SOCIAL COGNITIVE PERSPECTIVES ON THE DEVELOPMENT OF BODY IMAGE IN ADULT WOMEN

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Kristin Lee Petersen

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The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

DOCTOR OF PHILOSOPHY

SUPERVISORY COMMITTEE:

Brent Hill
Chair

Claudette Peterson

Elizabeth Blodgett-Salafia

Chris Ray

Approved:

August 24, 2017
Date

Chris Ray
Department Chair

ABSTRACT

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body image. The problem this study addressed was women receive messages that contribute to negative body image throughout their lifetimes. When these messages are processed passively, especially when cultivated over time, serious disorders and the transmission of unhealthy behaviors to children and peers can result. Different age groups provided insight into events that occur in the decades of their lives, and how influences are perceived differently at different ages.

This study used Q methodology to analyze the subjective, qualitative perspectives of women concerning influences on the development of their body image. Forty-five women sorted a list of 45 potential influences under two conditions of instruction (one pertaining to adolescence and the other pertaining to adulthood). The data were collected and analyzed, resulting in the identification and description of three archetypes: the Resilient (influenced by positive factors), the Transitional (influenced by a combination of factors), and the Impressionable (influenced by negative factors). The most commonly reported influences were significant others, siblings, mothers, self-talk, and close friend peers. The majority of women reported becoming more resilient to negative influences with age.

Practitioners must not only treat the outcome of body image dissatisfaction, but also teach resilience and an internal locus of control to help prevent body image issues. The earlier in life this type of education is received, the more likely body image dissatisfaction will be minimized.

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CHAPTER ONE. INTRODUCTION

Body image is an issue that touches males and females of all ages and ethnicities. Cash and Smolak (2012) define body image as a multidimensional construct that incorporates biophysical, cognitive, behavioral and affective dimensions to assess a person's self-perceptions or attitudes regarding his/her body. Breaking down this definition, from a biophysical perspective, when a person experiences a negative body image, or body image issues or disorder, they dislike some aspect of their physical appearance. This can include the weight in general, or any number of specific body parts. That is to say, they may believe they have one or any number of the following: large hips and stomach (muffin top), fat ankles, flabby arms, fat thighs, thin hair, double-chin, bags under the eyes, and crow's feet, to name a few. Some people have a very general discontent with their appearance, while others become obsessed with specific body parts.

From the cognitive perspective, researchers examine the factors that contribute to how a person "learns" how to feel about herself. Parents, peers, and media are the most often researched etiological factors of body image development (van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002). Because the messages that come from these sources are many, ubiquitous, and salient, the recipient of the messages often passively accepts them as truth, without challenging the messages with her own thoughts and values. These messages are often promoting the "thin-ideal," the mindset that to be accepted in society today as a beautiful, successful, worthy person, one must be ultra-thin, with dancer-like toned muscles, and airbrushed skin (Stice & Bearman, 2001). Instead of passively accepting these messages about one's body that are not always healthy, we need a more deliberate sense of information processing that would allow us to decide for ourselves what we believe and value.

Someone who experiences negative body image is at risk for many destructive behaviors, including but not limited to dieting, unnecessary cosmetic surgeries, binging and purging, mirror checking, poor self-esteem, smoking onset (Cash & Pruzinsky, 2002; Stice & Shaw, 2002; Stice & Whitenton, 2002; Thompson, Heinberg, Altabe, & Tantless-Dunn, 1999). Some of these can lead to eating disorders, which can ultimately lead to death (Stice & Whitenton, 2002). These behaviors also become a very dangerous type of role modeling, when younger girls observe their older counterparts or mothers practicing them (Smolak, Levine, & Schermer, 1999).

Affectively, there are also many negative outcomes that result from negative body image. One can experience depression, anxiety, negative affect, and low self-esteem. Women learn to objectify themselves, seeing their bodies as objects, as they believe other's see them (Fredrickson & Roberts, 1997). This objectification (discussed more fully in the literature review) can lead to loss of self and increased mental health risks, especially in time with life-course changes to the female body (Fredrickson & Roberts, 1997). When a person is constantly interpreting messages about his/her appearance as "you are not thin enough, you are not pretty enough, you are not good enough," that person can become very fixated on the issue, and experience deep depression and anxiety in the wake of the regulatory behaviors that are an attempt to "be enough." Regulatory behaviors include camouflaging body parts, seeking reassurance, mirror checking or avoiding, excessive grooming, and avoiding social situations (Cash, 2002). These feelings and attitudes often become very deep-seated very early in life, and sufferers experience high levels of cognitive rigidity when professionals try to intervene, meaning it is very difficult to change the way they think about body image in general, and especially their own bodies.

Body image satisfaction/dissatisfaction exists on a continuum. Some people have a very positive view of their body, whether they have weight issues or not. Unfortunately, it is much more common for individuals to feel some level of dissatisfaction with their bodies, especially for women. Dissatisfaction increases with age and exposure to etiological factors (Lowes & Tiggemann, 2003). A variety of influential factors, such as parents, peers, media, and others contributes to an ever-evolving body image throughout a child's life, into adulthood. Although researchers have been studying body image for decades, the increasingly ubiquitous nature of the media and the thin-ideal body type it promotes has brought about an explosion of new research in the past 30 years.

This study focused on women and their journey that led to the development of their body images. However, to understand the body image journey at different stages of their lives, and the importance of not passing on body image issues to their own children, some literature using children as participants was reviewed.

Statement of the Problem

The problems associated with body image issues are copious. Researchers have documented issues in children as young as six (Lowes & Tiggemann, 2003). The issues can span a lifetime as eating disorders are on the rise in the elderly population (Gagne, von Holle, Brownley, Runfola, Hofmeier, Brandch, & Bulik, 2012). Intervention can occur at any age, but is extremely difficult. Prevention programs are important for young children, but if not done carefully, can suggest that children think more about their bodies. The most frightening aspect of body image issues is all the right people can do all the right things, and still, it may not change the mindset of the patient. Without the openness and willingness to accept a new way of thinking, as with an addict, the patient will not get well, and is at great risk of death from the

disorder (Stice & Whitenton, 2002). The most tragic aspect of body image issues is they appear to be entirely preventable, yet conditions in our society do not support this type of prevention.

Body image dissatisfaction can be introduced as a general discontent based on, for example, a comparison made between the self and a celebrity or peer, or in response to a direct comment from a parent or peer. The dissatisfaction could be a short-lived experience, or it could be confounded by more messages from parents, peers, and media, or by a traumatic event. As messages continue to be received and processed, they become more difficult to ignore. They may lead to stronger levels of dissatisfaction, possibly even becoming a disorder, such as body dysmorphic disorder or an eating disorder.

Experiencing body image dissatisfaction can lead to lower self-esteem, depression, anxiety, and negative affect. When the mental health of the individual is affected in this way, more things can start to go wrong. The individual sees herself as unacceptable, and may use dangerous strategies to correct the problem. These strategies include dieting, unnecessary cosmetic surgeries, excessive exercise, starving herself, use of laxatives, and binging and purging. The mindset of an individual who has turned to these behaviors to deal with her body image issues has become extremely unhealthy. She sees herself as an object to be changed. She has become obsessed with what she puts into and gets out of her body, the exact shape and contour of every part of her body, and often sees weight on her body that is not there. Intervention for patients involves a type of deprogramming to change the brainwashing the patient has previously bought into about her body. She must change the way she thinks about her body, and this is extremely difficult. Relapse is very common. If the individual does not change this type of behavior, it can result in death. In fact, the incidence of death because of eating disorders is higher than reported because eating disorders and starvation cause a host of medical

issues, including heart problems and organ failure, which are often credited as the cause of death. Per the DSM-V (2013), eating disorders have the highest mortality rates of all mental health conditions.

While more serious disorders like the ones discussed above are more obvious times for intervention to be introduced, there is an enormous population of people experiencing levels of body image dissatisfaction that, while less medically serious, can still negatively affect their life, be passed on to their children and peers, and eventually become more serious problems.

The problem this study addressed was women receive messages that contribute to negative body image throughout their lifetimes. When these messages are processed without intentional thought, especially when cultivated over time, serious disorders and the transmission of unhealthy behaviors to children and peers can result.

Purpose of the Study

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body images. Different age groups provided insight into events that occurred in the decades of their lives, and new challenges or relief that was experienced.

Research Questions

1. What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?
2. What are the positive and negative influences that women report lead to the development of their body image?

3. How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?
4. In the opinion of the participants, what should be done to intervene with factors that lead to negative body image?

These questions were addressed using Q methodology, a set of psychometric and operational principles that used a systematic quantitative procedure to examine the subjective components of human behavior (McKeown & Thoman, 2013).

Definitions of Terms

The following is a list of terms and their definitions that were used throughout this paper.

Anorexia Nervosa

Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. Significantly low weight is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight (DSM-V, 2013, pp. 345).

Appearance Evaluation

As opposed to satisfaction, measurement scales will assess agreement with statements (Thompson et al., 1999, p.10).

Appearance Orientation

A measure of cognitive-behavior investment in one's appearance, measured by frequency of appearance-related thoughts and behavior (Thompson et al., 1999, p.10).

Appearance Satisfaction

Satisfaction with overall appearance, measurement scales define which aspects of appearance are assessed (Thompson et al., 1999, p.10).

Behaviorism

A stimulus-response paradigm whereby all behavior is believed to be caused by external stimuli. The learner is believed to be passive, and behavior is shaped through positive or negative reinforcement.

Binge Eating Disorder

Recurrent episodes of binge eating. An episode of binge eating is characterized by the following: 1.) Eating, in a discrete period (e.g., within any two-hour period), an amount of food that is definitely larger than what most people would eat in a similar period of time under similar circumstances; 2.) A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).

