sub-code, parents negatively

commenting on other's bodies, alerts parents to never criticize a child's body size or weight. As well as, never destructively criticize another person's body in front of the child. The final sub-theme, avoiding food and dieting behaviors, indicates that parents should not engage in extreme diet or exercise behaviors as children might model the behavior. The second prominent risk theme was complimenting. The data indicated that parents should not be complimenting children on weight or body size. Praising a child for thinness or muscularity makes body size and shape salient for a child, which may cause an unhealthy obsession with the body. Each theme and sub-theme represents risk behaviors parents should eliminate to detoxify the environment.

### **Triangulation of Data**

To ensure data analysis reliability the data collection process and analysis concluded with triangulating the data. Thoughtful and systematic data triangulation reduces "systematic bias and distortion during data analysis" (Patton, 2002, p. 563). Data triangulation increases credibility and quality of research findings, as data verification reduces the probability of reporting researcher biased responses (Patton, 2002). There are several methods to triangulate data analysis (Baxtor & Babbie, 2004; Patton, 2002), but the investigator employed triangulation with multiple analysts and expert audit review technique (Patton, 2002).

**Triangulation with multiple analysts.** First, the investigator employed triangulation with multiple analysts to validate the coding. Patton (2002) describes triangulating analysts as "having two or more persons independently analyze the same qualitative data and compare their findings" (p. 560). Triangulating analysts helps ensure reliability and validates the data and results. The secondary coder was first educated

about the code descriptions. After training, the primary investigator provided the secondary coder with a randomly selected sub-set of the data.

Once the secondary coder independently coded the data, the researchers discussed the outcome and compared codes. The coders were in 100 percent agreement about which passages represented “risk” and “protective” factors. Minor discrepancies existed; however, when discussing the protective factor sub-codes. The two predominant themes, as indicated by the primary investigator are (a) parents as educators and (b) parents providing an appropriate environment. The secondary coder viewed many of the passages that the primary investigator deemed as “parents as educators” relevant to “parents providing an appropriate environment.” The secondary coder’s reasoning was she felt that parents as educators was part of parents providing an appropriate environment. The primary coder explained that because there were so many salient examples of parents as educators that the theme was deserving of its own code and category. After deliberation, the coders were in agreement that the two dominate protective codes of parents as educators and parents providing an appropriate environment should remain separate categories.

**Expert audit review technique.** Next, expert audit review confirmed the primary investigator’s data judgment (Patton, 2002). Because the data from study one informs the assembly of study two’s questionnaire, the researcher wanted assurance that the risk and protective factors found in the content analysis paralleled with health experts’ knowledge. Thus, two body-image health experts reviewed results ensuring the data’s accuracy.

The recruited health experts examined the material considering one of the following criteria: (a) work with children with body-image issues or (b) work with

families who have children with poor body-image. Experts reviewed the results section and indicated if any inaccuracies existed within the announced findings. Experts composed a list of any additional protective or risk factors that were not found during the content analysis.

### **Protective Factor Results**

Table 1 reports the frequency of the two main protective themes and seven sub-themes. Two predominant themes were identified as relating to protective factors parents should engage in. The first theme represents parents educating their children and the second theme constitutes parents creating an appropriate environment for their children. The two themes are discussed in the subsequent sections.

#### **Parents as Educators**

The brochures and online websites offered several protective factors pertinent to how parents should educate their children on issues related to body-image. The sub-themes represent positive role model, teaching body diversity, media literacy, and providing reasons for weight gain. In the results section, notations are made based on brochure/web page number and page number (e.g., [5, 1-5]).

**Positive role model.** Messages within the protective theme frequently offered guidance for how parents could be a positive role model for a child. For example, ETFO body image project recommends that parents need to accept their own bodies [1, 1] and engage in sensible eating and exercising [5, 15]. Specifically, the ETFO advised parents to be “a role model who is positive and accepting of their own body” [1, 1]. If a parent accepts his/her own body weight and shape, the child will model that behavior and accept their own body-image [11, 27]. On the contrary “if a parent stands in front of the mirror

poking at what they perceive as imperfections, your child will follow suit” [11, 27].

Parents should engage in healthful eating practices and invite children to engage in similar eating behaviors. Parents can involve their children in healthful eating practices by cooking well-balanced family meals, eating breakfast, and sharing family meals [6, 17]. Parents should engage in appropriate amounts of exercise and initiate family physical activities such as soccer, running, biking, or swimming [13, 31]. Being a positive role model provides children with the tools to engage in healthful behavior and develop a positive body-image.

**Teaching body diversity.** Teaching body diversity permits children to be tolerant and accepting of different body sizes [23, 54]. According to Dr. Freitas, frequently reminding children that everyone is different and the importance of celebrating those differences makes children more accepting of all body types and loving their own bodies [19, 48]. Parents need to verbally reinforce that body diversity is acceptable. Specifically, parents should “let them know that people come in a variety of heights, weights, sizes, skin colors, physical abilities and that those differences are what make them unique” [13, 32]. Parents may reinforce body diversity by exposing children to diverse images [7, 20]. Parents could provide toys other than Barbie and GI-Joe. The text mentions “the toys that children play with also help shape a sense of what is physically desirable and undesirable” [2, 4]. In addition, parents might purchase non-traditional books for children with alternate images and then communicate that all body sizes are acceptable and looking different from one another is normal [7, 20-21]. In traditional stories, such as Snow White and the Little Mermaid “the hero or heroine is described as attractive, while the evil character often has a deformity or is unattractive or overweight” [2, 4], which is

why exposure to nontraditional books is important. Finally, the brochures recommend celebrating “the diversity of human shapes by plastering your fridge door with pictures of people of all shapes and sizes” [11, 27]. By celebrating the uniqueness of people (e.g., body size, height, physical ability) children acknowledge the importance of diversity and accept their own bodies.

**Media literacy.** Another sub-theme of parents as educators is teaching children media literacy. Teaching children media literacy gives children critical reflection skills [6, 17]. Media literacy is important, “as media messages about body shape and size will affect the way we feel about ourselves and our bodies only if we let them” [2, 5]. Through discussion of media imagery, children are able to “effectively recognize and analyze the media messages that influence us, and can realize that the media’s definitions of beauty do not define our self-image or potential” [2, 5]. For example, parents should point out that media producers often distort the images through use of air-brushing and that the perfected images are not realistic [5, 15]. Discussion protects children from the harmful messages about body size and eating. One recommendation provided is teaching children to talk back to the television when he/she disagrees with the perfected imagery shown. Talking back teaches children to reject passive consumption, and instead promotes the idea that they do not need to accept all messages conveyed [7, 21]. Parents can ask children how they feel about certain images projected. For example, parents might ask “does that image look real?” or “do you know a lot of people who look like that?” [8, 22]. Involving children in dialog and teaching them to be critical permits children to recognize that media images are not typical and are unrealistic.

**Reasons for weight gain.** Finally, parents should educate children about reasons weight gain occurs and why some people weigh more than others. When discussing body diversity with children, parents should acknowledge genetics cause larger body types [1, 1]. Conveying this message helps children understand that some people naturally have larger body sizes and helps eliminate the prejudice and stereotypes associated with bigger bodies [5, 15; 11, 27].

Parents should prepare young children for how their bodies will change when going through puberty. Helping children understand that bodies will change and grow due to puberty [10, 26] allows children to better accept the changes. For example, mothers should explain that weight gain caused by development of breasts and hips is a normal part of adolescence [13, 31]. While discussing the changes, parents must stress that body development is a normal and healthy part of his/her child's development [20, 49]. The discussion should take place during prepubescent age and the goal should be "to educate and remind your child that they are still growing and developing and just like every personality, everybody is unique" [22, 49]. The discussion hopefully prepares a child for how his/her body changes and helps the child to embrace the changes.

### **Creating an Appropriate Environment**

The brochures and online websites offered several protective factors explaining how parents can create an environment conducive for positive body-image development. The sub-themes represent open communication, complimenting, and making healthy food choices available. In the results section, notations are made based on brochure/web page number and page number (e.g., [5, 1-5]).

**Open communication.** Part of creating a safe and loving home environment for children is keeping communication lines open between parent and child [4, 14]. Children feeling ignored or feel they are unable to communicate with parents are more likely to experience poor self-esteem and body-image [4, 14]. Listening constitutes an important role in open communication [23, 52]. For example, if a child approaches a parent with concerns about weight or “feeling fat” the parent should listen, but probe to find out more about the issue. If the child feels fat “find out how your child might be experiencing feelings of inadequacy or not feeling good enough” [17, 39]. The parent might find that the child does not feel fat because the child is overweight; instead the child may feel like he/she is an outcast, cannot do certain activities or just lacks confidence [21, 48]. Now, a parent can help his/her child form a goal to fix the insecurity and brainstorm certain behaviors the child could engage in to reach the goal [21, 48]. One article explained “help your child articulate their goal. What is it they would like to do and why. Then the parent can link some behaviors to reaching those goals” [21, 48]. The key; however, is to “help the child explore the behaviors that will help support that goal, and that link gets made more organically as opposed to use trying to push our goals onto our children” [21, 48]. Finally, parents should support children by hugging them. One brochure stated “hug your child, shake her hand when she gets and A, massage her shoulders after a tense day. Your comfort with your child’s body sends a strong message that their body is lovable” [11, 27]. When communication lines remain open and the parent provides a supportive environment for the child, the child might be more prone to talking with the parent about body-image issues and problems or insecurities affiliated with body-image [13, 32].



**Complimenting.** As indicated in the brochures and web pages, parents should compliment children on the child's talents, abilities, character, accomplishments, and physical qualities. By focusing on a child's inner qualities and accomplishments the child should value personality traits and talents more so than appearance [6, 17].

Complimenting a child on physical attributes such as strength, balance and energy promotes a positive body-image as the parent is pointing out how the body helps a child to accomplish certain things (e.g., scoring a goal in soccer; [3, 9-10]). One article noted:

Provide lots of reassurance about kids' looks and about all their other important qualities. As much as they may seem not to notice or care, simple statements like 'you've got the most beautiful smile' or 'that shirt looks great on you' really do matter. Compliment them on other physical attributes, such as strength, speed, balance, energy, or grace. Appreciating physical qualities and capabilities helps build a healthy body image. [3, 10]

Parents' compliments; however, should consist of a healthy balance of both internal qualities and physical attributes. Parents should focus more on praising inner qualities because the inner qualities are more salient to the child. But, children need reassurance about physical qualities such as strength or smile [3, 9; 13, 31; 16, 37]. In sum, parents need to understand whatever he/she is praising a child for becomes important to the child [16, 37].

**Healthy choices available.** Finally, parents should strive to provide an environment with healthy choices available. Parents should "allow your child to make decisions about food, while making sure that plenty of healthy and nutritious meals and snacks are available" [9, 24]. Moreover, one article describes "the parent's job is to

prepare and serve nutrition foods – that’s all” [11, 27]. Describe how food nourishes the body helps positive development [14, 33]. Instead of telling a child that an apple represents the better choice compared to a brownie because it encourages weight loss, a parent should describe how an apple can make the child a healthier person [17; 39]. The text notes that parents should “talk about food with regard to how it can nourish the body, rather than its effects on weight. Focus on health, not calories, fats, or carbohydrates” [14, 33]. Providing healthy options and focusing on health, not weight loss, promotes the idea that healthy eating means feeling better not altering body appearance [18, 42].

### **Risk Factors Results**

Table 2 reports the frequency in which the predominant risk themes and sub-themes were noted in the data. Two main themes surfaced relevant to risk factors: role model and complimenting. The role model theme contains several sub-themes: (a) negative commentary on personal body, (b) negative commentary on other’s and child’s body, and (c) avoiding certain food and dieting behaviors. No sub-themes were found under complimenting. The themes are detailed in the following sections.

#### **Role Model**

The brochures and online websites offered several personal behaviors parents must eliminate signifying risk factors. The sub-categories represent negative commentary on personal body, negative commentary on other’s body, and avoiding certain food and dieting behaviors. In the results section, notations are made based on brochure/web page number and page number (e.g., [5, 1-5]).

**Negative commentary on personal body.** One of the most toxic behaviors a parent engages in is self-criticism. A parent who is destructively critical of personal

body-image is more likely to have a child who is negatively critical of personal body-image. One article explains the connection:

It is more likely that a child who grows up with a parent who increasingly disparages and seeks to alter his or her own body, will grow up to feel the same despair and practice the same destructive behaviors. And we see this pattern in the rise in cases of second and third-generation eating disorders. [7,18]

Parents should refrain from making negative comments about personal body-image [1, 1]. Comments such as “I’m fat” or “I look disgusting” lead children to think that being overweight is negative and cause them to scrutinize personal body more intensely. One brochure stated “constantly complaining about or fretting over your appearance teaches kids to cast the same critical eye on themselves” [3, 10]. Another brochure advises parents to ask themselves the following question: “Do you make negative comments about your own body in front of your child?” [6, 17]. If the response is yes, a parent must eliminate the behavior immediately as the language parents use strongly “shapes a child’s perception” [2, 3] of body-image. In addition, parents ought to remove all weight scales from the home. Parents are advised not to weigh themselves or children because it highlights the importance of weight instead of feeling healthy [11, 27]. Finally, parents should not avoid specific activities such as swimming or sunbathing because it draws attention to body shape and weight [5, 15]. Making excuses such as “I look [or feel] fat in a swim suit” demonstrates to a child that only specific bodies are appropriate in swim suits. Moreover, the commentary makes body appearance more salient than the value or level of fun of the activity.

**Negative commentary on other's and child's body.** The text indicates that parents must refrain from producing negative commentary about other's bodies (i.e., children, strangers, and acquaintances) [9, 24]. Kelly argues that a parent should never communicate something about a body that validates narrow concepts of beauty or health [8, 22]. Discriminatory remarks against overweight individuals "undercuts everything a parent is trying to teach a kid" about body-image and body acceptance [8, 22]. For example, word associations such as "ugly" and "fat" or "thin" and "pretty" should not be spoken around children as the words further promote stereotypes and prejudices [10, 26].

The content analysis reveals that parents should never try to alter or negatively comment on a child's body appearance [1, 1]. According to Matz, when a parent comments about a child's body to the child, the child internalizes the messages, which are "incredibly difficult to undue" [16, 37]. Once a child internalizes the messages received, the messages lead a child to be more body-critical and less trusting of the parent. In addition, if a child were to come home from school and complain that they were ridiculed for weight, parents should support the child, not tell the child to go on a diet or put the child on a diet [7, 21]. One web page puts the parent's reaction into perspective by providing the following scenario: "when the black child comes to a parent with a story of racist treatment at school, the parents don't tell the child to bleach their skin or imply that it was their own fault" [7, 21]. Thus, parents should not tell the child to change or suggest that the child's at fault or characterize them as lazy or fat.