The binge-eating episodes are associated with three (or more) of the following:

- Eating much more rapidly than normal.
- Eating until feeling uncomfortably full.
- Eating large amounts of food when not feeling physically hungry.
- Eating alone because of feeling embarrassed by how much one is eating.
- Feeling disgusted with oneself, depressed, or very guilty afterward.
- Marked distress regarding binge eating is present.

The binge eating occurs, on average, at least once a week for three months. The binge eating is not associated with the recurrent use of inappropriate compensatory behavior as in bulimia nervosa and does not occur exclusively during bulimia nervosa or anorexia nervosa (DSM-V, 2013, pp. 350).

Body Distortion

Generally, refers to size estimation inaccuracy, but has been used to describe strange perceptual experiences (Thompson et al., 1999, p.10).

Body Dysmorphic Disorder

A psychological disorder in which a person becomes obsessed with imaginary defects in her appearance (Thompson et al., 1999, p.10).

Body Dysphoria

Can mean dissatisfaction, or distress with body image (Thompson et al., 1999, p.10).

Body Esteem

Similar to body satisfaction, scale items ask for agreement with positive versus negative features of one's body (Thompson et al., 1999, p.10).

Body Image

A multidimensional construct that incorporates biophysical, cognitive, behavioral, and affective dimensions to assess a person's self-perceptions or attitudes regarding his/her body (Cash & Smolak, 2012).

Body Image Dissatisfaction/Disorder/Disturbance

These terms are used interchangeably, each study will define them as they use them (Thompson et al., 1999, p.10).

Body Satisfaction

Satisfaction with an aspect of one's body, measurement scales define which parts are assessed (Thompson et al., 1999, p.10).

Body Schema

A construct tied to cognitive-processing theories and models, hypothesized framework for interpreting appearance-related information (Thompson et al., 1999, p.10).

Bulimia Nervosa

Bulimia nervosa involves a recurring cycle of binge eating and purging to compensate for what was eaten. The diagnostic criteria include:

Recurrent episodes of binge eating. An episode of binge eating is characterized by the following: 1.) Eating, in a discrete period (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances. 2.) A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating). 3.) Recurrent inappropriate compensatory behaviors in order to prevent weight gain, such as self-induced vomiting; misuse of laxative, diuretics, or other medications; fasting; or excessive exercise. 4.) The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for three months. 5.) Self-evaluation is unduly influenced by body shape and weight. 6.) The disturbance does not occur exclusively during episodes of anorexia nervosa. (DSM-V, 2013, pp. 345)

Camouflaging

Behavior aimed at concealing the body part the individual is self-conscious about (Cash & Pruzinsky, 1990, pp. 223).

Characterizing Statements

The statements ranked at both extreme ends of composite sort of a factor. They are used to produce a first description of the composite view (van Exel, p. 10).

Cognitive Processing Bias

Assumptions about situations may be made illogically (Graber, Brooks-Gunn, Paikoff, & Warren, 1994).

Cognitivism

Information processing paradigm whereby learner is seen as an active learner/thinker/problem-solver.

Depression (Depressive Disorder Due to another Medical Condition)

A prominent and persistent period of depressed mood or markedly diminished interest or pleasure in all, or almost all, activities that predominates in the clinical picture.

There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct pathophysiological consequence of another medical condition.

The disturbance is not better explained by another mental disorder (e.g., adjustment disorder, with depressed mood, in which the stressor is a serious medical condition).

The disturbance does not occur exclusively during the course of a delirium.

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning (DSM-V, 2013, pp. 180).

Eating Disorder

Feeding and eating disorders are characterized by a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning. (DSM-V, 2013, pp. 329)

Factor/Archetype

Participants association with subjective operants which is indicated by the magnitude of factor loadings/definition of a dimension within a space/group of participants who represent a particular viewpoint (McKeown, p. 6).

Normative Discontent

Pervasive negative feelings that women experience towards their body. These negative feelings become so common, they are 'normal' (Rodin, Silberstein, & Streigel-Moore, 1984).

Self-Esteem

An evaluation of self which expresses approval or disapproval with oneself, and indicates how capable, significant, and worthy one believes herself to be (Coopersmith, 1967).

Self-Serving Bias

Cognitive bias with a tendency to attribute positive events to one's own character and negative events to external factors (Veale, 2004).

Size Perception Accuracy

Accuracy of estimation of the size of body parts (commonly referred to as body image distortion) (Thompson et al., 1999, p.10).

Thin-Ideal

Socially defined ideals of attractiveness, which include an extremely thin body type (Thompson & Stice, 2001).

Weight Satisfaction

Satisfaction with one's weight, measured by noting discrepancy between current and ideal weight (Thompson et al., 1999, p.10).

Significance of the Study

Everyone has a unique journey of body image development. Learning how factors that influence body image combine with other personal factors leads to a better understanding of body image as a construct. That understanding will help education professionals deconstruct the issues and teach a mindset for a healthier body image.

[Note the intentional shift to first person narrative for this sub-section to adequately describe the researcher's personal interest in the study, as suggested by Ravitch and Riggan (2012).] I became interested in the topic of body image as a research topic when my three daughters were preadolescents, and about to enter that ominous stage of adolescence. All my girls were healthy, but different shapes and sizes, and affected by these differences. I noticed the early interest in their bodies and appearance that most parents start to notice at this age, and I also noticed the labeling of food as good or bad. Fortunately, none of my children developed an obsession, body image disorder, or eating disorder, but I started paying more attention to their attitudes, perceptions, concerns, and behaviors related to the topic. I read articles and studies and felt real frustration over finding how pervasive these problems are in our culture, that our culture cultivates these problems rather than solves them, and that it continues into adulthood, which sets up a continuing cycle for mothers to pass down to daughters. I started to notice that we are *learning* what to think of ourselves, based on a very unrealistic cultural ideal, and the etiology has a snowball effect, facilitated by modern technology. I came to believe that although this learning process was very passive, it was also concretely constructed, which made me believe it could be deconstructed and rebuilt into something healthier.

I believe that adults must understand their own cognitive process where body image experiences were created and felt, and assess where they are now to help their children be

resilient to unhealthy messages related to body image. For this reason, while this study focuses on adult participants, I believe that the issues resulting from body image are inextricably linked for children and adults.

Limitations

This study was reliant on the ability of the participants to recall experiences from their adolescence. It was assumed that experiences that influence the development of body image were salient enough to recall, even years later. The Q sort is an unknown research method to many people, and some confusion could be felt, especially in completing the instrument online. However, the instructions for completing the Q sorts are detailed and descriptive. Also, the interface developed by the researcher on the Q Flash software is based on a template that was previously found to be user-friendly, therefore participants should have little trouble completing the sorting tasks. Q methodology has been criticized in the past for its demanding sorting process which may require participants to make too fine of distinctions among the items (McKeown & Thomas, 1988) or is simply beyond the cognitive ability for most people to perform adequately (Bolland, 1985). However, such issues would be expected to manifest mainly in placement of items near the center of the sort-distribution. Therefore, the open-ended items on the instrument and subsequent analyses focused primarily on items toward the extremes of most and least-influential, which should have been the easiest for respondents to discriminate.

CHAPTER TWO. LITERATURE REVIEW

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body images. Using Q methodology, the study addressed the following questions:

1. What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?
2. What are the positive and negative influences that women report lead to the development of their body image?
3. How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?
4. In the opinion of the participants, what should be done to intervene with factors that lead to negative body image?

Decoding the physical body into the psychological account of the body and then into attitudes and behaviors toward the body is a complex and emotionally charged developmental process. In Cash and Smolak (2012), they defined body image as a multidimensional construct that incorporates biophysical, cognitive, behavioral and affective dimensions to assess a person's self-perceptions or attitudes regarding his/her body. Thompson et al. (1999) recognized that defining body image was "tricky" because there are many body image terms that are used interchangeably that should not (pp. 9-10). They list 16 terms with definitions for explication, many of which are mistakenly used interchangeably by other researchers. These terms are among those defined in the above section, *Definition of Terms*. Some of the differences found in various definitions are simply semantics, but researchers tend to define this construct differently

depending on their research focus. Based on the different research focuses, Cash and Smolak did a respectable job of encompassing the different facets of body with one exception. It may be worth adding that a person's body image develops and evolves over a lifetime.

Body image satisfaction/dissatisfaction exists on a continuum. Some people have a very positive view of their body, whether they have weight issues or not. Unfortunately, it is much more common for individuals to feel some level of dissatisfaction with their bodies, especially for women. Research reports that between 69 and 84 percent of women experience some level of body image dissatisfaction, most commonly referring to their weight (Fallon & Rozin, 1985; Pruis & Janowsky, 2010). But dissatisfaction does not start in adulthood. Lowes and Tiggemann (2003) found that girls as young as six show a desire to be thinner. Dissatisfaction increases with age and exposure to etiological factors. A variety of influential factors, such as parents, peers, media, and others contributes to an ever-evolving body image throughout a child's life, into adulthood. Although researchers have been studying body image for decades, the increasingly ubiquitous nature of the media and the thin-ideal body type it promotes has brought about an explosion of new research in the past 30 years.