**Avoid certain food and dieting behaviors.** Parents are directed to avoid labeling or categorizing food. Categorizing foods as "good," "bad," "safe," or "dangerous" is a risky behavior [5, 15; 6, 17; 9, 24]. Labeling foods teaches children that craving and

eating some foods (e.g., brownies or chips) constitutes a negative behavior. Instead, parents should teach children that any food can be eaten, but in moderation [5, 15]. Parents should teach children about food moderation by not limiting a child's portions or banning foods [11, 27]. Engaging in such behaviors makes a child more prone to over-eating or sneaking food later [14, 33]. Finally, parents should not talk about food in terms of its effects on weight [14, 33]. Phrases such as "carbohydrates make you fat" or "eating fat will make you fat" send children the wrong message about food and how food connects to the body [14, 33].

Parental dieting or talking about dieting is detrimental to a child's body-image [12, 28; 14, 33]. A parent constantly dieting encourages a negative relationship with food and decreases the likeliness of learning healthy attitudes about food and body-image [6, 17]. In addition, if parents consume dieting products (e.g., diet pills), the behavior teaches children to not like the body and seek body modification strategies. Experts advise against parents purchasing dietary supplements, because the message conveyed is that "I'm discontent with my body" [8, 22]. Parents should "avoid fad dieting and any mention of the words diet or fattening" [17, 38], as well as "counting calories" [14, 33]. Exercising at unhealthy levels is all dangerous [17, 38]. Exercise should be done in moderation, not at extreme levels because excessive physical activity encourages children to model the behavior which leads to an unhealthy relationship to the physical body.

### **Complimenting**

The final risk factor theme is parental complimenting. When a parent compliments a child's weight, the parent is indirectly conveying how a boy or girl should look [2, 3]. Complimenting a child's weight might lead the child to strongly value

physical appearance and body shape more than internal qualities [6, 17]. If parents compliment a child's weight, the child begins believing a particular appearance is required to gain approval or acceptance from others, specifically the parent [6, 17]. What a child receives praise for (e.g., being skinny or muscular) is what the child understands as important [16, 37].

### **Discussion**

Bogenschneider (1996) argued that the Ecological Risk and Protective Theory is a theory that can “capture the complexity of youth development” (p. 130). In order to gain a rich understanding of child development and why some children might engage in risky/harmful behaviors and other children may not, both risk and protective factors need exploration in relation to the risky or harmful behavior (Bogenschneider, 1996). Thus, the main objective of the qualitative content analyses was analyzing risk and protective factors parents engage in that impact a child's body-image positively to form a questionnaire.

The questionnaire consists of items constructed from common themes, sub-themes, and examples that were salient after the content analysis. The survey becomes employed in study two of the dissertation. Study two seeks further insight in understanding whether or not parents are sending the “right” messages to children about body-image and positively encouraging body-image development. The subsequent sections describe the prominent themes, as well as provide exemplar items that emerged from the themes and previous literature and theory that support the conclusions.

#### **Protective Theme**

Protective factors were defined as behaviors that parents should engage in, which encourage healthy body-image development (Bogenschneider, 1996). The role of protective factors in positive body-image development is parents providing children with tools to eliminate body-image dissatisfaction. One salient protective theme derived from the data was parents as educators. Parents as educators were further segmented into four sub-themes: (a) positive role model, (b) media literacy, (c) body diversity, and (d) reasons for weight gain. The second dominant theme represents creating an appropriate environment for children to develop in. Open communication, complimenting, and providing healthy choices signify sub-themes of creating an appropriate environment.

**Parents as educators.** Parents influence children one of two ways: directly or indirectly (Vincent & McCabe, 2000; Wertheim et al., 1999). Parents indirectly influence children to model parental behaviors engaged in (Vincent & McCabe, 2000; Wertheim et al., 1999). Evidenced in the content analysis is how parental behaviors can positively influence a child's body-image development. Bandura's (1977) social learning theory posits that people learn from one another. Applying the social learning theory to the parent-child dynamic, children may observe, imitate, and model parental behavior. Bandura's theory bridges cognitive learning with behavioral outcomes. In relation to the sub-theme of parents as positive role models: if a parent engages in healthful eating practices children learn to engage in sensible eating practices. Thus, parents as positive role models signify an indirect means of teaching children proper ways to care and think about the body. Exemplar items from the sub-theme represent: (a) I am accepting of my own body, (b) I engage in moderate levels of exercise, and (c) I feel positively about my own body.

Teaching children media literacy signifies another parent as educator sub-theme. The literature thoroughly documents the negative effects media has on body-image (Grabe et al., 2008; Groesz et al., 2002; Holmstrom, 2004). For example, a meta-analysis conducted by Grabe et al. (2008) found that female body-image dissatisfaction is associated with media exposure of the thin-ideal ( $d = -.28$ ). However, media effects diminish if parents intervene and discuss with children images consumed (Timmerman, Allen, & Burrell, 2006). Through meta-analysis, Timmerman et al. (2006) discovered that parents using active mediation techniques, such as a parent discussing the content or asking children if they have any questions, diminishes the impact of media on children. Specifically, Timmerman et al. (2006) found active mediation diminishes the modeling impact of television ( $r = -.153$ ). The analyzed brochures and text support the notion of parents intervening and mediating media consumption. Exemplar items surfacing represent: (a) I taught my child to be critical of the media, (b) I discussed with my child the unrealistic nature of body sizes in the media, and (c) I taught my child not to accept all messages conveyed in the media.

The final two sub-themes represent parents teaching children about body diversity and helping children understand the different reasons for weight gain. According to Musher-Eizenman, Holub, Miller, Goldstein, and Edwards-Leeper (2004) 4 to 6 year old children already attribute negative attributions to other overweight children. In addition, Cramer and Steinwert (1998) found that children as young as three years old possess negative attitudes about obesity. Since body stigmatization exists at such a young age parents must teach children acceptance of other people's bodies, as well as their own body. Items relevant to this sub-theme are: (a) I talk to my child about different body



sizes and (b) I teach my child to be tolerant of different body sizes. Moreover, while teaching body diversity parents must make salient that people gain weight for different reasons. Parents teaching children that genetics and puberty play a major role in body development inform children that excessive eating and laziness are not sole causes of weight gain. Exemplar items represent: (a) I taught my child that genetics play a role in body size and (b) I talked to my child about puberty and its effect on weight.

**Creating an appropriate environment.** The second prominent protective theme constitutes creating an appropriate environment for children to develop in. Riesch et al. (2006) identify key aspects of the parent-child relationship that assists in child development: communication, perceived open communication, satisfaction with family system, and family caring. While communication either enhances or hinders a child's development; perceived open communication constitutes the child's perception of parent approachability. A child's development relies on his/her satisfaction with the family system. That is, how content a child is with roles, relationships, connections, and emotional bonding within the family (Olson, 1994). Similarly, family caring represents the child's perception of his/her bond or attachment to a parent (Hawkins et al., 1992). Together, the elements construct the parent-child communication processes and significantly influence child growth.

The brochure and text analysis revealed that parent-child communication is imperative for healthful development. As scholars suggest, open communication between the parent-child dynamic is key. Thus, exemplar items from the content analysis are as follows: (a) I listen to my child, (b) I made it clear that my child could talk to me about anything, and (c) I hug my child. In addition, part of connecting with a child is

complimenting the child on certain attributes. A form of family caring is showing support and love through complimenting (Hawkins et al., 1992). Two items demonstrating the complimenting sub-theme represent (a) I complimented my child on his/her talents and (b) I complimented my children on personality traits.

A final way to create an appropriate environment for positive body-image development is through providing children with healthy food choices. Golan and Crow (2004) acknowledge that children often select foods that are “served most often and prefer what has been available and acceptable in the parental household” (p. 41). Therefore, parents need to provide children with healthy meals and snacks, such as fruits and vegetables. Items demonstrative of the sub-theme are: (a) I serve healthy food, (b) I provide healthy food options to my child, and (c) I describe how food nourishes the body.

### **Risk Themes**

Risk factors were defined as behaviors parents should eliminate to create a more healthful environment for children (Bogenschneider, 1996). By eliminating risk factors, parents detoxify the environment and teach children healthful behaviors, instead of harmful behaviors. One risk theme derived from the data was parents as role models. Parents as role models were further segmented into three sub-themes: (a) negative commentary on personal body, (b) negative commentary on other’s body, and (c) eliminating food and diet behaviors. Complimenting a child’s body signifies the second dominate theme.

**Parents as role models.** As previously mentioned, parents influence children indirectly (Vincent & McCabe, 2000; Wertheim et al., 1999). Children quickly internalize and understand that the behaviors parents engage in are appropriate behaviors.

Parents' negative behaviors impact child body-image development just as much as positive behaviors. Returning to Bandura's (1977) social learning theory, as children observe parental behavior the child begins to imitate and model the behaviors put forth. Thus, if a parent engages in unhealthful eating practices, dietary behaviors, and personal body-image criticism, the child follows suit. From the content analysis, parents may engage in several negative role model behaviors constituting risk factors: (a) self-critical of personal body, (b) critical of other's body, (c) negative food behaviors, and (d) negative dietary behaviors. If a child witnesses a parent employing unhealthful behaviors, the child begins enacting the behaviors as well. Demonstrative items stemming from the category represent: (a) I am critical about my body in front of my child, (b) I say I am fat in front of my child, (c) I criticize others for being fat, (d) I categorize foods as good or bad, and (e) I talk about dieting in front of my child.

Parents directly influence children in negative ways (Vincent & McCabe, 2000; Wertheim et al., 1999). Rodgers et al. (2009) analysis revealed that parental verbal commentary associated with both son ( $r = .30$ ) and daughter ( $r = .33$ ) body-image dissatisfaction ( $n = 338$ ). The goal of Rodgers et al.'s (2009) study was to have young adults identify how frequently parents made verbal comments about their weight. For example, participants were asked to mark how frequently a mother or father would say *if you want to look good you need to work out more* (negative comment). The content analysis parallels with Rodgers et al.'s (2009) findings, as a common theme was parents should not negatively comment on a child's body-image. Parents who negatively comment on a child's body-image teach children self-criticism and that the child's body

size is not satisfactory. Relatable items to the sub-theme represent: (a) I told my child they were overweight and (b) I told my child they need to lose weight.

**Complimenting.** Complimenting signifies the final dominant risk factor theme. Rodgers et al. (2009) asked female and male respondents to specify the frequency of parental positive commentary about weight, diet, or exercise. An example of a positive comment is *you don't need to lose weight*. The data analysis revealed that parental positive commentary had a negative impact on body image dissatisfaction for both sons ( $r = -.04$ ) and daughters ( $r = -.23$ ), but the comments were significantly and more strongly correlated to female body image disturbances (see Kluck, 2010). Another form of positive commentary represents complimenting. When a parent compliments child on body size, the child internalizes the comments and places value on physical body. The compliments cause the child to feel pressured to maintain a certain body appearance, making body size very salient for the child. Thus, items stemming from complimenting are: (a) I compliment my child's weight and (b) I told my child they were beautiful because of their body size.

### **Implications**

As discussed, several protective and risk themes and sub-themes were found via directed content analysis. The content analysis revealed several behaviors that parents should and should not engage in. Some of the behaviors signify protective factors; whereas other behaviors constitute risk factors. Evidenced by the analysis is even when parents engage in appropriate protective behaviors, such as complimenting a child's inner qualities and providing healthful meal and snack options; enacting harmful behaviors such as self-criticism and challenging a child's weight can essentially outweigh the

helpful behaviors and create a harmful environment. The major implication represents that parents need to implement both risk and protective factors, supporting

Bogenschneider (1996) Ecological Risk and Protective Theory.

The content analysis made several themes, sub-themes and examples salient as important risk and protective factors parents should be aware of. From the themes and sub-themes the investigator developed a questionnaire measuring parental risk and protective behaviors (see Appendix B). The questionnaire is framed in past tense, as study two represents a retrospective analysis.

Table 1

*Frequency of Protective Themes and Sub-Themes*

<b>Protective Category</b>	<b>Exemplars</b>	<b>Frequency</b>
<b>Parents as Educators</b>		
Positive role model	(a)The parent engages in healthful eating behaviors. (b)The parent accepts own body size.	52
Body diversity	(a)The parent exposes child/ren to diverse body sizes. (b)The parent celebrates the uniqueness of all body sizes.	14
Media literacy	(a)The parent talks to child/ren about distortion of media images. (b)The parent teaches a child to be critical about media images.	19
Reasons for weight gain	(a)The parent tells the child/ren that gaining weight during puberty is healthy. (b)The parent describes to child/ren that body size is a result of genetics.	13

<b>Providing an Appropriate Environment</b>		
Open communication	(a)The parent listens to the child. (b)The parent asks the child how he/she feels about their body size.	25
Complimenting	(a)The parent compliments child/ren on talents. (b)The parent compliments child/ren on accomplishments.	15
Healthy choices available	(a)The parent provides healthy meal options. (b)The parent describes how food nourishes the body.	10

Table 2

*Frequency of Risk Themes and Sub-Themes*

<b>Risk Category</b>	<b>Exemplars</b>	<b>Frequency</b>
<b>Parents as Role Model</b>		
Negative commentary on personal body	(a)The parent criticizes own body. (b)The parent complains about body size.	25
Negative commentary on other's and child's body	(a)The parent refers to other people as fat in front of child/ren. (b)The parent tells child/ren that they need to go on a diet.	19
Avoiding food and dieting behavior	(a)The parent labels foods as good or bad. (b)The parent bans food from child/ren.	18
<b>Complimenting</b>	(a)The parent compliments a child's body size. (b)The parent uses "skinny" to describe why a child is pretty.	5



### **Chapter 3: Methods Study Two**

The goal of study two constitutes examining the parent and child's perspective. First, the researcher intends to explore what risk and protective behaviors parents employ in the home environment. Second, the child's perception of parental behaviors will be investigated, as well as what influence variable (i.e., parent, peer, media) is the most impactful on a child's body-image development.

#### **Procedures**

Surveys were distributed to participants enrolled in communication and psychology courses at a large urban public university in the United States. Recruitment criteria included: (a) 18 or older, (b) speak and write English, and (c) in contact with primary childhood guardian (between 8 and 18). In order to ensure parent and child data could be collected in tandem, the investigator used paper questionnaires. Participants received postmarked envelopes with the student questionnaire, primary guardian questionnaire, and survey directions. Paper surveys guaranteed that the parent and child data could be linked to one another and that the investigator would receive the surveys together (student and parent).

Student participants engaged in the following steps: (a) sign student consent form, (b) fill out student survey, (c) ask primary guardian to sign consent form, (d) primary guardian respond to survey, and (e) send back all items in post marked envelop. All student participants received extra credit from the communication or psychology instructors. If students did not qualify for the study, students could recruit a peer or family member that did qualify. If referrals were used, the students used the five steps listed above. Unqualified students received the same amount of extra credit for referrals.