This review of literature synthesized current research regarding social cognitive and behavioral perspectives on the development of body image in women. It used an integrative viewpoint and drew on learning, social, and human development theories that emphasize social learning and cognition. This theoretical background may contribute to research conducted to better understand the learning process that occurs in the development of body image so that effective teaching practices can be developed to address these problems. Because this paper addressed women, pronoun use will be feminine. The lens used to understand the developmental process of body image is learning. The link between learning and body image development may

not be overt considering it is not occurring in the structure of a school or classroom; however, it is critical to understand how women are processing information in the form of body image messages, how what they learn from those processed messages contributes to their overall health and well-being, and how they might transmit those messages to their children. This paper drew from the following learning and human development theories to describe how a body image may develop: social cognitive theory, social comparison theory, objectification theory, cultivation theory, information processing, and operant conditioning. By breaking down the transfer and processing of messages into learning components using these theories, professionals (teachers, counselors, youth leaders, parents, etc.) will better understand how to prevent body image issues at the onset, and how to intervene and treat issues that are already prevalent.

Body image is an issue that touches males and females of all ages and ethnicities. However, this paper does not address research regarding males, or differences across ethnicities. The research focuses on women of European descent. Eating disorders are very closely correlated with body dissatisfaction, but as a disorder, go beyond the scope of this study. A brief overview of eating disorders is included as a potential outcome of body dissatisfaction to help establish the significance of the issue. The bulk of the research compiled here includes nonclinical participants as it examines the intermediate issue of body dissatisfaction that occurs before it develops into more serious, clinical disorders, such as body dysmorphic disorder (BDD) or eating disorders.

The structure of the literature review is as follows: the significance of the issue of body image dissatisfaction is further established through a discussion of risks and outcomes of body image issues; the lens of learning is used to examine etiological factors of body image

dissatisfaction through several learning and human development theories; and future considerations will close out the discussion.

Risks/Outcomes of Body Image Issues

As noted above, research reports that between 69 percent and 84 percent of women experience some level of body image dissatisfaction. Research also now shows that "clinically relevant" body image dysfunction exists in non-eating disordered populations (Thompson, 1990, pp. 6). This is a very important acknowledgement, as it underscores the seriousness needed in addressing body images issues before they escalate into more life-threatening conditions, and before they get passed on to children. Understanding body image development is critical to preventing and treating negative body image and its damaging effects.

The topic of body image has been studied across a variety of disciplines, including but not limited to psychology, education, dietetics, dermatology, obstetrics and gynecology, and oncology. A negative body image has been associated with poor self-esteem, habitual body monitoring, increased shame, reduced motivation, depression, social anxiety, sexual dysfunction, body dysmorphic disorder, eating disorders, drastic body change measures, and in extreme cases, has led to death (Cash & Pruzinsky, 2002; Fredrickson & Roberts, 1997; Stice & Shaw, 2002; Stice & Whitenton, 2002; Thompson, Heinberg, Altabe, & Tantless-Dunn, 1999).

Two main components of body image are evaluation and investment (Cash & Fleming, 2002). Evaluation refers to the degree to which one is satisfied with her body. This is measured by the degree of difference between the person's actual appearance and their preferred appearance. Investment regarding body image is the level of importance one places on appearance and internalizes appearance standards (Cash, 2004). In Western culture, it is common for women to place a very high level of importance on their appearance. It is also common to be

very critical when evaluating themselves for body image satisfaction. The set of experiences that bring about the development of attitudes about evaluation and investment can have a direct effect on quality of life by impacting self-esteem, interpersonal confidence, and emotional stability (Cash & Fleming, 2002). Unfortunately, these attitudes and resulting behaviors are observed by and transmitted to children. If women can be taught greater awareness of their outward expression of body image dissatisfaction and how it affects their observers, they may start to view themselves more kindly, and eliminate one of the most salient teaching components of negative body image to children—negative messages from their mothers.

People experience body image in different ways. Depending on predispositions and the number and severity of etiological factors involved, some people can handle some level of dissatisfaction, whereas others become so distressed that their daily functioning is interrupted (Cash & Fleming, 2002).

Dieting

One of the most common outcomes of experiencing body image dissatisfaction is for the individual to begin dieting to lose weight. However, research shows that calorie restriction often predicts weight gain instead of weight loss (Stice, Cameron, Killen, & Taylor, 1999). Because this dieting failure can lead to frustration and loss of self-efficacy for weight change, dieting attempts predict increases in body image dissatisfaction for both males and females (Bearman, Presnell, Martinez, & Stice, 2006). Despite so many dieting attempts ending in failure, many women's obsession with losing weight drives them to try fad diet after fad diet, often spending a significant amount of money and cycling further into failure.

McCabe and Ricciardelli (2005) reported that 50 percent of women are on a diet on any given day. With so many working couples, the promise of quick, processed meals and fast foods

contribute to the failure to adhere to a structured diet program. If the entire family is not being expected to make the lifestyle change that the mother is making, it adds another layer of difficulty as the mother may need to prepare meals for her family separate from those for herself.

As women are bombarded with advertisements, testimonials, and invitations to meetings for diet programs, they may learn to place an even greater importance on their weight. They are taught that their bodies are more malleable than they may be. They are shown highly successful before and after pictures that represent a very small percentage of dieters and believe those results should be generalizable to them. When this fails to ring true, they develop even greater levels of dissatisfaction.

Body Dysmorphic Disorder (BDD)

As cited in Neziroglu, Khemlani-Patel, and Veale (2008), studies have found that individuals with body image disorders have difficulty with global processing of images, and instead tend to focus on details (Deckersbach, Savage, & Phillips, 2000), selectively regard emotional stimuli, especially BDD-related words, and interpret social, general, and BDD-related situations as threatening (Buhlmann, McNally, Wilhelm, & Florin, 2002). Individuals with body dysmorphic disorder often focus on not just one detail, but up to three body parts, with one causing the most distress (Neziroglu, Khemlani-Patel, & Yaryura-Tobias, 2006). The media advocates this focus on details or individual body parts by touting the importance of six-pack abs, horseshoe triceps, and buns of steel. Many images in advertising feature only one body part to focus on the perfection of it, contributing to the above-mentioned tendency of women with BDD to focus on details. Of course, these images are manipulated, but whether women know this or not, they see the image of that body part as being socially acceptable, and their corresponding body part as being unacceptable in comparison.

One of the aspects of body image that has been discussed in this paper is an individual with anything from just body image dissatisfaction to body dysmorphic disorder or eating disorders can look in the mirror and see something that is not actually there. Usually it is in the form of a specific body part, as she tends to focus on details. Veale (2004) has done extensive research on the 'self as an aesthetic object.' He said that external events or intrusive thoughts activate a distorted mental image. As a person becomes focused on specific features of her appearance, her awareness of those features increases. If dissatisfaction builds into dysphoria or body dysmorphic disorder, external events such as looking in a mirror or seeing a picture of one's self, or having an intrusive thought like 'The rolls in my stomach show in every shirt I wear,' trigger self-focused attention, which leads to the outcome of the 'self as an aesthetic object.' When women are objectified or objectify themselves, they have a fragmented view of themselves—a mere collection of body parts. The self-focused attention Veale describes becomes concerned with fixing or improving those fragments to become something more aesthetically pleasing to look at (Veale, 2004). This self-viewpoint is at the expense of seeing one's self as a thinking, feeling being with ideas, capabilities and experiences, worthy of love and respect regardless of appearance.

Fredrickson and Roberts (1997) also researched objectification of the female body. Their objectification theory postulates that females are trained through our culture to internalize an observer's perspective as the primary view of their physical selves. Relying on the perspective of others can lead to habitual body monitoring, increased shame and anxiety, reduced motivation, increased depression, sexual dysfunction, and eating disorders (Fredrickson & Roberts, 1997). Objectification theory will be discussed further in the theories section of this literature review, beginning on page 54.

Depression and Negative Affect

Depression and negative affect are two outcomes of body image dissatisfaction that overlap, but exhibit differences. Depression is a "persistent period of depressed mood or markedly diminished interest or pleasure in all, or almost all, activities that predominates in the clinical picture" (DSM-V, pp. 180). Depressed individuals generally feel sad, empty, worthless, anxious, hopeless, or restless. They can suffer from either inability to sleep, or excessive sleep, chronic fatigue, digestive problems or reduced energy (Depression, nimh.nih.gov). By contrast, negative affect subsumes a slightly different range of emotions, including anger, contempt, guilt, fear, disgust, and nervousness. People with high negative effect will show higher levels of distress and anxiety, and focus on the negative aspects of themselves and their lives (Koch, Forgess, Matovic, 2013). Negative affect is associated with a negative information-processing bias that produces a perception that one's actual body is even further from her ideal shape than it is.

It would seem likely that like self-esteem, they both can have a reciprocal relationship to body image. However, in Stice and Whitenton (2002), depressive symptoms did not have a significant relationship to ensuing increases in body dissatisfaction. Two other studies, Cattarin and Thompson (1994) and Rierdan, Koff, and Stubbs (1989) also found a null effect measuring the relationship between depression and body dissatisfaction increases. Two of the three studies used large samples, so it does not appear to be low statistical power causing the null effect. Considering consistent evidence showing that body dissatisfaction predicts depression, it is likely that the direction of the effect between the variables is opposite of what was hypothesized. Similarly, the null effect was found while testing whether negative affect increased the risk for body dissatisfaction (Taylor & Cooper, 1992). The researchers suggested that based on the

experimental evidence that negative affect inductions result in body dissatisfaction in the lab, maybe negative affect only exerts acute effects on body dissatisfaction, as opposed to an increase in existing satisfaction. Future research in this area needs to delineate the nature of the relationships between depression and body dissatisfaction, and negative affect and body dissatisfaction.

Self-esteem

Self-esteem is a critical internal factor to consider when studying body image. The construct of self-esteem is an evaluation of self which expresses approval or disapproval with oneself, and indicates how capable, significant, and worthy one believes herself to be (Coopersmith, 1967). Self-esteem and body image are so tightly woven as constructs, they are difficult to separate from each other. Self-esteem has a direct relationship to body image (van den Berg, Thompson, Obremski-Brandon, Coovert, 2002). Low self-esteem is attributed to factors not yet empirically related to body image, such as poor grades in school, family problems, perceived lack of creativity or athletic abilities. However, a qualitative point of view of these issues may reveal a connection to the onset of body image issues.

Van Vonderen and Kinnally (2012) found that being overweight is seen in our society as a weakness, a sign of laziness, a condition that can be prevented and/or fixed. This stigmatization can negatively affect the self-esteem of overweight people (Miller & Downey, 1999). Even if they are not objectively overweight, women often perceive themselves as being overweight when they compare to the media-promoted thin-ideal because they fall short of societal standards. Whether women are objectively or perceivably overweight, media comparisons can strongly contribute to lower self-esteem (Van Vonderen & Kinnally, 2012). A woman with very low self-

esteem due to her perception of her appearance or weight may also experience low self-efficacy in other areas of her life, such as her career, resulting in the failure to reach her full potential.

Women with higher body mass index (BMI) are more likely to have higher levels of body dissatisfaction and lower levels of self-esteem (Hendriks, 2002). This is even though BMI is not a consistent measure of body composition (Kruschitz, Wallner-Liebmann, Hamlin, Moser, & Ludvik, 2013). One of the primary flaws of using BMI to measure body composition is it uses weight as a measure of risk, as opposed to body fat, which is what causes someone to be obese. Weight does not take into account if someone is very fit, or has a very large or small frame. Someone who is very fit, and has above average muscle mass, could measure as overweight or even obese using BMI, but be quite healthy. Similarly, someone who has a very small frame could measure underweight using BMI, but be healthy (Kruschitz, Wallner-Liebmann, Hamlin, Moser, & Ludvik, 2013).

Eating Disorders

An eating disorder is characterized by "a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning" (DSM-V, 2013, pp. 329). Some individuals with eating disorders report behaviors like those with substance abuse disorders, such as craving and patterns of compulsive use. This resemblance may reflect the involvement of the same neural systems, including those implicated in regulatory self-control and reward, in both groups of disorders (DSM-V, 2013, pp. 329). Someone with an eating disorder is so focused on food and her weight, it consumes her time and thoughts. The eating habits of an individual who suffers from an eating disorder may disrupt her normal body functions. The actual disorder is usually a symptom of a different problem. The food, restriction of food, or purging of food becomes a

coping or control mechanism to deal with painful emotions. These emotions can stem from traumatic events such as physical or sexual abuse, rape, an accident or illness causing disfigurement, or weight-related teasing, to name a few (Treuer, Koperdak, Rozsa, & Furedi, 2005).

The Diagnostic and Statistics Manual of Mental Disorders (DSM-V, 2013) lists three main eating disorders: anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED). Anorexia nervosa uses the following diagnostic criteria:

- Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. Significantly low weight is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected.
- Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.
- Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight. (DSM-V, 2013, pp. 238-239)

Bulimia nervosa is also a potentially life-threatening eating disorder. It involves a recurring cycle of binge eating and purging to compensate for what was eaten. The diagnostic criteria include:

- Recurrent episodes of binge eating. An episode of binge eating is characterized by the following:

- Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances.
- A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- Recurrent inappropriate compensatory behaviors to prevent weight gain, such as self-induced vomiting; misuse of laxative, diuretics, or other medications; fasting; or excessive exercise.
- The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for three months.
- Self-evaluation is unduly influenced by body shape and weight.
- The disturbance does not occur exclusively during episodes of anorexia nervosa. (DSM-V, 2013, pp. 345)

Binge eating disorder is recurring binge eating without using offsetting behaviors such as purging to counter the binge eating. The diagnostic criteria include:

- Eating, in a discrete period of time (e.g., within any two-hour period), an amount of food that is definitely larger than what most people would eat in a similar period of time under similar circumstances.
- A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- The binge-eating episodes are associated with three (or more) of the following:
    - Eating much more rapidly than normal.
    - Eating until feeling uncomfortably full.

    - Eating large amounts of food when not feeling physically hungry.
    - Eating alone because of feeling embarrassed by how much one is eating.
    - Feeling disgusted with oneself, depressed, or very guilty afterward.
- Marked distress regarding binge eating is present.
- The binge eating occurs, on average, at least once a week for three months.
- The binge eating is not associated with the recurrent use of inappropriate compensatory behavior as in bulimia nervosa and does not occur exclusively during bulimia nervosa or anorexia nervosa. (DSM-V, 2013, pp. 350)

A lack of social support may be a culprit in promoting body image and eating disturbances (Stice, Presnell, & Spangler, 2002). Stice et al. (2002) and Stice and Whitenton (2002) suggest that the lack of a social support system predicted disordered eating onset. Although one test of this effect produced a non-significant result (Byely et al., 2000), it was reported that this may have occurred due to low statistical power. Stice and Whitenton's results supported the notion that acceptance in one's social network can be a protective factor against sociocultural pressures to be thin. In a positive support system, a woman will receive some accepting messages to counter the effects of the messages she receives from the media. The media messages, which will be further explained later in this paper, generally promote a thin-ideal body type that women cannot achieve. This is often internalized as failure and inability to fit in. A positive support system of friends and family will surround the woman with role models of people she loves and admires who likely also do not conform to the cultural standard. As will be explored in the section on Social Learning Theory, these role models teaching a healthier, more positive body image attitude will benefit women in their physical and emotional health.

Etiological Factors of Body Image Development

This section discusses factors that contribute to the development of body image. To present a complete picture of that development for the education of women, research regarding body image development in children is included. Understanding the full spectrum of development can help women understand their own journey through body image issues, and can help them realize the importance of refraining from body-related comments in the presence of their children.

The pressure to be thin from one's social environment can bring about body dissatisfaction because repeated messages that one does not live up to the standard would be expected to cause dissatisfaction with appearance (Streigel-Moore, Silberstein, & Rodin, 1986; Thompson et al., 1999). In Stice and Whitenton (2002), the perceived pressure to be thin was the most compelling predictor of body dissatisfaction onset. Girls who reported feeling moderate pressure to be thin were at four times the risk for body dissatisfaction. The second most compelling was body mass index (BMI). Even in girls who reported low levels of pressure to be thin, those who were above average in BMI were at eight times the risk for body dissatisfaction onset compared to girls with lower BMI. Adults feel pressure to emulate the thin-ideal as well, but these pressures can be especially salient for adolescent girls as this is the time of their life when appearance is most important to them. These pressures to be thin can come from a variety of sources, including parents, peers, siblings, significant others, and the media. The pressures can be direct, such as direct comments from parents or peers, or they can be indirect, such as modeling by parents or peers, and comparisons of self with images of women in the media. When girls and women internalize this notion of the thin-ideal, they believe that achieving

thinness will afford them social benefits, acceptance, and academic success. Not being able to live up to that thin-ideal leads to body dissatisfaction (Stice & Bearman, 2001).

Much of recent research on the etiology of body image disturbance has focused on models with multiple factors. The Tripartite Influence Model (van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002) investigates three primary sources that influence the development of body image—parent, peers, and media. This model has been replicated by many researchers. Others have studied one or two of the factors alone. Parents, peers, and media have become the most commonly investigated etiological factors in the development of body image. These and several others are examined in the following pages. Individuals do not experience each of these factors in a vacuum setting; therefore, factors can have a synergistically positive or negative affect, depending on the messages being conveyed (Thompson et al., 1999).

Media

Girls as young as six-years-old, and continuing into adulthood, have a desire to be thinner (Lowes & Tiggemann, 2003). Because media is available in more forms than ever before, and is injected into every aspect of our daily lives, media images have become the society-set comparison standard. Media specifically targets children, adolescents, and adults in a differentiated manner which increases resonance of the messages. Children are not always able to differentiate between fact and fiction, a real person from a digitally manipulated image (Rideout, 2014), so they may view their comparison targets as achievably comparable. Shroff and Thompson's research (2006) shows that media and peer influences are more influential during adolescence than parental influences for girls. Despite realizing that media images to which women aspire are unrealistic, they are still likely to compare themselves to models and other celebrities, resulting in decreasing self-esteem (Festinger, 1954; Granatino & Haytko,

2013; Thompson et al., 1999). This follows social comparison theory, which says that individuals define themselves based on comparisons they make with other people (Festinger, 1954). Social comparison theory is more thoroughly explored later in this paper.

Heinberg (1996) states that besides setting a nearly impossible standard to achieve in the thin-ideal, the media also sends the message that the body is as changeable as you want it to be, and with enough hard work, any individual can achieve the ideal. Girls and women believe they are to blame when they fail to achieve it. This sense of failure can result in BID (Groesz, Levine, & Murnen, 2002), and potentially, body dysmorphic disorder (BDD) or eating disorders (Choate, 2007). The advertising field defends itself by claiming that thin models are more effective in advertising than overweight models (Halliwell & Dittmar, 2004). Halliwell and Dittmar (2004) have produced research that shows that moderate-sized models are also effective in advertising, but do not create the negative effect on body image as ultra-thin models. In another study, Halliwell, Dittmar, and Howe (2005), investigated the effects ultra-thin models had on women with a history of eating disorders. Exposure to the ultra-thin models did not lead to increased body-focused anxiety; however, exposure to the moderate-sized models produced a *relief effect*, meaning the women felt lower levels of body-focused anxiety. They felt relieved when comparing themselves to models with body types closer to their own.