## **Participants**

The investigator distributed 200 survey packets (200 student and 200 parent surveys). The participants returned 126 survey packets, a 63 percent return rate. One hundred percent of the returned packets were completed and usable. The student sample was 75 percent female ( $n = 95$ ) and 25 percent male ( $n = 31$ ). Eighty-five percent were Caucasian ( $n = 107$ ), followed by Hispanic ( $n = 7$ ), African American ( $n = 7$ ), and American Indian/Alaska Native ( $n = 2$ ). Ninety-four percent of participants identified themselves as heterosexual ( $n = 118$ ), followed by gay ( $n = 7$ ), and 1 participant as asexual. Fifty-five participants were between 21-23 years of age, 31 identified as 18-20, 22 were 24-26, 11 identified as 27-30, and 7 participants were 30 or older. The average age of the student population was 2.27 ( $SD = 1.098$ ). The majority of participants' BMI was healthy ( $n = 83$ ), followed by overweight ( $n = 20$ ), obese ( $n = 19$ ) and 4 were underweight. One hundred and eight participants had the mother fill out the parental portion of the survey, 17 participants had the father complete the parental survey, and one participant's grandmother responded to survey items.

## **Measurements**

Two separate surveys were constructed. The first survey elicited responses from the students (see Appendix C). The second survey obtained responses from the student's primary childhood guardian (see Appendix B).

## **Student Measurement**

Before responding to the questionnaire (described next), all student participants provided demographic information, such as age, sexuality, present height (feet/inches) and weight (pounds). The latter two measures were used to calculate an accepted measure

of body fatness called the body mass index (BMI; Centers for Disease Control and Prevention (CDC), 2011). BMI was calculated using the Adult BMI Calculator located on the Centers for Disease Control and Prevention website (CDC, 2011). Table 3 specifies BMI cut-off points (CDC, 2011) used to categorize the results into four classes: (a) underweight (below 18.5), (b) healthy weight (18.5-24.9), (c) overweight (25.0-29.9), and (d) obese (30.0 and above).

**Body-image measurement.** The first section measured body-image perception on affective, cognitive and behavioral levels (note: all scale reliabilities with item numbers listed; see Appendix D). A total of 38 items were used. Ten items measured affective perception, which represents the feelings an individual has towards his/her body (Banfield & McCabe, 2002). Items from the Ben-Tovim Walker Body Attitudes Questionnaire (BAQ; Ben-Tovim & Walker, 1991) and Banfield and McCabe's (2002) multiple construct survey constructed the affective sub-scale. Respondents rated agreeability using a 5-point Likert scale (1 = *strong agree*, 5 = *strongly disagree*). Exemplar items include: (a) I feel physically attractive, (b) I feel negative about my weight, and (c) I feel satisfied with my body weight. Cronbach's alpha for the affective subscale was .93.

Thirteen items examined participant's cognitive perception, meaning participants thoughts and beliefs concerning body shape and size (Banfield & McCabe, 2002). Items were modified from the BAQ (Ben-Tovim & Walker, 1991) and Banfield and McCabe's (2002) survey. Participants rated agreeability using a 5-point Likert scale, one representing *strongly agree* and five signifying *strongly disagree*. Demonstrative statements include: (a) People avoid me because of my body size, (b) I hardly ever think

about the shape of my body, and (c) I spend a lot of time thinking about my weight. The cognitive subscale fit measures for internal consistency ( $\alpha = .83$ ).

Finally, 15 items measured the behavioral aspect of body-image perception. Items were adapted from Ricciardelli and McCabe's (2002) Body Change Inventory and the BAQ (Ben-Tovim & Walker, 1991). The items elicited information on what behaviors participants engage in to alter body appearance (Banfield & McCabe, 2002). The respondents answered each item by responding to frequency (1 = *very often*, 5 = *never*). Examples of behavioral items: (a) I watch what I eat closely, (b) I vomit to lose weight, and (c) I exercise to increase muscle size. The behavior subscale fit measures for internal consistency ( $\alpha = .81$ ). The affective, cognitive, and behavioral subscales were combined to form an overall body-image measure ( $\alpha = .91$ ).

**Socio-cultural influence measurements.** Student participants retrospectively responded to items measuring parental, media, and peer influence on body-image perception (note: all scale reliabilities with item numbers listed; see Appendix D). The subjects answered all items in regard to the time period when they were between 8 and 18 years of age (Levine, Smolak, & Hayden, 1994). Twenty-two items elicited information on parental influence. While answering the items, student respondents considered the parent who was filling out the parental survey. Student participants responded to agreeability of each statement (1 = *strongly disagree*, 5 = *strongly agree*). Four influence items were customized from Levine et al.'s (1994) sociocultural influence scale ( $\alpha = .53$ ). A demonstrative item: (a) my parent influenced my perception of body-image negatively. Other items were added to assess protective and risk behaviors parents engaged in that were identified in study one (see study one). Nine items were protective items, including

(a) my parent loved me regardless of my weight and (b) my parent taught me that gaining weight during puberty was healthy. Cronbach's alpha was .81. A total of nine risk items were employed. Six items represented risk theme one (parents as negative role models. Exemplar statements: (a) My parent called me names because of my weight and (b) my parent dieted. Cronbach's alpha was reported at .70. Three items signified risk theme two of negative complimenting behavior ( $\alpha = .63$ ). An exemplar items is: (a) my parent told me I was beautiful because I was thin.

Twelve items measured media influence on body-image perception. Items were adapted from Levine et al.'s (1994) and McCabe and Ricciardelli's (2001) sociocultural influence scales. Subjects responded to agreeability with each item (1 = *strongly disagree*, 5 = *strongly agree*). Demonstrative items consist of: (a) I compared myself to the models I saw in the media and (b) images in the media made me want to change my body size. The media influence scale was internally consistent ( $\alpha = .87$ ).

The last portion of the survey asked participants about peer influence on body-image perception. Modified items from Levine et al.'s (1994) and McCabe and Ricciardelli's (2001) sociocultural influence scales were employed. Subjects responded to a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Sample items include: (a) How my peers perceived my body was important and (b) My peers talked about dieting. The peer influence scale was internally consistent ( $\alpha = .80$ ).

### **Parent Measurement**

The primary guardians participated in a retrospective analysis of personal behaviors while his/her child was growing up. The guardians were instructed to focus on the child whom provided the survey while responding to items (note: all scale reliabilities

with item numbers listed; see Appendix E). Before responding to the questionnaire (described next), a parent identified his/her relationship to the child who provided the survey, as well as identified the sex of his/her child.

**Survey construction.** No pre-existing scales measure parental risk and protective behaviors regarding body-image development. Thus, the parental survey was newly constructed via qualitative content analysis (see study one, chapter two for detailed account). A Google search was performed using the following key terms: (a) body-image, (b) family, (c) positive body-image, (d) parent-child communication, and (e) body confidence. The search resulted in 23 usable online brochures and web pages, with 52 analyzable pages of data. All brochures and web pages addressed how parents help a child's body-image develop positively. Survey items were created based on themes and sub-themes constructed from data analysis. For a more detailed account of survey construction and items, see study one (chapter two) in paper.

**Protective items.** Forty-four protective items emerged from the qualitative content analysis (note: all scale reliabilities with item numbers listed; see Appendix E). Participants responded to the frequency of each item with a 5-point Likert scale (1 = *never*; 5 = *very often*). Twenty-three items supported the first predominant protective theme, parents as educators. The theme expresses that by educating children on certain phenomenon children appreciate personal body-image and understand why different body sizes exist. The items created from parents as educators were partitioned into four subscales: parents as positive role models (8 items, e.g., *I felt positively about my own body*), parents teaching body diversity (5 items, e.g., *I talked to my child about different body sizes*), parents educating on media literacy (5 items, e.g., *I told my child that some bodies*

*in the media aren't realistic*), and parents educating children on why weight gain occurs (5 items, e.g., *I talked to my child about puberty and its effects on weight*). The reliability of each sub-scale represents: (a) parents as positive role models ( $\alpha = .83$ ), (b) parents teaching body diversity ( $\alpha = .80$ ), (c) parents educating on media literacy ( $\alpha = .84$ ), and (d) parents educating children on why weight gain occurs ( $\alpha = .82$ ). Cronbach's alpha for parents as educators was ( $\alpha = .90$ ).

Twenty-one items represented the second protective theme, parents providing an appropriate environment for a child (note: all scale reliabilities with item numbers listed; see Appendix E). The theme considers how parents create an environment that fosters positive body-image development. Three sub-themes transitioned into three sub-scales: (a) open communication (6 items; e.g., *I listened to my child*), (b) complimenting (8 items; e.g., *I complimented my child on his/her grace*), and (c) making healthy choices available (7 items; e.g., *I provided healthy food options to my child*). The reliability of each sub-scale represents: (a) open communication ( $\alpha = .75$ ), (b) complimenting ( $\alpha = .80$ ), and (c) healthy choices available ( $\alpha = .80$ ). Cronbach's alpha for parents providing an appropriate environment was ( $\alpha = .87$ ).

**Risk items.** Thirty-six risk items surfaced from the qualitative content analysis (note: all scale reliabilities with item numbers listed; see Appendix E). Participants responded to the frequency of each item with a 5-point Likert scale (1 = *never*; 5 = *very often*). The first notable risk them was negative behaviors a parent should not engage in. Twenty-nine items signify the first theme, divided among three sub-themes: (a) negative commentary on personal body (13 items; e.g., *I said "I'm fat" in front of my child*), (b) negative commentary on other's bodies (3 items; e.g., *I criticized others for being fat in*

*front of my child*)/negative commentary on child's body (3 items; e.g., *I criticized my child for being fat*) and (c) avoiding certain foods and dieting behaviors (10 items; e.g., *I told my child that eating fat will make you fat*). The reliability of each sub-scale represents: (a) negative commentary on personal body ( $\alpha = .87$ ), (b) negative commentary on other's bodies ( $\alpha = .69$ )/negative commentary on the child's body ( $\alpha = .74$ ), and (c) avoiding certain foods and dieting behaviors ( $\alpha = .80$ ). Cronbach's alpha for negative behaviors parents should not engage in was ( $\alpha = .89$ ).

The second risk theme of complimenting was constructed of 7 items (note: all scale reliabilities with item numbers listed; see Appendix D). The theme indicates that parents should not be complimenting children about weight or body size. Exemplar items of risk theme two include: (a) I told my child he/she was skinny and (b) I praised my child for being skinny. Cronbach's alpha for complimenting was ( $\alpha = .73$ ).

### **Data Analysis**

Scale sums were computed for each variable. After, a series of analyses were completed to answer research questions three through six. Research questions three (i.e., *What risk behaviors are parents eliminating in order to promote a positive perception of a child's physical body?*) and four (i.e., *What protective behaviors are parents engaging in to promote a positive perception of a child's physical body?*) required use of multivariate analysis. Multivariate analysis reported the frequencies of risk and protective behaviors parents engaged in. In response to research question five (*What is the child's perception on how his/her parents influence body-image development?*), correlations and adjusted multiple regression were employed. Correlations were run to examine the relationships between sex of child, a child's current BMI, and body-image perception



(i.e., cognitive, affective, and behavioral) and parental behaviors (i.e., risk and protective behaviors). Adjusted multiple regression was used to determine which variable (i.e., perceived parental protective behaviors, perceived parental negative role modeling behaviors, perceived parental complimenting behaviors, and perceived parental influence) had the greatest impact on a child's body-image perception (i.e., cognitive, affective, and behavioral). Finally, to analyze research question six (*What influence variable (media, peers, or family) has the greatest impact on a child's body-image perception?*) adjusted regression was used. Adjusted regression permitted the investigator to determine what variable (i.e., peers, media, or family) had the greatest impact on a child's body-image perception (i.e., cognitive, affective, and behavioral).

Table 3

*BMI Cut-Offs*

Range of Weight	Code	BMI Cut-Off Points
Underweight	1	< 18.5
Healthy Weight	2	18.5 – 24.9
Overweight	3	25.0 – 29.9
Obese	4	> 30.0

*Notes:* The CDC (2011) provides four categories for ranges of weight. The categories are based off of a person's current height and weight. Accordingly, the CDC (2011) suggests that if an individual is not within the healthy weight range, individuals should seek help from a physician on how to achieve a healthier body weight.

## Chapter Four: Results Study Two

First, data is reported considering sex and body-image perception, as well as child BMI and body-image perception. The rest of the results are organized by research question. Data pertaining to risk behaviors parents engage in (research question three) are reported first; followed by protective behaviors parents employed (research question four). Then, results relevant to the child's perception of how parents influenced personal body-image development (research question five) are listed. Finally, data pertinent to which socialization factor influences a child's body-image perception most (research question six) are reported.

### Child Sex, BMI, and Body-Image Perception

**Child sex and body-image perception.** Correlations compared affective, cognitive, and behavioral body-image levels between males and females. A significant negative correlation exists,  $r = -.28$ ,  $N = 126$ ,  $p < .05$ , between child sex and affective body-image. There also exists a significant negative correlation,  $r = -.20$ ,  $N = 126$ ,  $p < .05$ , between a child's sex and cognitive body-image. The negative correlations demonstrate that males have better perceptions of affective and cognitive body-image than females. A significant positive correlation surfaced,  $r = .18$ ,  $N = 126$ ,  $p < .05$ , between child sex and behavioral body-image. The positive correlation indicates that females perceive behavioral body-image more positively than males. The correlations demonstrate that sex differences exist in perceptions of body-image.

**Child BMI and body-image perception.** Correlation coefficient examined the relationship between child BMI and body-image perception. A significant negative correlation,  $r = -.37$ ,  $N = 126$ ,  $p < .05$ , exists between child BMI and affective body-

image. Data analysis revealed a significant negative correlation,  $r = -.35$ ,  $N = 126$ ,  $p < .05$ , between child BMI and cognitive body-image. No significant correlation,  $r = -.11$ ,  $N = 126$ ,  $p > .05$ , was found between child BMI and behavioral body-image perception. The negative correlations signify the lower the BMI of a child the better the perception of cognitive and affective body-image.

### **Research Question 3**

Research question three examined risk behaviors parents employed. First, correlation examined the relationship between child sex and frequency of risk behaviors, between child BMI and frequency of risk behavior, and between parent/child relationship and risk factors. Next, analysis used the  $F$  statistic to compare means across employment of risk behaviors.