The body of research regarding the correlation of ultra-thin models used in media and increased body dissatisfaction is growing (Grogan, Williams, & Conner, 1996; Halliwell & Dittmar, 2004; Heinberg & Thompson, 1995; Irving, 1990; Stice & Bearman, 2001; Thompson et al., 1999). Groesz et al. conducted a meta-analysis of 25 experimental media image studies and found a significant effect size across all studies, clearly supporting the claim that the use of ultra-thin models is correlated with increased BID. Halliwell and Dittmar (2004) and Dittmar and

Howard (2004) also considered controlling for attractiveness in their research regarding this correlation. They found that even if moderate-sized models were highly attractive, respondents experienced the relief effect due to the models' more realistic size. They also supported the finding that when moderate-sized models were considered equally attractive to ultra-thin models, the advertising was equally effective. In the above studies measuring advertising effectiveness, effectiveness was measured by willingness to purchase a product and attitudes toward the product, not the product sales.

Size zero in women's clothing uses a bust size of 31.5 inches, waist size 23 inches, and his 34 inches. To put this into perspective, the waist of an eight-year-old is 22 inches, and the media promotes a one-inch larger waist as an ideal women's size (Kettler). Other parts of the world are realizing the effects of the unrealistically thin-ideal. In 2006, models in a Spanish fashion show were required to meet a specific BMI. Milan followed suit. This has been adopted by other countries since that time (Granatino & Haytko, 2013). In 2012, Israel passed legislation banning the use of underweight models in local ads and publications. Models must prove their BMI is higher than 18.5 by producing current medical records (Cowles, March 20, 2012). Fashion labels Prada, Versace, and Armani have banned size zero models from catwalks to express their concern of the use of underweight models sending the wrong signals to girls (Kettler).

Parents/Siblings

While women and girls internalize societal norms about body image from a number of different sources, messages from one's immediate subculture may be especially pertinent and meaningful (Presnell, Bearman, & Madeley, 2007). As noted in the *Risks/Outcomes* section of this paper, the lack of a social support system may play a role in body image and eating

disturbances. When people feel accepted by their social environment, they generally feel more secure and positive about themselves and their bodies (Stice & Whitenton, 2002). The perception of a support system can also act as a protective factor against the pressures to conform to the societal thin-ideal that predicts body dissatisfaction. Also, mentioned in the *Risks/Outcomes* section, Stice et al. (2002) suggests that the lack of a social support system predicted disordered eating onset.

Parents, especially mothers, are an important source of meaningful information regarding values, including body image (McCabe & Ricciardelli, 2001b). Most research relating parents to the body image development of their children focuses on maternal transmission, as does this paper. More research is needed regarding the father's influence on body image. Messages conveyed by parents exist in the form of direct comments about their own bodies or the individual's body, body-related attitudes, and in the form of modeling of eating behaviors tied to body image (Smolak, Levine, & Schermer, 1999). A mother may make comments regarding her own weight: that she is fat, that she has gained weight, or that a garment no longer fits. A child—especially a young girl—upon hearing these comments, may learn that gaining weight is bad, outgrowing clothes means one is getting fat, or getting or feeling fat is a negative event. The effect of comments is stronger when they are directed at the child. Telling the young girl she is gaining weight, that eating certain foods will make her fat, or that she needs to exercise to avoid gaining weight or to lose weight all could contribute to negative body image in the child. Girls perceive greater feedback from mothers to lose weight than boys, especially girls who are objectively overweight (McCabe & Ricciardelli, 2001a). Smolak, et al. (1999) found that boys were affected by direct comments only, while girls were affected by comments and maternal

modeling. Comments from parents about children's appearance convey body image norms that could lead to negative associations with body image in general (Smolak et al., 1999).

Streigel-Moore, Silberstein, and Rodin (1986) advised that the effects of highly appearance-invested maternal modeling can contribute to the development of body image disturbance in daughters. Observation of modeling behaviors may include the child observing the mother's eating or exercise habits: if she counts calories, cuts her food into small pieces, or exercises excessively. It can also include observing the mother doing garment adjustments, mirror checking, or changing clothes frequently. These observations will be discussed relative to social learning theory later in this paper.

If parental attitudes on body shape and weight reflect those of the media, the combined factors can send an even stronger message regarding body expectations to children (Van Vonderen & Kinnally, 2012). Lowes and Tiggemann (2003) found that girls reported having more parental control over their eating habits and a greater awareness of dieting than boys. In the same study, a significant, positive correlation between the girls own body dissatisfaction and that of their mothers. The effect of the fathers' dissatisfaction was not significant.

Although body image research tends to focus on negative body image as opposed to positive body image, it is important to note that parental (especially maternal) comments and modeling can also influence their body image in a positive way. Keeping body talk about health, rather than appearance, and focusing compliments of children on attributes other than appearance, such as kind-heartedness, work ethic, and helpfulness, will steer parental influences away from negative body image.

Children and adolescents tend to compare themselves to siblings based on academic, athletic, artistic, and musical abilities; and based on physical attractiveness and popularity

(Rieves & Cash, 1996). This is a type of social comparison. Social comparison theory is further explored later in this paper. In these comparisons, because the child is not only comparing herself to another person, but a sibling, the dynamic of competing for parental and other family favor can exacerbate the complexity of the feelings created—whether the comparison is upward or downward. In upward comparisons, the individual compares to someone they perceive as being more attractive than themselves (Taylor & Lobel, 1989). If a girl compares herself to her sister, whom she perceives as being more attractive and/or more well-liked by friends and family, she will experience an upward comparison, and could experience body dissatisfaction. In downward comparisons, the individual compares to someone they perceive as less attractive (Taylor & Lobel, 1989). If the girl compares herself to her sister and perceives herself to be more attractive, she would experience a downward comparison. She may even engage in teasing her sister for features she finds unattractive or for her weight, and contribute to her sister's experience with body dissatisfaction.

Peers

Children as young as 5 or 6 years old start to experience negative body image (McCabe & Ricciardelli, 2005). It is possible that the onset is linked to the stage of life when children start school, are forming peer relationships, and are exposed to an increasing number of media. Besides messages and attitudes conveyed by parents, another weighty source of information for both children and adults is their peers. Peers can convey their opinions and attitudes in the same forms as parents—direct comments and modeling. Direct comments may be regarding the peer's attitudes and opinions about herself, about the target individual, or about other individuals, either in the media or known personally. Any of these comments can influence the target individual's body image development, but the more personal the comment, the more weight the individual

will award it (Thompson et al., 1999). As with parents, peers can also be an important source of positive body image messages. Individuals are affected by the modeling of their peers by attending to their style of dress, their concern over weight and eating behaviors, and their attitudes toward exercise and body change. Both children and adults are influenced by the opinions of their peers to feel accepted (Shroff & Thompson, 2006).

The importance an individual place on her peer's opinion depends on the type of relationship she has with her. Individuals tend to place more importance on the opinions of same gender close friendships as opposed to acquaintances (Shroff & Thompson, 2006).
The use of the term 'peers' in etiology of body image dissatisfaction can be somewhat ambiguous for that reason. This is not to minimize the effects direct comments from strangers or casual acquaintances can have on an individual. The seemingly random cruelty, especially in the presence of other peers, can cause serious emotional distress.

McCabe and Ricciardelli (2001b) stated that peer influence can have a significant impact on what one considers normal or desirable regarding body size and shape. They found that women who experienced high body dissatisfaction were more likely to have felt peer pressure about weight, particularly in the form of criticism for weight gain, and praise for weight loss. Young women whose peers value thinness are more likely to have lower self-esteem as they struggle to live up to their peers' expectations (Kremar, Giles, & Helme, 2008). They also observed that when peers reinforce the thin-ideal found in the media, it is more likely that these young women will embrace this ideal as realistic and expected.

Puberty

When girls are entering puberty, they are generally just growing out of the age where they were interested in Barbie dolls. From approximately age 5-12, many girls are exposed to an

unrealistic body type in the Barbie doll. Girls between ages five and eight experienced increased body dissatisfaction, decreased self-esteem, and increased desire to be thinner after being exposed to the Barbie doll (Dittmar, Halliwell, & Ives, 2006). They move from this period, where they have already experienced unrealistic body types in toys and media, to the age where they increase their exposure to such media, and the influence of their peers increases as well.

During puberty, it is normal for girls to gain weight as their bodies develop, especially in the areas of the hips, buttocks, stomach, and thighs. Despite the weight gain being virtually universal and normal, girls feel a high level of dissatisfaction about the differences they see in their developing bodies and the societal ideal for female thinness that is portrayed in Western cultures (Presnell, Bearman, & Madeley, 2007; Thompson et al., 1999). Body image dissatisfaction is not only associated with being objectively overweight, indeed many normal-weight females also experience body image dissatisfaction (Presnell, Bearman, & Stice, 2004). During adolescence, a girl's physical appearance is very important to her. As her body changes conversely to the thin-ideal, many girls feel vulnerable to increased body image dissatisfaction and eating-related problems (Levine & Smolak, 2002; Presnell et al., 2007; Thompson et al., 1999). Adolescent girls are not equipped to deal with the thin-ideal pressure felt from media, peers, family, and society in general (Granatino & Haytko, 2013). Mooney, Farley, and Strugnell (2004) reported from a study of 124 teens, 15 and 16 years old, despite understanding that thin-ideal celebrities were not representative of the general population, the teens still wished to look like them. The participants' reasons for wishing to be thinner were to attract the attention of boys, gain approval of friends, and increase their self-confidence.

Girls who mature early or on-time report higher levels of body dissatisfaction than girls who enter puberty at a later age, possibly due to pubertal increases in body size and weight

(Graber, Brooks-Gunn, Paikoff, & Warren, 1994; McCabe & Ricciardelli, 2004; Tobin-Richards, Boxer, Kavrell, & Petersen, 1984). It is possible that hormonal changes during puberty cause unpredictable emotions (Graber, Brooks-Gunn, Paikoff, & Warren, 1994). These hormonal changes may cultivate cognitive processing biases that put girls at risk for body dissatisfaction. These biases mean that presumptions about situations are made illogically. A girl may misread a peer's glance and fear she is being judged on her appearance. The individual dealing with the hormone changes struggles to create an accurate social reality. This may lead to poor judgment and irrationality. The same girl mentioned above may decide she needs to diet to avoid being socially criticized again, whether she is overweight or not. Maturity, like other factors, cannot be considered alone, as it likely interacts with other variables such as dating, participation in athletic activities, and parental influence.

Internalization

An etiological factor that combines the external factors discussed above with internal processing is thin-ideal internalization. Thompson and Stice (2001) found that "internalization is a causal risk factor for body image and eating disturbances, and that it appears to operate in conjunction with other established risk factors for these outcomes, including dieting and negative affect" (p. 181). Thin-ideal internalization refers to the phenomenon of people finding the socially defined ideal of attractiveness meaningful, and seeking to emulate it (Thompson et al., 1999). Stice and Bearman (2001) found that thin-ideal internalization predicted increases in body dissatisfaction. Grabe, Ward, and Hyde (2008) conducted a meta-analysis of the body image literature and reported that 57 percent of experimental studies found that thin-ideal body images are tied to women's body image dissatisfaction. Individuals find these ideals meaningful because they are approved by others they look up to, such as family, friends, and celebrities. This

approval of respected social circles is called social reinforcement (Kandel, 1980). Reinforcement can come in the form of positive comments about the thin-ideal, or negative comments/criticism of other people or the individual if they do not meet the standards set by the thin-ideal (Hohlstein, Smith, & Atlas, 1998).

As discussed in the *Etiology* subsection on *media*, the thin-ideal set by society, in particular the media, is extremely difficult for most females to attain, which leads to body image dissatisfaction (Festinger, 1954; Heinberg, 1996; Thompson et al., 1999). In addition to being dissatisfied with their bodies, individuals at risk for eating pathology will often experience negative affect. Negative affect involves experiencing negative emotions and a poor self-concept. People who experience high levels of negative affect feel anger, anxiety, guilt, fear, and nervousness much of the time (Koch et al., 2013).

Thompson and colleagues have conducted body image research for approximately twenty years. They developed the internalization construct by asking women and men to describe the current ideal for attractiveness for females and used the qualitative responses to create the initial scales (Heinberg, Thompson, & Stormer, 1995; Stice, Schupak-Neuberg, Shaw, & Stein, 1994). The second phase of their research consisted of studies that tested whether thin-ideal internalization is positively correlated with body image and eating disturbance. These correlations were confirmed (Stice et al., 1994). The third phase tested whether thin-ideal internalization prospectively predicts body image and eating disturbances. Stice and Agras (1998) found the thin-ideal internalization predicted the onset of bulimic symptoms among adolescent girls who were initially asymptomatic. The fourth phase of research used experiments to attempt to reduce the impact of thin-ideal images portrayed in the media. The intervention reduced internalization, and has been replicated in other trials (e.g., Irving, DuPen, & Berel,

1998). In the fifth phase of research, the researchers attempted to rule out potential third variables that might explain the prospective findings and to establish that internalization is a causal risk factor for body image dissatisfaction and eating disturbances (Kraemer, Kazdin, Offord, Kessler, Jensen, & Kupfer, 1997). The intervention resulted in reduced internalization, which in turn reduced body dissatisfaction and bulimic symptoms. This established internalization as a causal risk factor for body image dissatisfaction and eating disturbances.

Trauma

Teasing was mentioned in conjunction with other etiological factors discussed above, but it is worth noting that teasing, in some cases, can be viewed by individuals as a traumatic event with lifelong consequences. There is some research regarding correlations between weight-related teasing and its relationship to negative body image, although the results in the literature are inconsistent. Rieves and Cash (1996) conducted a study on social development factors of women's body image that found that "peers and friends are among the most frequent and worst perpetrators of teasing, second only to brothers," and that teasing, especially appearance related (face and weight) is correlated to poor self-esteem and negative body image. Cattarin and Thompson (1994) were surprised to find that weight-related teasing did not predict and increase body dissatisfaction. However, they believed it was possibly due to low internal consistency of their teasing scale, and a relatively small sample size. Another explanation was that more earnest direct messages about the importance of thinness might have a greater adverse effect on body satisfaction.

Physical and sexual abuse are other types of traumatic events that have been linked to negative body image and eating disorders. The exact role of the abuse in the development of disorders is not clear. Treuer et al. (2005) found significantly more severe body image distortion

in physically abused patients and patients with a history of laxative abuse. These patients also had the worst rates on sexual abuse and body image distortion items. However, the presence of sexual abuse was not associated with more severe distortion. In Welch and Fairburn's study (1996) as many as 35 percent of bulimia nervosa patients had been sexually abused. Rorty, Yager, and Rossotto (1994) (as cited in Treuer et al., 2005), found that although sexual abuse was frequently a factor in eating disordered patients, there was no significant difference compared to other psychiatric disorders except when sexual and physical abuse occurred together.

It is worth mentioning, although beyond the scope of this paper, that other types of traumatic events that can contribute to body image issues are accidents and illnesses that can cause some type of physical disfigurement. Illnesses can include sexually transmitted diseases, infertility, breast and other types of cancers (Heinberg & Guarda, 2002).

Pregnancy/Postpartum

Pregnancy and postpartum phases of a woman's lifespan are critical times to study as several factors are combining to cause significant, and in most cases, irreversible changes in a woman's body. Hormones during both pregnancy and postpartum can lead to a negative shift in mood (even severe depression) and a biased view of the physical changes that are taking or have taken place. Per Heinberg and Guarda (2002), by the nine-month period of pregnancy, women will gain 25-35 pounds or more, experience increases in breast size, widening of hips and pelvis, skin changes, and swelling of the face, hands, and feet. Her medical team, family, friends, and even complete strangers seem hyper-focused on how she looks and her size, at a time when some women feel the least attractive. Conversely, other women have more positive experiences with the hormones instead causing a kind of euphoric effect (this can go up and down throughout the

pregnancy), and enjoying no swelling except in her budding middle, which can be a source of joy. Heinberg and Guarda (2002), cite Clark and Ogden (1999) as saying that although during pregnancy a woman's body moves further from the "ideal" shape than ever, women tended to enjoy a reprieve from dietary restraint and strict body image ideals. Pregnant women may be able to make cognitive and behavioral adjustments to their body image while they are pregnant.

Body image dissatisfaction often peaks in the postpartum period—the first year after childbirth (Strang & Sullivan, 2006). According to the American Psychological Association, between 9 and 16 percent of women experience postpartum depression (PPD). As high as 41 percent of women experience PPD after subsequent pregnancies if they had a previous experience with PPD. In the first year, all aspects of life have changed for the woman, and many of them are challenging. In addition to physical changes, hormonal changes continue throughout the first postpartum year, which make some women more emotional about the physical changes. Sleep deprivation contributes to emotional responses, stress eating, and the lack of time and interest in exercise. Many women, especially women who breast-feed their babies, feel as though their body is no longer their own. They are physically tied to their babies who are dependent on every element of survival from these new mothers. Postpartum body image concerns are greater than preconception body image concerns, and increase during the first postpartum year (Strang & Sullivan, 2006). Postpartum women frequently express concern with losing weight and after effects of their pregnant form, namely stretch marks (Heinberg & Guarda, 2002). Some dissatisfaction is because women may have unrealistic expectations about losing the pregnancy weight. Many women believe they should be able to lose the weight in six weeks. However, most postpartum weight loss occurs in the first year. Heinberg and Guarda report that between 10 and 30 percent of new mothers experience permanent weight gain of at least 10 pounds. Besides

weight gain, dissatisfaction with stretch marks, breast shape, pigmentation changes, and looseness of abdominal skin are common.

Learning, Social, and Human Development Theories Applied to Body Image

As previously mentioned, this paper drew from the following learning and human development theories to describe how a body image may develop: social cognitive theory, social comparison theory, objectification theory, cultivation theory, information processing, and operant conditioning.

Social Cognitive Theory

Most body image research comes from the cognitive or behavioral paradigms in psychology. From the cognitive social learning perspective, the causes of body image dissatisfaction encompass a range of predisposing, precipitating, and maintaining factors (Cash, 2002). Historical factors, such as social standards, interpersonal experiences, physical characteristics, and attributes of personality are the factors that predispose or influence how an individual thinks, feels, and acts in relation to their body. These factors influence whether a person's body image is developed positively or negatively. The historical/development factors mentioned above make up formative body image experiences which unfold as a person interacts with her environment. They occur in the context of cognitive, social, emotional, and physical development. Social standards tend to come from media. Interpersonal experiences are verbal and nonverbal communications one has with friends, family, peers, and strangers. Physical characteristics affect a person's body image because a person's body image is often related to how closely it meets the societal standards. Personality factors that can influence the development of body image are self-esteem, perfectionism, public self-consciousness, and a need

for social approval (Cash, 2002, pp. 38-41). Appendix A illustrates Cash's cognitive-behavioral model of body image development and experiences.

Precipitating and maintaining factors include appearance schematic processing, thoughts, interpretations, and conclusions drawn about oneself, body image emotions, and self-regulatory strategies and behaviors. These factors influence whether the positive or negative body image is maintained. Being schematic toward appearance means that cognitive generalizations about oneself are organized and processed in one's social experience (Markus, 1977, p. 64). A cognitive-behavioral model of body image development and experiences developed by Thomas Cash in displayed in Appendix A.