**Child sex and frequency of risk behaviors.** The correlation statistic was employed to examine the relationship between a child's sex and frequency of risk behaviors employed by parents. A significant positive correlation,  $r = .18$ ,  $N = 126$ ,  $p < .05$ , between child sex and parental negative complimenting behavior. The significant positive correlation signifies female children were less likely to perceive the parent as engaging in negative complimenting behaviors. No significant correlations existed between child sex and negative role model behaviors,  $r = -.01$ ,  $N = 126$ ,  $p > .05$ . The lack of significance signifies no relationship between sex of child and frequency of negative role model actions.

**Child BMI and frequency of risk behaviors.** The relationship between child BMI and frequency of parental risk behaviors was examined using correlation. Analysis revealed a significant positive relationship,  $r = .27$ ,  $N = 126$ ,  $p < .05$ , between child BMI

and negative complimenting behavior. No significant correlations were found between child BMI and negative role model behaviors,  $r = -.08$ ,  $N = 126$ ,  $p > .05$ . The positive correlation indicates that the more a child currently weighs, the more likely parents engaged in appropriate complimenting behavior.

**Parent/child relationship and frequency of risk behaviors.** Correlation analyses revealed no significant relationship between parent/child relationship and frequency of negative role model behavior,  $r = .05$ ,  $N = 126$ ,  $p > .05$  and between parent/child relationship and frequency of negative complimenting behavior,  $r = -.08$ ,  $N = 126$ ,  $p > .05$ . The non-significance of both correlations indicates that neither mother nor father is more likely to engage in negative role model behavior or negative complimenting behavior.

**Risk behaviors employed.** The  $F$  statistic considers the impact of risk behaviors parents engaged in. The lower mean indicates a parent reported greater engagement the risk behavior. A significant main effect of parent/child relationship and child sex was found,  $F(2, 126) = 2.81$ ,  $p < .05$  (see Table 4). In relationship to risk theme one, parents engaging in negative role model behaviors, fathers ( $M = 3.80$ ,  $SD = .27$ ) were more likely to frequently make negative commentary about their bodies in front of sons than mothers ( $M = 3.94$ ,  $SD = .19$ ). Mothers ( $M = 3.71$ ,  $SD = .11$ ) more frequently made negative commentary about their bodies in front of daughters when compared to fathers ( $M = 3.97$ ,  $SD = .22$ ) and grandmothers ( $M = 3.85$ ,  $SD = .62$ ). Data demonstrated fathers ( $M = 4.08$ ,  $SD = .17$ ) were more likely than mothers ( $M = 4.59$ ,  $SD = .12$ ) to engage in frequent negative comments of a child's or other's body in front of a male child. Fathers of females ( $M = 4.30$ ,  $SD = .14$ ) were more likely to make negative comments of a child's

or other's body than mothers ( $M = 4.43, SD = .07$ ) or grandmothers ( $M = 4.50, SD = .39$ ). Mothers of male children ( $M = 3.68, SD = .16$ ) more frequently engaged in poor dieting and exercise behaviors than fathers ( $M = 3.98, SD = .23$ ). Fathers with female children ( $M = 3.62, SD = .18$ ); however, more frequently reported engaging in poor diet and exercise behaviors than mothers ( $M = 3.83, SD = .10$ ) or grandmother ( $M = 4.50, SD = .52$ ). The results demonstrate that fathers and mothers engage in risky behaviors around children and the child's sex plays an integral role in what risk behaviors are employed.

In relation to risk theme two, negative complimenting behavior, fathers of male children ( $M = 3.33, SD = .29$ ), were more likely than mothers ( $M = 3.82, SD = .20$ ) to engage in negative complimenting behavior. Mothers of female children ( $M = 3.69, SD = .12$ ) were more likely than fathers ( $M = 3.83, SD = .22$ ) and grandmother ( $M = 4.00, SD = .65$ ) to implement negative complimenting behaviors. The statistics illustrate that mothers engage in risky complimenting behaviors with daughters, whereas fathers use risky complimenting behaviors with sons.

#### **Research Question 4**

Research question four examined frequency of protective behaviors parents employed. Correlations examine the relationship between child sex and frequency of protective behaviors, between child BMI and frequency of protective behavior, and between parent/child relationship and protective behaviors engaged in. Next, analysis used the  $F$  statistic to compare means across employment of protective behaviors.

**Child sex and frequency of protective behaviors.** The correlation statistic was employed to examine the relationship between sex of child and frequency of protective behaviors employed by parents (see Table 5). Analyses revealed positive significant

correlations between child sex and teaching body diversity,  $r = .20$ ,  $N = 126$ ,  $p < .05$ , between child sex and teaching media literacy,  $r = .21$ ,  $N = 126$ ,  $p < .05$ , between child sex and providing reasoning for weight gain,  $r = .21$ ,  $N = 126$ ,  $p < .05$ , between child sex and open communication,  $r = .21$ ,  $N = 126$ ,  $p < .05$ , between child sex and positive complimenting behavior,  $r = .27$ ,  $N = 126$ ,  $p < .01$ , and between child sex and creating an appropriate environment behaviors,  $r = .23$ ,  $N = 126$ ,  $p < .05$ . The correlations illustrates that parents were more likely to employ the protective behaviors with female children than male children.

No significant correlations existed between child sex and positive role model behaviors,  $r = -.07$ ,  $N = 126$ ,  $p > .05$ , or between child sex and making healthy food choices available,  $r = .06$ ,  $N = 126$ ,  $p > .05$ . The lack of significance signifies that there is not a strong relationship between sex of child and frequency of the aforementioned protective behaviors.

**Child BMI and frequency of protective behaviors.** The relationship between child BMI and frequency of parental protective behaviors was examined using the correlation statistic (see Table 6). Analysis revealed a significant negative relationship,  $r = -.21$ ,  $N = 126$ ,  $p < .05$ , between child BMI and positive role model behavior and between child BMI and making healthy food choices available,  $r = -.23$ ,  $N = 126$ ,  $p < .05$ . No significant correlations were found between child BMI and teaching body diversity,  $r = -.01$ ,  $N = 126$ ,  $p > .05$ , child BMI and teaching media literacy,  $r = .07$ ,  $N = 126$ ,  $p > .05$ , between child BMI and positive complimenting behavior,  $r = -.06$ ,  $N = 126$ ,  $p > .05$ , between child BMI and providing reasons for weight gain,  $r = -.07$ ,  $N = 126$ ,  $p > .05$ , and child BMI and open communication,  $r = -.10$ ,  $N = 126$ ,  $p > .05$ .

**Parent/child relationship and frequency of protective behaviors.** Correlation analyses uncovered several negative significant correlations between parent/child relationship and frequency of protective behaviors (see Table 7). There exists significant negative correlations between parent/child relationship and behaving as a positive role model,  $r = -.25$ ,  $N = 126$ ,  $p < .01$ , between parent/child relationship and teaching body diversity,  $r = -.29$ ,  $N = 126$ ,  $p < .01$ , between parent/child relationship and providing reasons for weight gain,  $r = -.36$ ,  $N = 126$ ,  $p < .01$ , between parent/child relationship and the theme of parents as educators,  $r = -.35$ ,  $N = 126$ ,  $p < .01$ , between parent/child relationship and open communication,  $r = -.34$ ,  $N = 126$ ,  $p < .01$ , between parent/child relationship and making healthy food choices available,  $r = -.32$ ,  $N = 126$ ,  $p < .01$ , and parent/child relationship and creating an appropriate environment,  $r = -.31$ ,  $N = 126$ ,  $p < .01$ . Results illustrate that mothers more frequently employ the mentioned protective behaviors than fathers.

Correlation analyses revealed no significant relationship between parent/child relationship and teaching media literacy,  $r = -.17$ ,  $N = 126$ ,  $p > .05$ , and between parent/child relationship and positive complimenting behavior,  $r = -.12$ ,  $N = 126$ ,  $p > .05$ . The non-significance of both correlations indicates that neither mother nor father is more likely to engage in educating children about the media and positive complimenting behavior.

**Protective behaviors used.** The  $F$  statistic and means were used to gain understanding of protective behaviors parents engaged in. A main effect of parent/child relationship was found for protective strategies implemented,  $F(2, 126) = 1.83$ ,  $p < .05$  (see Table 8). In relationship to theme one, parents as educators, mothers ( $M = 3.73$ ,  $SD =$



.11) significantly engaged in positive role model behaviors more frequently than did fathers ( $M = 3.15$ ,  $SD = .18$ ) and grandmother ( $M = 3.13$ ,  $SD = .60$ ). Mothers ( $M = 3.88$ ,  $SD = .12$ ) significantly implemented teaching media literacy more frequently than did fathers ( $M = 3.60$ ,  $SD = .22$ ) and grandmother ( $M = 1.00$ ,  $SD = .74$ ). Mothers ( $M = 3.00$ ,  $SD = .12$ ) significantly reported more frequently discussing reasons for weight gain with their children than fathers ( $M = 2.26$ ,  $SD = .15$ ) or grandmother ( $M = 2.00$ ,  $SD = .21$ ). Mothers ( $M = 3.21$ ,  $SD = .09$ ) engaged in more educational behaviors than did fathers ( $M = 2.71$ ,  $SD = .15$ ) and grandmothers ( $M = 2.04$ ,  $SD = .50$ ).

In relationship to protective theme two, creating an appropriate environment, mothers ( $M = 3.74$ ,  $SD = .10$ ) reported providing an open communication environment more so than fathers ( $M = 3.07$ ,  $SD = .18$ ) and grandmother ( $M = 3.00$ ,  $SD = .59$ ). Mothers ( $M = 3.85$ ,  $SD = .10$ ) also made healthy food choices available to children more so than fathers ( $M = 3.25$ ,  $SD = .16$ ) or grandmother ( $M = 3.29$ ,  $SD = .54$ ). Overall, mothers ( $M = 3.86$ ,  $SD = .08$ ) significantly employed more strategies in creating an appropriate environment for the child than fathers ( $M = 3.41$ ,  $SD = .13$ ) or grandmother ( $M = 3.43$ ,  $SD = .44$ ). Data analysis reveals mothers more frequently engage in protective strategies than fathers and grandmothers.

There were no significant main effects for child sex and parental protective strategies employed,  $F(2, 126) = .91$ ,  $p > .05$ . The result indicates that the sex of the child did not affect parental protective strategies used.

### Research Question 5

The fifth research question examined the relationship between the child's perceptions of how a parent influenced body-image development. The relationships between the variables were examined using the correlation test and adjusted multiple regression.

**Parent perception of weight and current child BMI.** First, the relationship between parent perception of a child's weight and the child's BMI was examined. The correlation analyses revealed a significant positive correlation,  $r = .45$ ,  $N = 126$ ,  $p < .05$ , between a parent perceiving a child as fat and a child's current BMI. Another significant negative correlation,  $r = -.42$ ,  $N = 126$ ,  $p < .05$ , surfaced between a parent perceiving a child as thin and the child's current BMI. The negative correlation indicates that if a parent viewed the child as fat, the child's BMI is higher (indicating an unhealthy weight); whereas the positive correlation demonstrates when a parent perceived the child as thin, the child's BMI is currently lower (indicating a healthier weight).

**Child sex and perceived parental influence.** The relationship between a child's sex and perception of parental influence was examined using the correlation coefficient. The analysis revealed a significant correlation,  $r = .18$ ,  $N = 126$ ,  $p < .05$ , between child sex and parents complimenting a child on size. No significant correlations were found between child sex and parental influence,  $r = -.14$ ,  $N = 126$ ,  $p > .05$ , child sex and protective behaviors,  $r = -.03$ ,  $N = 126$ ,  $p > .05$ , and child sex and negative role model behaviors,  $r = -.01$ ,  $N = 126$ ,  $p > .05$ . The correlation indicates that females believe parents did not engage in complimenting personal body size; whereas males thought parents complimented body size more frequently.

**Child BMI and perceived parental influence.** Correlation coefficient was used to examine the relationship between child's BMI and parental influence strategies. Analysis found significant negative correlations between child BMI and perception of parental protective factors employed,  $r = -.32, N = 126, p < .05$ , between child BMI and negative role model behaviors,  $r = -.32, N = 126, p < .05$ , and between child BMI and perception of a parent's influence on body-image development,  $r = -.28, N = 126, p < .05$ . No significant correlation existed between child BMI and negative complimenting behavior (risk theme 2),  $r = .12, N = 126, p > .05$ . Results illustrate that the lower the body-image score, the more positive behaviors parents employed.

**Body-image levels and perceived parental influence.** Adjusted multiple regression was used to examine the predictor variables relationship with each type of body-image. In terms of a child's affective body-image the adjusted multiple  $R = .21, p < .05$  was significant,  $F(4, 121) = 9.34$ . One of the predictors demonstrated a significant contribution to a child's affective body-image perception; perceived parental influence,  $\beta = .38, t = 3.70, p < .05$ . None of the other predictors demonstrated a significant contribution, perceived protective factors,  $\beta = .07, t = .71, p > .05$ , perceived parental negative role model behaviors,  $\beta = .07, t = .65, p > .05$ , or perceived parental negative complimenting behaviors,  $\beta = -.15, t = -1.68, p > .05$ . The results illustrate that a child perceives parental influence as the greatest predictor of affective body-image perception.

When exploring a child's cognitive body-image the adjusted multiple  $R = .20, p < .05$  was significant,  $F(4, 121) = 8.67$ . One of the predictors demonstrated a significant contribution to a child's cognitive body-image perception; perceived parental influence,  $\beta = .33, t = 3.23, p < .05$ . None of the other predictors demonstrated a significant

contribution, perceived protective factors,  $\beta = .08, t = .79, p > .05$ , perceived parental negative role model behaviors,  $\beta = .15, t = 1.35, p > .05$ , or perceived parental negative complimenting behaviors,  $\beta = -.03, t = -.37, p > .05$ . The results illustrate that a child perceives parental influence as the greatest predictor of cognitive body-image perception.

Finally, in relationship to a child's behavioral body-image perception the adjusted multiple  $R = .07, p < .05$  was significant,  $F(4, 121) = 3.33$ . One of the predictors demonstrated a significant contribution to a child's behavioral body-image perception; perceived parental negative complimenting behaviors,  $\beta = .23, t = 2.36, p < .05$ . None of the other predictors demonstrated a significant contribution, perceived protective factors,  $\beta = -.06, t = -.55, p > .05$ , perceived parental negative role model behaviors,  $\beta = .19, t = 1.59, p > .05$ , or perceived parental influence,  $\beta = .05, t = .41, p > .05$ . The results illustrate that a child perceives parental negative complimenting behavior as the greatest predictor of behavioral body-image perception.

### **Research Question 6**

Research question six serves the purpose of understanding what socialization factor (i.e., peers, parents, media) has the greatest impact on child body-image perception. First, correlations provide an understanding of the relationship between child sex and media, peer, and parent influence. Next, adjusted regression offers understanding of the influence magnitude of all socialization factors.

**Correlations.** Significant correlations exist between sex of child and media influence and sex of child and peer influence. The analysis revealed a significant negative correlation,  $r = -.21, N = 126, p < .05$ , between sex of child and media influence. A significant negative correlation emerged,  $r = -.32, N = 126, p < .05$ , between child sex

and peer influence. The significant negative correlations indicate males perceive media and peers as a more positive influence on body-image perception than females.

**Affective body-image and socialization factors.** Adjusted regression was used to analyze the predictor variables' relationship with a child's affective body-image perception. The adjusted multiple  $R = .56$ ,  $p < .05$  was significant,  $F(6, 119) = 8.96$  (see Table 9). Two of the predictors demonstrated a significant contribution to a child's affective body-image perception; parental influence,  $\beta = .88$ ,  $t = 2.72$ ,  $p < .05$ , and media influence,  $\beta = .26$ ,  $t = 2.8$ ,  $p < .05$ . None of the other predictors demonstrated a significant contribution, protective factors,  $\beta = .12$ ,  $t = .79$ ,  $p > .05$ , parental negative role model behaviors,  $\beta = .15$ ,  $t = .68$ ,  $p > .05$ , parental negative complimenting behaviors,  $\beta = -.49$ ,  $t = -1.72$ ,  $p > .05$ , or peer influence,  $\beta = .09$ ,  $t = .64$ ,  $p > .05$ . The results illustrate that a child perceives parental influence and media influence as the greatest predictors of affective body-image perception.

**Cognitive body-image and socialization factors.** Adjusted regression was used to analyze the predictor variables' relationship with a child's cognitive body-image perception. The adjusted multiple  $R = .65$ ,  $p < .05$  was significant,  $F(6, 119) = 14.09$  (see Table 10). Two of the predictors demonstrated a significant contribution to a child's cognitive body-image perception; parental influence,  $\beta = .52$ ,  $t = 1.98$ ,  $p < .05$ , and media influence,  $\beta = .39$ ,  $t = 5.24$ ,  $p < .05$ . None of the other predictors demonstrated a significant contribution, protective factors,  $\beta = .11$ ,  $t = .91$ ,  $p > .05$ , parental negative role model behaviors,  $\beta = .28$ ,  $t = 1.59$ ,  $p > .05$ , parental negative complimenting behaviors,  $\beta = -.11$ ,  $t = -.45$ ,  $p > .05$ , or peer influence,  $\beta = .06$ ,  $t = .52$ ,  $p > .05$ . The results illustrate

that a child perceives parental influence and media influence as the greatest predictors of cognitive body-image perception.

**Behavioral body-image and socialization factors.** Adjusted regression was used to analyze the predictor variables' relationship with a child's behavioral body-image perception. The adjusted multiple  $R = .46$ ,  $p < .05$  was significant,  $F(6, 119) = 5.19$  (see Table 11). Two of the predictors demonstrated a significant contribution to a child's behavioral body-image perception; parental negative complimenting behavior,  $\beta = .67$ ,  $t = 2.32$ ,  $p < .05$ , and media influence,  $\beta = .35$ ,  $t = 3.83$ ,  $p < .05$ . None of the other predictors demonstrated a significant contribution, protective factors,  $\beta = -.10$ ,  $t = -.70$ ,  $p > .05$ , parental negative role model behaviors,  $\beta = .38$ ,  $t = 1.75$ ,  $p > .05$ , parental influence,  $\beta = -.10$ ,  $t = -.31$ ,  $p > .05$ , or peer influence,  $\beta = -.10$ ,  $t = -.72$ ,  $p > .05$ . The results illustrate that a child perceives parental negative complimenting behavior and media influence as the greatest predictors of behavioral body-image perception.

Table 4  
*Risk Behaviors Employed – Means and Standard Deviation*  
 $F = 2.81$   
 $df = 2, 126$   
 $p < .05$

Dependent Variable	Student Sex	Parent/Child Relation	Mean	SD
Negative Role Model Behaviors	Male	Mother	3.94	.19
		Father	3.80	.27
	Female	Mother	3.71	.11
		Father	3.97	.22
		Grandmother	3.85	.62
Negative Commentary Own Body	Male	Mother	4.59	.12
		Father	4.08	.17
	Female	Mother	4.43	.07
		Father	4.30	.14
		Grandmother	4.50	.39
Negative Commentary Other Body	Male	Mother	3.68	.09
		Father	3.98	.23
	Female	Mother	3.83	.09
		Father	3.62	.18
		Grandmother	4.50	.52
All Risk Theme 1	Male	Mother	3.98	.12
		Father	3.92	.19
	Female	Mother	3.90	.08
		Father	3.92	.15
		Grandmother	4.21	.44
All Risk Theme 2	Male	Mother	3.82	.20
		Father	3.33	.29
	Female	Mother	3.69	.12
		Father	3.83	.22
		Grandmother	4.00	.65

Note: The lower mean indicates a parent was more likely to engage in risk behavior.

Table 5  
*Correlation among Child Sex and Parental Protective Factors*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Child Sex	-									
2. P1T1	-.07	-								
3. P1T2	.20*	.19**	-							
4. P1T3	.21*	.21**	.77**	-						
5. P1T4	.18	.25**	.71**	.60**	-					
6. AllP1	.15	.60**	.84**	.82**	.81**	-				
7. P2T1	.21*	.36**	.47**	.44**	.52**	.59**	-			
8. P2T2	.27**	.33**	.49**	.34**	.50**	.54**	.51**	-		
9. P2T3	.06	.70**	.39**	.39**	.41**	.64**	.45**	.45**	-	
10. AllP2	.23*	.57**	.56**	.48**	.59**	.73**	.79**	.83**	.31**	-

*Note.* \* $p < .05$ . \*\* $p < .01$ .



Table 6  
*Correlation among Child BMI and Parental Protective Factors*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
11. Child BMI	-									
12. P1T1	-.21*	-								
13. P1T2	-.00	.19**	-							
14. P1T3	.07	.21**	.77**	-						
15. P1T4	-.66	.25**	.71**	.60**	-					
16. AllP1	-.09	.60**	.84**	.82**	.81**	-				
17. P2T1	-.10	.36**	.47**	.44**	.52**	.59**	-			
18. P2T2	-.06	.33**	.49**	.34**	.50**	.54**	.51**	-		
19. P2T3	-.23*	.70**	.39**	.39**	.41**	.64**	.45**	.45**	-	
20. AllP2	-.16	.57**	.56**	.48**	.59**	.73**	.79**	.83**	.31**	-

*Note.* \* $p < .05$ . \*\* $p < .01$ .

Table 7  
*Correlation among Parent/Child Relationship and Parental Protective Factors*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
21. P-C Relation	-									
22. P1T1	-.25**	-								
23. P1T2	-.29**	.19**	-							
24. P1T3	-.17	.21**	.77**	-						
25. P1T4	-.36**	.25**	.71**	.60**	-					
26. AllP1	-.35**	.60**	.84**	.82**	.81**	-				
27. P2T1	-.34**	.36**	.47**	.44**	.52**	.59**	-			
28. P2T2	-.12	.33**	.49**	.34**	.50**	.54**	.51**	-		
29. P2T3	-.32**	.70**	.39**	.39**	.41**	.64**	.45**	.45**	-	
30. AllP2	-.31**	.57**	.56**	.48**	.59**	.73**	.79**	.83**	.31**	-

*Note.* \* $p < .05$ . \*\* $p < .01$ .

Table 8  
*Protective Behaviors Employed – Means and Standard Deviation*  
 $F = 1.83$   
 $df = 2, 126$   
 $p < .05$

Dependent Variable	Parent/Child Relation	Mean	SD
Positive Role Model Behavior	Mother	3.73	.11
	Father	3.15	.18
	Grandmother	3.13	.60
Teaching Media Literacy	Mother	3.88	.12
	Father	3.60	.22
	Grandmother	1.00	.74
Reasons for Weight Gain	Mother	3.00	.12
	Father	2.26	.15
	Grandmother	2.00	.21
Overall Educational Behaviors	Mother	3.21	.09
	Father	2.71	.15
	Grandmother	2.04	.50
Open Communication	Mother	3.74	.10
	Father	3.07	.18
	Grandmother	3.00	.59
Healthy Food Choices	Mother	3.85	.10
	Father	3.25	.16
	Grandmother	3.29	.54
Overall Creating an Appropriate Environment	Mother	3.86	.08
	Father	3.41	.13
	Grandmother	3.43	.44

Note: The higher mean indicates the parent was more likely to employ the strategy.

Table 9  
*Affective Body-Image and Socialization Factors*

Multiple  $R = .56$

$F = 8.96$

$df = 6, 119$

$p = .00^*$

Predictor	Beta	$t$	Sig.
Parental Influence	.88	2.72	.01*
Parental Protective Influence	.12	.79	.43
Parental Negative Role Model Behaviors	.15	.68	.50
Parental Negative Complimenting	-.49	1.72	.09
Media Influence	.26	2.80	.01*
Peer Influence	.09	.64	.53

Table 10  
*Cognitive Body-Image and Socialization Factors*

Multiple  $R = .65$

$F = 14.09$

$df = 6, 119$

$p = .00^*$

Predictor	Beta	$t$	Sig.
Parental Influence	.52	1.98	.05*
Parental Protective Influence	.11	.91	.36
Parental Negative Role Model Behaviors	.28	1.59	.12
Parental Negative Complimenting	-.11	-.45	.65
Media Influence	.39	5.24	.00*
Peer Influence	.06	.52	.61

Table 11  
*Behavioral Body-Image and Socialization Factors*

Multiple  $R = .46$   
 $F = 5.19$   
 $df = 6, 119$   
 $p = .00^*$

Predictor	Beta	$t$	Sig.
Parental Influence	-.10	-.31	.16
Parental Protective Influence	-.10	-.70	.49
Parental Negative Role Model Behaviors	.38	1.75	.08
Parental Negative Complimenting	.67	2.32	.02*
Media Influence	.35	3.83	.00*
Peer Influence	-.10	-.72	.47

## Chapter Five: Discussion

The present study examined whether parents positively influence a child's body-image perception. Specifically, the study investigated whether parents implement protective factors to encourage healthy body-image perception and reduce risk factors leading to poor body-image development in the home environment based on health expert opinions. In addition, the study explored parental influence, along with other ecological elements (i.e., peers, media) to understand the valence environmental factors have on a child's body-image perception.

The majority of children experienced some type of body dissatisfaction. Gender; however, determined what kind of body-image dissatisfaction. Similar to previous studies (McCabe & Ricciardelli, 2001a; Ricciardelli et al., 2000), females indicated a worse affective and cognitive body-image compared to males; whereas males reported a less positive behavioral body-image. That is, females possess poorer feelings (i.e., affective) and thoughts (i.e., cognitive) about body, but males engage in more strategies to alter body size or shape (i.e., behavioral; Banfield & McCabe, 2002).

Scholars argue that male body-image remains neglected in the literature because the main focus constitutes weight loss strategies, not weight gain or increasing muscle mass strategies (McCabe & Ricciardelli, 2001a; Middleman, Vazquez, & Durant, 1998). Because the current literature concentrates on dieting as the main form of body alteration, males report better body-image perceptions because of the desire to increase body size (Drewnowski, Kennedy, Kurth, & Krahn, 1995; Tiggemann, 1994). Any form of extreme body modification, whether weight loss or gain can lead to behavioral body-image issues. Although males are less likely to engage in dieting, purging or fasting, males are more

likely to engage in excessive workouts to enhance the body, constituting a form of body-image dissatisfaction.

Consistent with the Ecological Risk and Protective Theory (ERPT; Bogenschneider, 1996), multiple ecological factors influenced child body-image development. Regression analyses reported that affective and cognitive body-image levels were significantly negatively impacted by parental and media influence. Regression analysis further revealed that behavioral body-image levels were significantly influenced by the media, as well as parental negative complimenting behavior. Contrary to literature (Ata., 2007; Jones & Crawford, 2006; Levine & Smolak, 2002; Ricciardelli et al., 2000; Paxton et al., 2006), children claimed that peers did not significantly influence body-image development.

The results of the study indicate that parents and media generate the greatest impact on a child's body-image development. Supporting the ERPT, the findings demonstrate when examining health-risk behaviors scholars need to consider multiple socialization factors (Bogenschneider, 1996). Relative to the current study, children report parents and the media signify the most influential sources for body-image development.

An interesting aspect of parental message valence represents how messages influenced different levels of body-image. Specifically, a child's behavioral body-image, not affective or cognitive body-image, was strongly affected by parental negative complimenting behavior, as well as media messages. Kluck (2010) and Rodgers et al. (2009) explained that parents make positive commentary about a child's body size or shape in order to increase a child's body-image satisfaction. The findings; however,

indicate that a child does not interpret parental complimenting as a positive behavior. When a parent compliments a child's body size, the child internalizes the comments and places value on physical body. The compliments may cause the child to feel pressure to maintain a certain body appearance, making body size very salient for the child. The consequence of parental complimenting behavior represents children engaging in negative behaviors, such as dieting or excessive workouts to maintain the appearance.

One important implication of parents engaging in complimenting behavior signifies parents may not know that complimenting a child's body size indicates harmful behavior. According to the data, children believe parental negative complimenting constitutes one antecedent to poor body-image. The child's perception parallels with the data from study one. Health experts specified parents should not compliment children on body size, weight, or shape (University's Students Guide to Body-Image, n.d). However, the data from study two demonstrates that parents admit to employing the risky behavior, which may indicate that parents are unaware of the adverse impact.

Specifically, the data indicates that mothers are more likely to compliment female children while fathers compliment male children. The finding supports previous studies demonstrating that mothers reinforce societal body standards for female children more so than fathers (Hill & Franklin, 1998; Keel, Heatherton, Harnden, & Hornig, 1997; Pike & Rodin, 1991). A mother, by complimenting a daughter's thinness, perpetuates societal body norms. A mother compliments a daughter based on what is familiar to the mother.

In the literature less is known how fathers influence body-image perception. The current study; however, provides additional insight into the topic. Ricciardelli et al. (2000) found that fathers were "more important in influencing body change methods" (p.



194) in sons. The current study may explain Ricciardelli et al.'s (2000) results. When fathers compliment a son's body size and muscular shape, the son may feel more pressure to maintain the muscular appearance. Thus, the son becomes more concerned about body appearance and how to maintain physical body.

O'Dea's (2004) "First, do no harm," principle signifies the "warnings about the potential to do more harm than good when attempting to prevent eating disorders" (O'Dea, 2004, p. 228). With negative complimenting behaviors, parents may believe they are helping a child. Instead, the parent is increasing a child's awareness of his/her weight and body size. According to health experts, parents should compliment a child's talent, smile, personality, or strength (Kids Health, 2012) and refrain from using thinness and pretty or muscular and handsome in the same statements (Kids Health, 2012).