Albert Bandura (1977) built on Julian Rotter's Social Learning Theory, now called Social Cognitive Theory, to explain how behavior is learned through the environment in a process of observational learning (pp. 12). Bandura's research linked the schools of thought of behaviorism and cognitivism, as he believed that people learn through observation, but that they also use information processing to recognize relationships between their behavior, observations of others' behavior, and rewards and punishments. By contrast to behaviorists John B. Watson and B. F. Skinner who believed psychology should study observable behavior, not unobservable events that take place in the mind (Skinner, 1984), Bandura believed that observation could not lead to learning unless there were cognitive processes at work (Bandura, 1977). For educators, it is increasingly obvious that learning is ultimately a social process (Bandura, 1986; Dewey, 1916; Vygotsky, 1978). Vygotsky (1978) also argued that cognitive functions are connected to the external or social world.

Bandura used a model of interaction called *triadic reciprocal determinism,* to further explain his theory. This model, depicted in Appendix C, demonstrates that a person's behavior

influences and is influenced by environmental and personal factors. Triadic reciprocal determinism is the idea that an individual goes through cognitive processes and is influenced by external events, such as the media and the opinions of other people, all of which affect the individual's behavior. The following paragraphs explain the application of Bandura's social cognitive theory and model of triadic reciprocal determinism to the construct of body image.

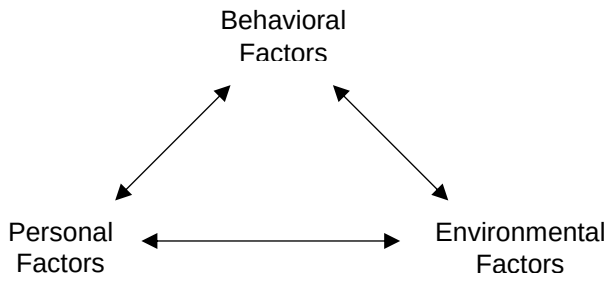

Figure 1. Albert Bandura's Model of Triadic Reciprocal Determinism.

Observable behavior, messages, and images of physical attractiveness are culturally defined in the media (Cash, 1990). Other factors, not defined by media, parents, or peers are the timing of an individual's maturation (McCabe & Ricciardelli, 2004), how closely the individual perceives how she mirrors the thin-ideal, and feedback received about one's appearance (Rieves & Cash, 1996). In addition to simply observing behavior, learning occurs when the individual also observes the model (person being observed) receiving either a reward (positive reinforcement) or punishment (negative reinforcement) for that behavior. When the reinforcement is observed, it is called vicarious reinforcement. The individual will identify with the behavior as something to adopt or something to avoid.

Bandura (1977) described three types of models: (a) an actual live person demonstrates desired behavior; (b) a person verbally describes desired behavior; and (c) a symbolic model, such as an element of the media, demonstrates desired behavior. The individual observes the

behavior either demonstrated or described by the model, then uses the following cognitive processes to analyze the information: (a) attention-the individual attends to the modeled behavior, (b) retention-the individual is able to remember features of the behavior, (c) reproduction-the individual organizes her responses to the behavior based on her own cognitive and physical abilities, and (d) motivation-the individual has a desire to reproduce or refrain from the behavior based on her anticipated rewards, consequences, and internal standards.

Social cognitive theory can be used to better understand body image. Children, women and men are continuously fed information in the form of observable behavior from family members, peers, teachers, the media, and even themselves about what the ideal body looks like. A young girl observes the picture of an air-brushed model in a magazine. The mother of three with no time to justify primping observes the perfectly put together, size-two friend in the carpool lane. A man with a thyroid condition causing weight gain observes a male model of similar age with a narrow waist and muscular physique in a television commercial. In any of these observations, individuals observe other individuals, identify behaviors and qualities they deem as desirable, and experience a drop in their own self-esteem at their perceived lack of those behaviors or qualities. As observances of those behaviors and qualities multiply, the individual is further reinforced that society's expectation of beauty is thin, muscular bodies, and perfect facial features with smooth, unblemished skin. As the above *Etiology* section of this paper has established, those messages are persistent from a variety of sources: parents and other family members, peers, media and internalization.

As mentioned above in the *Etiology* subsection on *parents*, Streigel-Moore, Silberstein, and Rodin (1986) advised that the effects of highly appearance-invested maternal modeling can contribute to the development of body image disturbance in daughters. Mothers are a very salient

source of modeling behavior and values for daughters. According to Bandura's Social Learning Theory, the role of modeling and vicarious learning is the basis of the acquisition of attitudes and behavior. This knowledge presents both an opportunity and a threat to mothers, depending on how they choose to respond. They can model healthy behavior and attitudes on food and bodies for their children, or they can model dissatisfaction, unhealthy attitudes and eating habits, at the risk of this observable behavior being transmitted to their children.

Rieves and Cash (1996) conducted a study with 152 college women at Old Dominion University to study social developmental factors and body image attitudes. Participants completed a battery of tests on teasing, sibling appearance, maternal attitudes toward physical appearance, and the participants' current body image attitudes. Seventy-two percent of the women reported that as children they were teased or criticized about their looks, most often their face and weight. Thirty-eight percent of the women said the teasing had an adverse impact on their body image development. As expected, the inventories on teasing correlated negatively with appearance evaluation tools and positively with overweight preoccupation, situational body image dysphoria, and endorsement of maladaptive appearance assumptions. Except for overweight preoccupation, the relationships could not be explained by the participants' current weight. In other words, participants who evaluated their appearance low, experienced body image dysphoria, but were not necessarily objectively overweight. In sibling comparisons, 19 percent of participants reported a negative net effect, 63 percent reported no effect, and 18 percent reported a positive net effect. The perceived effects of siblings' appearance were significantly related to appearance-invested beliefs, but interestingly unrelated to appearance evaluation and overweight preoccupation. Significant correlations were also found between the participants' body image attitudes and measures of their perceptions of their mothers' body

image attitudes. The participants' appearance evaluation also correlated negatively with their mothers' perceived overweight preoccupation. Forty-four percent of women stated their mothers' attitudes had a positive effect on their own body image, 38 percent reported no effect, and 18 percent reported a negative effect. The results of this study demonstrate the role of modeling and vicarious learning in Bandura's social learning theory.

Neziroglu, Roberts, and Yaryura-Tobias (2004) and Veale (2004) also proposed adapted forms of Social Learning Theory for body image disorders, specifically body dysmorphic disorder (BDD). Neziroglu's model highlights evaluative and operant conditioning, and the role of relational frames involved in developing BDD assumptions. Veale's model emphasizes imagery, attentional biases and effortful cognitive processes such as ruminating. Ruminating involves the compulsively focused attention on the thing that causes one distress (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008).

In Neziroglu, et al. (2004), most BDD patients reported that during childhood, appearance was one of, if not the most reinforced personal factor. The majority also reported being in the "attractive" crowd at school, and noting that the importance of appearance was emphasized. However, BDD patients also reported a significantly higher incidence of emotional and sexual abuse, or other types of trauma, such as being victims of teasing and/or bullying, or physical accidents causing deformities. As discussed elsewhere in this paper, peer and/or family teasing is highly correlated with body dissatisfaction—both reported by children and recalled by adults (Cash, 2002; Cash et al., 1986; Levine & Smolak, 2002; Rieves & Cash, 1996). The positive or negative reinforcement received by BDD individuals makes up the operant conditioning component of "learning" how to feel about themselves. From the evaluative conditioning perspective, the negative reinforcements, such as being teased, presents as the

unconditioned stimulus (UCS). This stimulus causes an unconditioned response (UCR) like anxiety, depression, or shame. When that response is paired with a neutral stimulus, or conditioned stimulus (CS), like the name of the body part earlier teased, the individual might make a negative association to that body part in general, conditioned response (CR), so that if it is mentioned even neutrally, the individual feels anxiety, depression, or shame (Neziroglu, et al., 2008). Based on his cognitive behavioral theories, Neziroglu hypothesized that three prerequisites precede the development of BDD: a biological predisposition, early childhood reinforcement history, and vicarious learning.

Individuals who experience not just body dissatisfaction, but disorders such as body dysmorphic disorder, maintain their disorder through operant conditioning. As they go through the process described above, the facets of their disorder are perceivably reinforced. As described in the next section on *information processing*, an individual with BDD processes the messages she receives as negative, she eventually seeks to prevent or avoid those negative associated emotions through safety seeking behaviors, also called self-regulatory processes (Cash, 2002). These behaviors include camouflaging, reassurance seeking, mirror checking or avoiding, excessive grooming, and avoidance of social situations (Cash, 2002). Another compulsive behavior common to individuals with body dysmorphic disorder is comparing specific body parts to those of other people, often finding themselves less attractive (Neziroglu et al., 2008).

Relational Frame Theory (RFT) builds on evaluative and operant conditioning. Besides the associated conditioned response to a particular word, in RFT, any other word that reminds the individual of the negative stimuli would induce a negative reaction. For example, if a person had been teased about her stomach (UCS), and felt embarrassment and shame from that teasing (UCR), hearing anything that reminded her of her stomach (i.e. rolls, muffin top, gut, belly,

midsection, etc.) (CS) could induce the same negative response of embarrassment or shame (CR). Relational Frame Theory helps people make connections among events and develop certain beliefs based on these connections. However, as human beings, we use language to make connections that may or may not be factual. These connections tend to be communicated rather than experienced, so faulty connections are often not tested and discarded (Neziroglu et al., 2008). For example, a child may hear a parent remark that another child is a very messy houseguest, and therefore difficult to invite over. The parent may also say that the child is such a beautiful child, it is too bad she is so difficult. The child that hears this may learn that if someone is difficult in some way, others will put up with her if she is beautiful. That child may go on to question if she is beautiful enough to be accepted when less than perfect. Neziroglu stated,

> As soon as we can think, we arbitrarily relate events that may occur together or events that we associate with past events. Therefore, there may be either direct conditioning of the CS and UCS or conditioning via the mediation of language. As the CS is paired with the CR, a set of cognitions are strengthened. Information is processed at this time, and a set of beliefs initially introduced through early life experiences continues to be reinforced (p. 31).