Another harmful behavior parents employed represents communicating negative comments about personal body in front of a child. The results indicate that mothers are more likely than fathers to comment about personal bodies in front of daughters; whereas, fathers are more likely to negatively comment about their bodies in front of male children. The negative complimenting behavior and personal body commentary represent a form of gender-relevant messages (McCabe & Ricciardelli, 2001a). For example, a mother may state she feels fat in front of the daughter; whereas a father might say he needs to become more muscular in front of the son. The data illustrates that mothers and fathers engage in negative complimenting and commenting behavior with same-sex children. Because society teaches men and women to look a certain way, the messages used with same-sex children model the cultural teachings. That is, mothers send messages

to daughters perpetuating the norm that women should not be overweight and fathers disseminate messages to sons about being muscular and fit.

Despite implementing risky behaviors, parents identified engaging in protective behaviors. Protective behaviors signify messages designed to strengthen the likelihood of positive development by enhancing a child's ability to handle risk-filled situations (Bogenschneider, 1996; Kazdin, 1997). Health experts identified several ways a parent may help a child acquire a positive body-image perception. Mainly, results from study one showed health experts recommended to create a positive environment for the child and offered educational tips to parents in regards to positive role model behaviors. Regardless of the child's gender, mothers were more likely to employ protective behaviors than fathers. The data shows that mothers engaged in more educational behaviors, including teaching children why weight gain occurs (i.e., puberty), media literacy, and being a positive role model. In addition, mothers communicated and provided healthier food choices for the child.

According to O'Dea (2004) people need to "encourage healthy eating among children and adolescents without promoting weight loss attempts and the diet-binge cycle" (p. 227-28). Mothers in the study employed healthful and helpful behaviors that *should* have encouraged positive body-image development according to the health expert opinions. The question then becomes, why did the child participants indicate significant low levels of cognitive, affective, and behavioral body-image?

Rutter (1987) and Bogenschneider (1996) explained that the ERPT combines the risk and protective processes because the two processes cannot be dichotomized. That is, the risk and protective process are not independent models explaining health-risk

behaviors, but dependent models (Bogenschneider, 1996; Morse, 1993). Seemingly, parents, specifically mothers, in the current study should have helped children develop a healthy body-image through enacting the health experts' recommended protective behaviors. The protective behaviors; however, might become offset by the risk behaviors occurring in the home environment. As previously noted mothers and fathers made negative commentary about personal bodies and engaged in negative complimenting behaviors with same-sex children. In addition, fathers were more likely than mothers to make negative commentary about other's bodies in front of sons or daughters, as well as engage in poor dieting and exercising behaviors around female children. Mothers were more likely than fathers to engage in poor dieting and exercising behaviors in front of male children.

The study demonstrates the importance of the ERPT in many ways. First, the current investigation provides support for Bogenschneider's (1996) argument that risk and protective processes need to be explored in tandem to understand child development. The data specifically indicates that parents engaged in protective behaviors, but enacted risky behaviors as well. The risky behaviors countered the protective behaviors, leading to poor body-image development for male and female children. Strom and Boster's (2011) study had similar findings. The scholars explored parental supportive messages sent to children on educational attainment (i.e., dropping out or finishing high school; Strom & Boster, 2011). Strom and Boster (2011) found children who deemed messages as negatives were less likely to complete an education than children receiving positive messages. In Strom and Boster's (2011) study the negative messages represented scare tactics through risky communication. The positive messages; however, led children to

increase resiliency and complete schooling. Similarly, in the current study the negative risk messages had more valence than the positive messages the children received, leading to poor body-image satisfaction. The finding highlights the importance of message design, specifically the importance of parents eliminating all risk factors from the home environment and implementing protective behaviors to help the child develop positively.

Second, the study provides support for the ecological aspect of Bogenschneider's (1996) ERPT. Bogenschneider (1996) integrates Bronfenbrenner's (1979, 1986) ecological theory of human development, which suggests child development is influenced by a number of socialization factors including macro (e.g., media institutions) and micro levels (e.g., peers, family). Even though the children received messages at home helping the child develop positively (i.e., protective messages), the children were not resilient enough to overcome the messages received about body from the media. Research demonstrates, beginning at a young age people consume the prototypical body types and shapes of skinny females and muscular males in the media (Furnham et al., 2002). The study illustrates that even though mothers are sending messages that encourage positive body-image development, the media's messages counteract the parental protective messages. The finding supports Bogenschneider's (1996) ERPT because the theorist argues that all socialization factors influence health-risk behaviors. Specifically, each individual socialization element contributes to a child's body-image development.

Returning to the resiliency factor, children may not be resilient enough to overcome media messages pertaining to body appearance. The finding holds important implications for parent-child interaction. The results indicated that mothers frequently engaged in teaching media literacy to the child. The child data; however, showed no

significant findings pertaining to frequency of parents teaching media literacy. Meaning, parents think they are teaching media literacy, but according to the child reports no recollection of the conversations.

Because the children indicated that media influenced body-image on affective, cognitive, and behavioral levels, parents should engage in more conversations about media literacy starting at a young age. Media literacy is defined as teaching children how to read messages in the media (Griffin, 2013). According to the University's Students Guide to Body-Image (n.d.), parents need to help children recognize all media images are interpretive constructions, not reflections of reality. Parents should educate children how media messages and images are used to influence perceptions of reality (Griffin, 2013). For example, parents should talk to children about the unrealistic nature of body sizes in the media. The conversation would hopefully teach children that the bodies in the media are not the norm. In addition, children need to learn to be active consumers, not passive (Kelly, 2008). An active consumer talks back to the television when he/she disagrees with messages or images. By teaching children to question images and messages, parents are helping the child question cultural myths and develop personal opinions (Kelly, 2008).

Scholars argue educating children about media literacy might increase a child's resiliency and ability to resist negative messages from the media (Timmerman et al., 2006). Specifically, Timmerman et al. (2006) found media effects diminish if parents intervene and discuss with children images consumed. Through meta-analysis, Timmerman et al. (2006) discovered that parents using active mediation techniques, such as a parent discussing the content or asking children if they have any questions about

media content, reduced the impact of media on children. Timmerman et al. (2006) found active mediation diminishes the modeling impact of television ( $r = -.15$ ), which may apply to body-image perception as well. Applying Timmerman et al.'s (2006) results to the current study, if parents intervened and discussed media images with children, a child may become more resilient. The resiliency, in return, could encourage a child to be more critical of the images consumed, as found in study one.

### **Limitations and Future Research**

Results should be viewed with caution as limitations exist. The first limitation constitutes one of response bias (Paulhus, 1991). One form of response bias represents social acceptance or social desirability (Paulhus, 1991). Meaning, participants respond to items in a way that make them appear positive or socially desirable (Paulhus, 1991). In the current study, parents were asked to evaluate how frequently they engaged in risky behaviors, such as calling a child fat or limiting a child's food intake. When responding, parents may have stated he/she did not engage in a risky behavior frequently to save face or answer an item with a more desirable response. The investigator tried to circumvent the problem of response bias by assuring anonymity. Participants were told that they were unidentifiable. Upon Paulhus (1991) recommendation, the investigator also directed students to fill out the child survey separately from when the parent filled out their survey. Regardless of the steps taken by the investigator, response bias still indicates a limitation to the study.

Another limitation represents the validity of retrospective analyses. In the current study, children were directed to consider peer, media, and parental influence between the ages of 8 and 18. In addition, parents responded to items retrospectively. The parents

were asked to consider behaviors implemented in the home environment as the child was growing up. As a retrospective analysis, subjects were directed to recall the home environment and influence elements several years ago. Subjects may have held and reported erroneous perceptions. Therefore, future research should examine the child and parental perceptions of risk and protective behaviors when the child lives at home. A non-retrospective analysis might allow for a more accurate interpretation of risk and protective behaviors enacted as the study would be present day.

In addition, the limitation of retrospection might be eliminated by employing a longitudinal study of parental risk and protective behaviors. Future investigations should evaluate risk and protective behaviors implemented by parents on a yearly basis beginning when a child turns eight. The evaluations should continue until the child is 18. A longitudinal study could provide further insight into recent behaviors parents engage in that encourage body-image development, as well as identify how a child's body-image perceptions fluctuates on a yearly basis.

As researchers continue to explore the ERPT's relationship with body-image development, it is important to restate the significance of examining body-image development through both risk and protective processes. Moving forward with this line of literature, scholars might engage in qualitative interviews with parents and children. Qualitative interviews would permit the parent's cognitive justifications of why he/she implements certain risk behaviors, such as complimenting a child's body size. An assumption of the current results constitutes, parents engage in risky complimenting behaviors because the parents believe the said behavior encourages positive body-image

development. Qualitative interviews would permit the investigator to test the assumption, as well as find out other reasons why parents engage in the harmful behavior.

Future investigations might consider collecting data from both mother and father, as well as the child. Through this research, scholars might find that mothers are enacting protective behaviors, while the father engages in risk behaviors (or vice versa). Receiving dissimilar messages from mother and father might show that the negative messages received are more salient to a child. Essentially, the parent sending risky messages to a child might hold more valence than the protective messages disseminated by the other parent, which would provide further support for the present study. In addition, the discrepant messages, as seen in the current study, might lead children to be confused and turn to other outlets, such as the media or peers, to learn about the prototypical body type. Again, future research in this area would further explain the results from the current study, as well as explain why the media's messages are so salient to children and body-image development.

Finally, future research should strive to understand message construction of weight-related difficult conversations between parents and children. With the current weight epidemic (obesity and extreme thinness), children are at risk to develop major health problems at a young age. Research should consider whether parents would confront a child about excessive weight gain or loss and how parents would approach the said conversation. In addition, future investigations need to explore the child's perspective on the issue. That is, asking a child what h/she would like to hear from his/her parents if excessive weight gain or loss occurred. The research might introduce



the importance of communication and message construction on such a health related problem.

### **Concluding Remarks**

In conclusion, theoretical and practical implications surface from the current study. The research provides support for Bogenschneider's (1996) Ecological Risk and Protective Theory in several ways. First, the theorist argues that multiple ecological factors need to be considered when examining development of health risk behaviors (Bogenschneider, 1996). Specifically, results show that children perceive parental complimenting behavior, parental and media influence as the most impactful variables on body-image development. The data set demonstrates that multiple factors work together and influence a child's body-image development.

Second, Bogenschneider (1996) argues that risk and protective processes cannot be viewed as dichotomous entities; rather as processes that equally impact development. The data set, again, provides support for Bogenschneider's (1996) argument. For example, mothers reported engaging in multiple protective behaviors frequently; however, children significantly indicated experiencing poor body-image on cognitive, affective, and behavioral levels. One explanation represents the risk behaviors employed by parents off-set the protective behaviors implemented. Another explanation constitutes the protective behaviors being counteracted by the media risk messages. The findings illustrate the importance of the non-dichotomous nature of the two processes. That is, data show that the risk and protective processes are not separate entities, but two processes that hold equal weight as children develop.

Important practical implications emerged as well. Most significantly, results illustrate that parents need to be aware of the adverse effect of media messages on a child's body-image development. Children indicated media influences all body-image facets in a negative manner. The investigation revealed only mothers taught media literacy in the home environment; however, the child did not perceive parents as teaching media literacy. The discrepant perspectives demonstrate even though mothers think they are educating children on media, the children do not recall such conversations. Thus, the researcher recommends parents spend more time educating children about media images and messages. Both mothers and fathers should engage in conversations with their children about the unrealistic nature of male and female models observed on television, films, magazines, and the Internet. The conversations might provide children with enough resiliencies to overcome negative messages consumed.

A second practical implication represents parents using negative complimenting behaviors. Mothers were found to compliment daughters on body size; whereas fathers complimented sons on body size. Parents might believe that complimenting a child's body size and shape is a useful conversational message encouraging positive body-image development. In reality, the complimenting behavior causes a child's body size and shape to be salient to a child. The research recommends parents avoid engaging in statements such as "you are beautiful because you are thin" or "you are handsome because you are tone." Instead, parents should compliment children on their level of intelligence, strength, or smile because what a parent compliment becomes important to a child.

Although prior research indicates that parents are imperative to the developmental process of body-image, society knows little about whether parents send healthful and

helpful messages to a child about body-image. The results indicate parents are sending a mixture of effective (i.e., protective) and ineffective (i.e., risk) messages to their children about body size and shape. Unfortunately, the risk messages seem to impact a child's body-image development more so than the protective messages. The significance of this resides in a parent's ability to eliminate all harmful messages and vocalize protective messages with a concentration on teaching children about media literacy. The study illustrates that parents might have the ability to positively influence a child's body-image perception and circumvent the adverse effect of media messages when implementing proper strategies.

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*Appendix A*  
Content Analysis Websites

<i>Brochure/Web Page Number</i>	<i>Author</i>	<i>Title</i>
1	Elementary Teachers' Federation of Ontario	Reflections on Body Image: The ETFO Body Image Project
2	Concordia College	The University's Student Guide to Body-Image
3	Kidshealth.org	Encouraging a Healthy Body Image
4	Kidshealth.org	Developing your Child's Self-esteem
5	Dr. Michael Levine	10 Things Parents can do to Help Prevent Eating Disorders
6	University of Michigan Health System	Eating Disorders: What Families need to Know
7	Marius Griffin – Body Image Task Force	Building Blocks for Children's Body-Image
8	Maureen Kelly – Director of Education & Training Tompkins County	10 Tips for Raising Kids with a Healthy Body-Image
9	Women's Health	Your Body Image Plays a Role in Theirs
10	Web MD	Body-Image and Children
11	Christine Langlois – Canadian Living	10 Ways to Promote Healthy Body-Image in your Child
12	Body Image Health	The Body-Image Building Blocks

13	Dr. Nor Ashikin Mokhtar	What Factors Influence Body-Image and How to Create Positive Body Image in Children
14	Dr. Stacey Rosenfeld, MD	Raising a Child with Body Confidence
15	Eating Disorder HOPE	Mirror, Mirror, On the Wall...
16	Julie Revelant, Fox News	How to Build a Positive Body-Image in your Child
17	Mama Compass	Teaching your Child about Positive Body-Image: Girls and Boys!
18	Leigh Felesky	Boost your Child's Body-Image
19	Dr. De Freitas	Body Image: Tips for Helping your Child have a Healthy One
20	Health Day News	Health Tip: Help your Child Create a Healthy Body-Image
21	Sandra Henderson	How to Boost your Child's Body-Image
22	Tips from Town	Promoting a Healthy Body-Image in your Child
23	Teach Kids How – Preparing your Child for Life	Teach your Child about Self-Esteem and Body-Image

*Appendix B*  
Parent Questionnaire

**PARENT Survey Explanation:** The following is a retrospective analysis of behaviors you (the parent) engaged in as your child was growing up. Throughout the duration of the survey please focus on the child who provided you with the survey.

Answer the following questions to the best of your ability:

1. Identify your relationship with your child:
  - a. Mother
  - b. Father
  - c. Other: \_\_\_\_\_
2. Identify the sex of your child:
  - a. Male
  - b. Female

**Directions:** Please clearly mark your response when describing how you remembered your child as he/she was growing up. Please focus on the child who provided you with the survey.

1. My child was tall.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
2. My child was short.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
3. My child was fat.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
4. My child was thin.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

**Directions:** Please indicate how frequently or infrequently you engaged in the behaviors listed while your child was growing up. Please focus on the child who provided you with the survey.

1. I engaged in sensible eating with my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
2. I told my child that some bodies in the media aren't realistic.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
3. I felt positively about my own body.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
4. I invited my child to engage in healthy eating practices with me.

- [1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
5. I cooked well-balanced meals for my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  6. I provided healthy snack options to my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  7. I complimented my child on his/her strength.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  8. I ate breakfast with my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  9. I engaged in physical exercise with my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  10. I talked to my child about different body sizes.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  11. I complimented my child on his/her accomplishments.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  12. I explained that Barbie's body size was unrealistic.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  13. I discussed with my child the unrealistic nature of body sizes in the media.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  14. I asked my child if they thought the images in the media looked real.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  15. I taught my child that it is alright for people to have a larger body size.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  16. I complimented my child on his/her grace.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  17. I let my child know that people are different weights.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  18. I talked to my child about puberty and its effect on weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
  19. I listened to my child  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

20. I explained that GI-Joe's body size shouldn't be desirable.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
21. I talked to my child about body image.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
22. I made it clear that my child could talk to me about anything.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
23. If my child told me they felt fat, I asked why  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
24. If my child told me they felt poorly about their body, I asked him/her to explain their feelings.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
25. I told my child that some bodies in the media are distorted.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
26. If my child told me they felt poorly about their body, I helped him/her form goals to fix the insecurity.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
27. I complimented my child on his/her talents.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
28. I taught my child that genetics play a role in body weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
29. I complimented my child on his/her smile.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
30. I engaged in moderate levels of exercise  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
31. I taught my child to be critical of the media.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
32. I complimented my child on his/her balance.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
33. I ate dinner with my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
34. I taught my child that weight gain is normal during puberty.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

35. I complimented my child on his/her energy.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

36. I talked to my child about weight gain during puberty.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

37. I taught my child to be accepting of different body sizes.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

38. I allowed my child to make decisions about food.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

39. I provided healthy food options to my child

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

40. I provided nutritious food option to my child

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

41. I described how food nourished the body

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

42. I complimented my child on his/her character.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

43. I described how healthy food can make you a healthy person.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

44. I taught my child any food is ok, if eaten in moderation.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

**Directions:** Please indicate how frequently or infrequently you engaged in the behaviors listed while your child was growing up. Please focus on the child who provided you with the survey.

1. I criticized my body in front of my child.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

2. I used pretty and thin to describe people in front of my child.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

3. I said "I'm fat" in front of my child.

[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]



4. I told my child that eating fat will make you fat.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
5. The word fattening was used in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
6. I told my child he/she was skinny.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
7. I complained about my body in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
8. I weighed my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
9. I felt fat in a swim suit.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
10. I criticized others for being fat in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
11. I used to talk about dieting in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
12. I praised my child's body size.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
13. I used ugly and fat to describe people in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
14. I told my child that he/she was fat.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
15. I over-exercised.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
16. I told my child that he/she was overweight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
17. I praised my child for being muscular.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
18. I weighed myself in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
19. I told my child that he/she needed to lose weight.

- [1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
20. I told my child some food were good.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
21. I described how food helps weight loss.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
22. I used to count calories.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
23. I talked about the amount of calories in food.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
24. I told my child that healthy food will help him/her lose weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
25. I told my child that sweets were bad for his/her weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
26. I limited my child's food intake.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
27. I said "I look disgusting" in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
28. I told my child some food were bad.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
29. I complimented my child on his/her weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
30. I banned certain foods from my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
31. I told my child that carbohydrates will make you fat.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
32. I used dietary supplements.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
33. I told my child he/she was muscular.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
34. The word diet was used in front of my child.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

35. I told my child they were beautiful because of his/her weight.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]
36. I praised my child for being skinny.  
[1: Never] [2: Seldom] [3: Sometimes] [4: Often] [5: Very Often]

*Appendix C*  
Child Questionnaire

Identify your sex: (a) Male (b) Female

How would you describe your race:

How would you describe your sexual preference:

Identify your age:

Identify your weight:

Identify your height:

Identify which parent will be filling out the other survey (e.g. mother or father):

\_\_\_\_\_

**Directions:** Clearly indicate your response to each item by selecting ONE of the choices.

1. I feel physical attractive.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

2. I feel fat.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

3. My buttocks are too large.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

4. If I look in a mirror I feel bad about my body.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

5. I feel negatively about my body size.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

6. I desire to be thinner.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

7. I feel negative about my weight.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

8. I think about dieting.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

9. My body size is important.

[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

10. I diet because I feel fat.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
11. People avoid me because of my body size.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
12. My weight is the most important thing.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
13. I feel positive about my body size.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
14. My life is ruined because of my body size.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
15. I hardly ever think about the shape of my body.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
16. I have fat thighs.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
17. I look fat in photos.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
18. I desire to be more muscular.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
19. I feel positive about my weight.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
20. I have considered suicide because of my body size.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
21. People laugh at me because of my weight.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
22. I spend a lot of time thinking about my weight.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]
23. I feel satisfied with my body weight.  
[1: Strongly agree] [2: Agree] [3: Neutral] [4: Disagree] [5: Strongly disagree]

**Directions:** Clearly indicate your response to each item by selecting ONE of the choices.

1. I skip meals to lose weight.

- [1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
2. I watch what I eat closely.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  3. I change my eating patterns to increase muscle size.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  4. I vomit to lose weight.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  5. I change my eating patterns to increase body size.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  6. I exercise to lose weight.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  7. I deliberately eat foods that slim me.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  8. I take food supplements to increase my muscle size.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  9. I refuse food or drink offered to me because I am concerned about my weight.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  10. I only eat fruits, vegetables, and other low calorie foods.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  11. I exercise to increase body size.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  12. I fast to lose weight.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  13. I take dietary supplements to lose weight.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  14. I lift weights to gain muscles.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]
  15. I exercise to increase muscle size.  
[1: Very Often] [2: Often] [3: Sometimes] [4: Seldom] [5: Never]

**Directions:** Answer the questions with regard to the time period when you were between **8 and 18 years of age**. Consider the parent who is filling out the other portion of the survey.

1. My parent loved me regardless of my weight.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
2. My parent taught me to respect people regardless of their weight.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
3. My parent called me names because of my weight.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
4. My parent taught me that gaining weight during puberty was healthy.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
5. My parent made healthy food choices available to me.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
6. My parent complimented me for being thin.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
7. My parents influenced my perception of body-image positively.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
8. My parent was critical about his/her body.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
9. My parent made me want to engage in healthy exercise behaviors.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
10. My parent complimented me for being muscular.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
11. My parent made me want to engage in healthy eating behaviors.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
12. My parent made me want to lose weight.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
13. My parent made me want to gain muscle mass.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]
14. My parent teased me because of my weight.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

15. My parent influenced my perception of the perfect body.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

16. My parent influenced how I exercised.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

17. My parent dieted.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

18. My parent helped me appreciate my body.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

19. My parent taught me that some images in the media aren't realistic.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

20. My parent influenced me to diet.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

21. My parents influenced my perception of body-image negatively.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

22. My parent influenced me to live a healthy lifestyle.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

23. How my parent perceived my body was important.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

**Directions:** Answer the questions with regard to the time period when you were **between 8 and 18 years of age.**

1. I thought models in the media were confident.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

2. The media influenced my body-image perception negatively.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

3. I thought models in the media were happy.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

4. The media influenced how I exercised.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

5. I compared myself to the models I saw in the media.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

6. The media influenced my perception of a perfect body.



[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

7. I was interested in emulating the models appearing in the media.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

8. Images in the media made me want to lose weight.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

9. The media influenced me to use diet products.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

10. Images in the media made me want to gain muscle mass.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

11. Images in the media made me want to change my body size.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

12. The media influenced my body-image perception positively.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

**Directions:** Answer the questions with regard to the time period when you were between **8 and 18 years of age.**

1. My peers talked about weight.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

2. My peers influenced my perception of body-image.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

3. My peers talked about dieting.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

4. My peers talked about exercise.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

5. My peers influenced my perception of body-image negatively.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

6. My peers made me want to obtain a perfect body.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

7. My peers commented on my body.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

8. How my peers perceived my body was important.

[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

9. My peers influenced my perception of body-image positively.  
[1: Strongly Disagree] [2: Disagree] [3: Neutral] [4: Agree] [5: Strongly Agree]

*Appendix D*  
Child Scale Reliabilities and Items

<i>Scale</i>	<i>Reliability</i>	<i>Item Numbers</i>
Child Affective Body-Image	$\alpha = .93$	1, 2, 3, 4, 5, 7, 13, 16, 19, 23
Child Cognitive Body-Image	$\alpha = .83$	6, 8, 9, 10, 11, 12, 14, 15, 17, 18, 20, 21, 22
Child Behavioral Body-Image	$\alpha = .81$	1-15
Child Perspective on Parental Influence	$\alpha = .53$	7, 15, 21, 23
Child Perspective on Protective Factors Employed	$\alpha = .81$	1, 2, 4, 5, 9, 11, 16, 18, 19, 22
Child Perspective on Negative Role Modeling Behaviors Employed	$\alpha = .70$	3, 8, 12, 13, 14, 17, 20
Child Perspective on Negative Complimenting Behaviors Employed	$\alpha = .63$	6, 10
Child Perspective on Media Influence	$\alpha = .87$	1-12
Child Perspective on Peer Influence	$\alpha = .80$	1-9

*Appendix E*  
Parent Scale Reliabilities and Items

<i>Scale</i>	<i>Reliability</i>	<i>Item Numbers</i>
P1T1: Parents as Positive Role Models	$\alpha = .83$	1, 3, 4, 5, 8, 9, 30, 33
P1T2: Parents Teaching Body Diversity	$\alpha = .80$	10, 12, 17, 20, 37
P1T3: Parents Teaching Media Literacy	$\alpha = .84$	2, 13, 14, 25, 31
P1T4: Parents Educating why Weight Gain Occurs	$\alpha = .82$	15, 18, 28, 34, 36
All P1: Parents as Educators	$\alpha = .90$	See all above items
P2T1: Open Communication	$\alpha = .75$	19, 21, 22, 23, 24, 26
P2T2: Complimenting	$\alpha = .80$	7, 11, 16, 27, 29, 32, 35, 42
P2T3: Healthy Choices Available	$\alpha = .87$	6, 38, 39, 40, 41, 43, 44
All P2: Parents Providing an Appropriate Environment	$\alpha = .87$	See above items for P2T1, P2T2, P2T3
R1T1: Negative Commentary on Personal Body	$\alpha = .87$	1, 3, 5, 7, 8, 9, 11, 15, 18, 22, 27, 32, 34
R1T2a: Negative Commentary on Other's Body	$\alpha = .69$	2, 10, 13
R1T2b: Negative Commentary on Child's Body	$\alpha = .74$	14, 16, 19

R1T3: Avoiding Foods and Dieting Behaviors	$\alpha = .80$	4, 20, 21, 23, 24, 25, 26, 28, 30, 31
All R1: Behaviors Parents Should not Engage in	$\alpha = .89$	See above items for R1T1, R1T2a, R1T2b, R1T3
R2: Negative Complimenting Behaviors	$\alpha = .73$	6, 12, 17, 29, 33, 35, 36

## **Anna R. Herrman**

### **Education**

**PhD Candidate**, University of Wisconsin-Milwaukee, Department of Communication

Projected Graduation: May, 2013

Dissertation Title: Encouraging a healthy body-image: Are parents sending effective messages to children?

Advisor: Mike Allen, PhD

Committee Members: Nancy Burrell, PhD  
Tae-Seop Lim, PhD  
Sang-Yeon Kim, PhD  
Julie Delaney, PhD

**Masters of the Arts**, University of Wisconsin-Milwaukee, Department of Communication, 2009

Thesis Title: Body Image: An Influential Factor of Communication Apprehension

**Bachelor of the Arts**, St. Norbert College, Department of Communication, 2003

### **Academic Appointments**

*January 2013 – May 2013: St. Norbert College*

**Teaching Fellow: Nonverbal Communication**

**Responsibilities**: constructing course syllabus, developing lecture and discussion material, class activities, leading discussion and in-class exercises, developing assignments, and exams.

*January 2013 – May 2013: St. Norbert College*

**Teaching Fellow: Interpersonal Communication**

**Responsibilities**: constructing course syllabus, developing lecture and discussion material, class activities, leading discussion and in-class exercises, developing assignments, and exams.

*September 2012 – December 2012: University of Wisconsin-Milwaukee*

**Teaching Assistant: Online Nonverbal Communication**

**Responsibilities**: developing online lecture material, facilitating/monitoring online student discussion, constructing assignments, and exams.

*Summer 2012: University of Wisconsin-Milwaukee*

**Teaching Assistant: Business and Professional Communication**

**Responsibilities:** constructing course syllabus, developing lecture and discussion materials, class activities, leading discussion and in-class exercises, developing assignments, and exams.

September 2011 – December 2012: University of Wisconsin-Milwaukee

**Teaching Assistant:** Introduction to Conflict Resolution and Peace Studies

**Responsibilities:** developing lecture and discussion materials, class activities, leading discussion and in-class exercises, developing assignments, and exams.

September 2011 – May 2012: University of Wisconsin-Milwaukee

**Teaching Assistant:** Cross-Cultural Communication

**Responsibilities:** constructing the course syllabus, developing lecture and discussion materials, class activities, leading discussion and in-class exercises, developing assignments, and exams.

January 2010-May 2011: University of Wisconsin-Milwaukee

**Teaching Assistant:** Intercultural Communication

**Responsibilities:** constructing the course syllabus, developing lecture and discussion materials, class activities, leading discussion and in-class exercises, developing assignments, and exams.

September 2009-December 2009: University of Wisconsin-Milwaukee

**Teaching Assistant:** Department of Global Studies

**Responsibilities:** assistant to Dr. Masri for Introduction to Global Studies

January 2009: University of Wisconsin-Milwaukee

**Teaching Assistant:** Introduction to Interpersonal Communication.

**Responsibilities:** developing lecture materials, class activities, and leading discussion and in-class exercises.

September 2008-May 2009: University of Wisconsin-Milwaukee

**Teaching Assistant:** Introduction to Interpersonal Communication

**Responsibilities:** constructing lecture materials, developing class activities, leading discussion and in-class exercises, and constructing exam questions.

Summer 2008: University of Wisconsin-Milwaukee

**Teaching Assistant:** Business and Professional Communication

**Responsibilities:** developing lecture materials and class activities, leading discussion and in-class exercises, and developing exams.

September 2007-May 2008: University of Wisconsin-Milwaukee

**Teaching Assistant:** Business and Professional Communication

**Responsibilities:** constructing lecture materials and class activities, leading discussion and in-class exercises, and developing exams and speech topics.

## **Awards and Recognitions**

Amelia Lucas Trust Fund Award (\$200.00) to assist with cost to complete dissertation research. Awarded by the Department of Communication Awards and Recognition Committee, University of Wisconsin-Milwaukee, Fall 2012

Awarded Communication Graduate Student Research Award (\$500.00) to attend the 98<sup>th</sup> National Communication Association Conference in Orlando, FL., 2012

Awarded Grant (\$450.00) to attend the 98<sup>th</sup> National Communication Association Conference in Orlando, FL from Graduate Student Travel Support Program, 2012

Awarded Think Swiss Travel Grant (\$1,200) to attend Computer Mediation Communication Summer Research Program in Ascona, Switzerland, 2012

ICA Teaching Award, University of Wisconsin-Milwaukee, 2009

Department Outstanding GPA Award, University of Wisconsin-Milwaukee, 2009

## **Invited Lectures**

Herrman, A. R. (Fall, 2012). Promotive versus Preventive Dietary Practice and Self Construal: Communicating Healthful Food Choices. Presented as part of Milwaukee Health Team Project Colloquium at the University of Wisconsin Milwaukee.

Herrman, A. R. (Fall, 2012). Difficulties in forming intercultural relationships. Invited class presentation (Human Communication). Upper Iowa University, Dr. Melissa Maier

Herrman, A. R. (Spring, 2012). Accepting your body image in an idealistic society: Is it possible? Invited class presentation (Nonverbal Communication). St. Norbert College, Dr. Kevin Hutchinson

## **Publications**

Allen, M., Dilbeck, K., England, N., Herrman, A., Kartch, F., Kim, J., Kulovitz, K., Lau, A., Maier, M., May, A., McNallie, J., Omori, K., & Shoji, K. (in press). Test of a causal model for sexual harassment using data from a meta-analysis. In N. Burrell, M. Allen, R. Preiss, and B. Gayle (Eds.), *Managing interpersonal conflict: Advances through meta analysis*. Mahwah, NJ: Taylor and Francis.

Herrman, A. R., & Allen, M. (in press). Comparing hard and softline bargaining. In N. Burrell, M. Allen, R. Preiss, and B. Gayle (Eds.), *Managing interpersonal conflict: Advances through meta analysis*. Mahwah, NJ: Taylor and Francis.

Herrman, A. R., Omori, K., McNallie, J., & Allen, M. (in press). Evidence of analytic versus holistic thinking in viewing magazine images: Preliminary findings. *Qualitative Research Reports in Communication*.



- Tenzek, K. E., Herrman, A. R., May, A., Feiner, B., & Allen, M. (2013). Examining the impact of parental disclosure of HIV on children: A meta-analysis. *Western Journal of Communication*, 77, 323-339. doi: 10.1080/10570314.2012.719092
- Kim, S., Allen, M., Gattoni, A., Grimes, D., Haung, H., Herrman, A. R., Kim, J., Lu, S., Maier, M., May, A., Omachinski, K., Tenzek, K., Turkiewicz, K., & Zhang, Z. (2012). Testing an additive model for the effectiveness of evidence for the persuasiveness of a message. *Social Influence*, 7, 65-77. doi: 10.1080/15534510.2012.658285
- Turkiewicz, K.L., Kim, J., Tenzek, K.E., & Herrman, A. R. (2010). Behind the scenes: Life as an editorial assistant. *Communication Monographs*, 77, 454-461. doi: 10.1080/03637751.2010.523603

### **Scholarly Work under Review**

- Kim, S., Lim, T., Song, H., England, N., Cramer, E., Herrman, A., Hawkins, J., Kim, H., Ota, H., Kim, J., Kim, J., Tenzek, K., & Omori, K. (under review). Examining the impact of cultural holism on health beliefs: East-West cultural differences in food preference and health assessment. Manuscript under review at the *Journal of Cross-Cultural Psychology*.

### **Scholarly Work in Progress**

- Cramer, E., Kim, S., Herrman, A. R., England, N., Kim, H., & Kim, J. (2013, May). Role recognition in patient-physician interaction: The impact of holistic and analytic worldviews. Paper submitted to the National Communication Conference Washington DC.
- Herrman, A. R. (in progress). The dark side of compliments: A drive for thinness.
- Herrman, A. R., & Kartch, F. (in progress). We don't love each other anymore: Contemplating and initiating the divorce disclosure with children.
- Herrman, A. R., & McNally, J. (in progress). Are they as smart as they look? The impact on weight, dress, and sex on credibility.
- Herrman, A. R. & Tenzek, K. E. (in progress). Gender differences in peer influence on body image and eating disorders: A meta-analysis.
- Herrman, A. R., & Tenzek, K. E. (in progress). You starve yourself too?: How people with eating disorders manage uncertainty in online communities.
- Kartch, F., & Herrman, A. R. (under review). Coming out to the family: An application of goals, plans, and action. Manuscript under review at the *Journal of Family Communication*.
- Kim, S., Lim, T., Song, H., Herrman, A. R., Hawkins, J. M., Omori, K., Kim, H., Ota, J., Kim, J., Kim, J., England, N., Tenzek, K., & Cramer, E. (in progress). The impact of self construal in the health context: Examining weight perception and dietary practices in Eastern and Western cultures.

## **Papers Accepted to Conferences**

- Kim, S., Lim, T., Song, H., Herrman, A., Omori, K., Hawkins, J., Ota, H., Kim, H., Kim, J., England, N., Tenzek, K., Cramer, E., Grimes, D., & Dilbeck, K. (2013, April). Self construal and body image: Comparing weight estimation among American, Japanese, and Korean women. Paper accepted to the annual convention of Central States Communication Association, Kansas City, MO.
- Kim, S., Lim, T., Song, H., Hawkins, J., Herrman, A., Kim, H., Ota, H., Kim, J., England, N., Tenzek, K., Cramer, E., Omori, K., Grimes, D., & Dilbeck, K. (2013, February). Promotive versus preventive dietary practice and self-construal: Communicating healthful food choice. Paper accepted to the annual convention of Western States Communication Association, Reno, Nevada.
- \*Top Paper: Health Communication Interest Group
- Herrman, A. R., Kartch, F., Henningsen, M., McWorthy, E., & Valde, K. (2012, November). Goals-Plans-Action Research in Interpersonal Communication: Celebrating the Role of the GPA in COMMunication Scholarship. Panel competitively accepted to the 98<sup>th</sup> annual convention of National Communication Association, Orlando, FL.
- Kartch, F., & Herrman, A. R. (2012, November). I don't know how to say this, but...: Coming out to the family. Paper presented at the 98<sup>th</sup> annual convention of National Communication Association, Orlando, FL.
- Kim, S., Lim, T., Song, H., England, N., Herrman, A. R., Hawkins, J., Kim, H., Ota, H., Kim, J., Tenzek, K., Omori, K., Cramer, E., Grimes, D., & Dilbeck, K. (2012, November). What's healthy? Community perceptions of healthy food. Paper presented at the 98<sup>th</sup> annual convention of National Communication Association, Orlando, FL.
- Kim, S., Lim, T., Song, H., Cramer, E., Tenzek, K., England, N., Herrman, A., Hawkins, J. M., Kim, H., Ota, H., Kim, J., Omori, K., Grimes, D., & Dilbeck, K. (2012, November). Integrating cultural worldviews into health self-assessment and behavior when a family member is ill. Paper presented at the 98<sup>th</sup> annual convention of National Communication Association, Orlando, FL.
- Omori, K., Herrman, A. R., McNally, J., & Allen, M. (2012, April). Beauty ideals in magazines: Cultural differences between Japanese citizens and US citizens in the US. Paper competitively accepted to Central States Communication Conference, Cleveland, Ohio.
- Allen, M., Dilbeck, K., England, N., Herrman, A., Kartch, F., Kim, J., Kulovitz, K., Lau, A., Maier, M., May, A., McNally, J., Omori, K., & Shoji, K. (2011, November). Test of a causal model for sexual harassment using data from a meta-analysis. Paper competitively accepted to the National Communication Conference, New Orleans, LA.
- Herrman, A. R. (2011, November). Patriotism and ethnocentrism: When is the line crossed?. Activity submission accepted to GIFTS Division at the National Communication Conference; New Orleans, LA.

- Herrman, A. R., Omachinski, K., Kartch, F., & Burrell, N. (2011, November). The displacement of blame in conflict: The use of internal and external attributions in the Real Housewives of New York City. Paper accepted to the Scholar to Scholar Division at the National Communication Conference; New Orleans, LA.
- Herrman, A. R., Omori, K., McNallie, J., & Allen, M. (2011, November). Traditional or local standards of beauty? Japanese and American responses to fashion, beauty, and body image in magazines. Paper accepted to the Japanese-U.S. Communication Division at the National Communication Conference; New Orleans, LA.
- Herrman, A. R., & Tenzek, K. E. (2011, November). Gender differences in peer influence on body image dissatisfaction: A meta-analytic review. Paper accepted to Interpersonal Division at the National Communication Conference; New Orleans, LA.
- Maier, M., Herrman, A., Kartch, F., Omori, K., Tenzek, K., Stache, L., Grimes, D., Dilbeck, K., Ahn, S., Glocka, J., Maloney, J., Zoromski, D., & Burrell, N. (2011, November). Managing conflict while owning a small business: Saving face and figure in a health club. Paper presented at the National Communication Association convention, New Orleans.
- Herrman, A. R., & Tenzek, K. E. (2011, November). Pro-ana websites: A critical look at online communities. Paper part of Multiple Identities and Silenced Voices: An Examination of Marginalized Groups' Positive and Negative Communication Experiences Panel. Panel accepted at the National Communication Conference; New Orleans, LA.
- Herrman, A. R. (2011, October). Sam and Naomi Bennett: A popular culture analysis. Paper presented at the Midwest Popular Culture Association Conference, Milwaukee, WI.
- Herrman, A. R., Maier, M. A., & Cole, A. (2011). *Examining the relationship between conjugal and parental power and adult children's assertiveness and conflict management*. Paper competitively accepted to Central States Communication Conference, Milwaukee WI.
- Herrman, A. R. (2011). *Building a global village*. G.I.F.T.S. submission accepted to Central States Communication Conference, Milwaukee, WI.
- Allen, M., Kim, S., Gattoni, A., Grimes, D., Haung, H., Herrman, A. R., Kim, J., Lu, S., Maier, M., May, A., Omachinski, K., Tenzek, K., Turkiewicz, K., & Zhang, Z. (2010). *Testing an Additive Model for the Effectiveness of Evidence for the Persuasiveness of a Message*. Paper competitively accepted to National Communication Association Conference, San Francisco, CA.

\*Top Four Paper: Argumentation and Forensics Division

- Kartch, F., Herrman, A. R., Maier, M., England, N., & Burrell, N. (2010) *Building Bridges: An Integrative Approach to Mediation*. Paper competitively accepted to National Communication Association Conference, San Francisco, CA.
- Herrman, A. R. (2010). *Body image: An influential factor of communication Apprehension*. Paper competitively accepted to Central States Communication Association Conference, Cincinnati, Ohio.

\*Top Three Paper: Communication Theory

- Allen, M., Feiner, B., Herrman, A. R., Tenzek, K., & May, A. (2010). *Examining the impact of parental disclosure of HIV on children: A meta-analysis*. Paper competitively accepted to Central States Communication Association Conference, Cincinnati, Ohio.
- Herrman, A. R., Kartch, F., Maier, M., England, N., & May, A. (2010). *The tension between theory and practice: Mediators' reflections about the field of conflict*. Panel competitively accepted to Central States Communication Association Conference, Cincinnati, Ohio.
- Allen, M., Herrman, A. R., Hample, J., Hebl, M., Kulovitz, K., Liang, X., Pederson, J., & Zhao, X. (2009). *A method of evaluating the impact of a scholar*. Paper competitively accepted to the International Communication Association Conference, Chicago, Illinois.

### **Professional Association Memberships**

Central States Communication Association  
National Communication Association

### **Services**

#### **Editorial Board:**

Communication Studies  
International Journal of Communication and Health

#### **Professional:**

National Communication Association Reviewer, G.I.F.T. Reviewer, 2013  
Undergraduate Honor's Research Conference Reviewer, Central States, 2013  
Book Review: Pearson MyLAB and Mastering Product, Pearson Press, 2012  
Book Review: Understanding Intercultural Communication, Oxford University Press, 2012  
National Communication Association Reviewer, G.I.F.T. Reviewer, 2012  
International Society for the Scholarship of Teaching and Learning, Volunteer, 2011  
Central States G.I.F.T Reviewer, 2011  
International Communication Association Reviewer, 2010  
Central States Reviewer, Media Effects Division, 2010  
Volunteer, Central States Communication Conference, 2010  
Assistant Editor of Communication Monographs, 2010  
Volunteer, National Communication Association Conference, 2009

#### **University:**

Volunteer, Public Speaking Workshop, 2012  
Alternative Textbook Writing Center, Fall 2011 Semester

Undergraduate Mentor, 2011  
Volunteer, Public Speaking Workshop, 2010  
Graduate Student Representative, Graduate Advisory Committee, 2010  
Vice President, Graduate Advisory Committee, 2010  
Member, Student Recruitment Committee, 2010  
Member, Student Exit Interview Committee, 2010  
Member, Faculty Search Committee, University of Wisconsin-Milwaukee, 2009  
Volunteer Coordinator, Graduate Advisory Committee, 2009  
Member, Graduate Advisory Committee, 2009  
Member, Milwaukee Graduate Assistant Association (MGAA), 2007-2009

**Community:**

Food for Haiti, 2010  
Green Bay Fish Fry Assistant for Lent Season, 2010  
AIDS Walk Participant, 2009  
AIDS Walk Volunteer, 2009  
Milwaukee Marathon Volunteer, 2009  
Assistant at the Mediation Peace Center, mentor to the children, 2008  
Assistant of auction at Humane Society Ball, 2007  
Assistant at Special Olympics held at St. Norbert College, mentor to the children, 2006  
Green Bay Boys and Girls Club mentor, 2004-2005  
Mentor at Eighth Grade Mentor Day at St. Norbert College, 2004