If a child learns early in life that being beautiful will help her be more accepted, and that belief is supported by seeing beautiful people living the glamorous life in the media, beautiful people enjoying the popular life at school, and beautiful children being doted on by family members, the child is likely to put a great deal of importance on appearance, and start to feel concern about her body, which she may carry with her through adulthood.

Cash's (2004) cognitive behavioral model considered the view of oneself as an aesthetic object, and how this leads to effortful cognitive processes such as ruminating, social comparing,

and self-attacking. It also emphasized external representations prompting negative perceptions of body image, then negative affect and rumination. This model is depicted in Appendix A.

Information Processing

Many people with body image disorders perceive, process, and recall information in their immediate environment in biased ways (Neziroglu et al., 2008). This bias may play a role in how experiences at a young age are processed and stored, and ultimately contribute to the development of body image issues. As cited in Neziroglu, Khemlani-Patel, and Veale (2008), studies have found that individuals with body image disorders have difficulty with global processing of images, and instead tend to focus on details (Deckersbach, Savage, & Phillips, 2000), selectively regard emotional stimuli, especially BDD-related words, and interpret social, general, and BDD-related situations as threatening (Buhlmann, McNally, Wilhelm, & Florin, 2002). Individuals with body dysmorphic disorder often focus on not just one detail, but up to three body parts, with one causing the most distress (Neziroglu, Khemlani-Patel, & Yaryura-Tobias, 2006).

As an individual with BDD processes the messages she perceives as negative, she eventually seeks to prevent or avoid those negative associated emotions through safety seeking behaviors, also called self-regulatory processes (Cash, 2002). These behaviors include camouflaging (behavior aimed at concealing the body part the individual is self-conscious about), reassurance seeking, mirror checking or avoiding, excessive grooming, and avoidance of social situations (Cash, 2002).

Cash (2008) used the term “unfair to compare” to describe a cognitive error in the bias involved in appearance comparisons, where people choose to compare themselves to people they believe are more attractive.

Social Comparison Theory

According to Dunning and Hayes (1996), people constantly engage in social comparisons, comparing themselves to how others are, how they look, how well they perform at a task or ability, and what others have achieved. Gilbert, Giesler, and Morris (1995) found that people even compare themselves to others who are unlikely to provide information relevant to themselves.

The norm for body comparison in present-day culture is characterized by extremely thin bodies (Hendriks, 2002; Stice & Bearman, 2001; Thompson et al., 1999). This thin-ideal is presented in mainstream media, and mainstream media is where women often turn for information about how they should look (Hendriks, 2002). Mass media uses actors, actresses, models, and news anchors who are mostly highly attractive, presenting extreme physical comparison standards. Research has found that in comparison to these "perfect" images, individuals tend to be less satisfied with their own appearance (Schooler, Ward, Merriwether, & Caruthers, 2004; Tantleff-Dunn & Gokee, 2002; Tiggeman & Slater, 2003). Because the images seen in the media are considered perfect and set a societal standard which is nearly impossible to reach (Festinger, 1954; Thompson et al., 1999), exposure to these idealized media images can negatively affect self-evaluation (Groesz, Levine, & Murnen, 2002).

Girls make social comparisons in adolescence as a self-identity forming task, and media images are most often their comparison standard. There is a weight prejudice in our society where thinness has a positive connotation that signifies success and social desirability, and adiposity is associated with being lazy and undesirable (Van Vonderen & Kinnally, 2012). Because of this, women may see their body shape as a sort of measuring stick of social value. Social Comparison Theory research shows a strong correlation between adolescent girls with

BID and the viewing of media images promoting the thin-ideal (Cusumano & Thompson, 2001; Groesz et al., 2002; Hargreaves & Tiggemann, 2004).

Social Comparison Theory, was first proposed by Leon Festinger in 1954, but has undergone several theoretical advances. However, the basis for the theory remains supported by current research. Some of the advances have aided in further understanding motives for comparisons, the directional nature of comparisons, and the role the media plays in these comparisons. Social Comparison Theory shares a fundamental connection with social cognitive theory. The models of comparison made in Social Comparison Theory provide targets of observation and modeling considered in Social Cognitive Theory.

People have several motives for social comparisons. One, according to Festinger (1954) is that people have a basic need to maintain a self-view, so they seek information about their characteristics and abilities, as they compare to others. Festinger believed that people sought objective standards with which to compare, but when none were available, fell back on social comparisons. Klein (1997) disagreed with Festinger, and believed people sought social comparisons even when objective comparisons were available because social comparisons often yield faster conclusions. A second motive for social comparisons is the need to create a positive image for oneself (Wills, 1981). A person might make what Wills calls a "downward social comparison" as a defense mechanism. She compares herself to someone she considers worse off to feel better about herself, thus boosting her positive self-image. The third motive is the need to self-improve, which may lead to making an "upward social comparison" with someone perceived as better off than oneself (Taylor & Lobel, 1989). The first three motives are all supported by the literature, which in summary, indicates that social comparison is a process used to fulfill needs such as self-evaluation, self-enhancement, and self-improvement (Kruglanski &

Mayseless, 1990; Suls, Martin, & Wheeler, 2002; Wood & Taylor, 1991). However, a fourth incidence of comparison has been found by Mussweiler, Ruter, and Epstude (2004). Not all comparisons are as deliberate as the first three, as to be considered "motives." The fourth is conducted spontaneously, without intention. When comparisons are made spontaneously, without deliberate consideration, they can become obsessive and obtrusive in one's daily thinking and self-evaluation (Mussweiler et al., 2004).

As described in the above paragraph on motives, social comparisons have a directional nature. If an individual makes a "downward comparison," she has compared herself to someone she believes is worse off. In this case, the individual (called the target) does not wish to be more like the comparison standard, she wishes to be contrasted to it. In an "upward comparison," where the individual is comparing herself to someone (whether a real person or a media image) she believes is superior to herself, Festinger (1954) predicted she would feel pressure to be assimilated with the standard (Lockwood & Kunda, 1997; Mussweiler & Strack, 2000; Pelham & Wachsmuth, 1995). Lockwood and Kunda (1997) found that if individuals saw the trait (in this case, appearance) as being malleable, they were motivated to assimilate in an upward comparison. Blanton (2001) followed up on their research with his three selves model of social comparison.

The following is an example of how an individual with BID might use social comparisons based on the four motives discussed above. Because thoughts of her body are pervasive, the first motive, basic need for self-view, can becomes an obsession. She must know how she looks always, in all lights, in every garment, in comparison to every other woman. She relates to the second motive, the need to create a positive image, because she is desperate to look better. She conducts "mirror checks" frequently, and compares herself to others to find

something favorable and feel good. She relates to the third motive, the need to self-improve, because part of BID is not just comparing, but almost always finding something unfavorable. She might look for something little to fix, but continue to find things that are longer term fixes, not just quick garment adjustments. And finally, she can relate to the fourth motive, because conducting social comparisons becomes more than a habit, as pervasive and obsessive as the initial need to know how she looks.

Mussweiler and Epstude (2009) suggested that "comparisons in general are so ubiquitous because they allow us to process information in a more efficient manner than more absolute modes of information processing." Comparisons in general, as well as social comparisons in specific, limit the range of information that must be considered to evaluate or judge a given object. Social comparison often focuses on a small subset of all the information that is potentially relevant for self-evaluation, making it an efficient mode of self-evaluation. The less information people must consider, the faster they come to a conclusion (Frei, 2009; Macrae & Bodenhausen, 2000). Coming to a conclusion based on one's own intelligent guesswork or self-educated technique is referred to as heuristic processing. Heuristic processing and the accessibility of media images make social comparisons convenient and self-evident.

Three selves model of social comparison. Blanton's (2001) three selves model of social comparison suggested that comparison with others can influence one's self-evaluation through one of three comparison processes. First, the target compares herself to others who represent the "standard of comparison." This type of comparison results in contrast. Second, the target compares herself to the standard, but includes those being compared in her representation of self. This comparison results in assimilation. Third, others may be included in the representation of a social category of which both the self and the similar others are members. The process of

comparison that is chosen by the target will depend on which self-concept is most recently employed by the target (Stapel & Van der Zee, 2006).

The three possible self-concepts that can be employed by the target are the personal self, the possible self, and the collective or social self. The personal self is the target's representation of her own current and personal attributes. The self has clear self-other boundaries. Another person cannot be included in the standard for evaluation. This evaluation will generally result in contrast (Major, Sciacchitano, & Crocker, 1993; Sanders, 1992). The possible self, is the person's conception of the person she could become in the future. Because the possible self is not limited to traits the person currently possesses, the traits of a comparison other can be included in the target's self-evaluation. This type of evaluation will generally result in assimilation. Third, the collective (social) self is the self-concept that arises from being a member in meaningful groups. In this case, other group members will be included in the target's self-evaluation. This evaluation will generally result in assimilation (Lockwood & Kunda, 1997; Major et al., 1993).

Objectification Theory

One of the dangers of body image dissatisfaction that has been discussed in this paper is an individual can look in the mirror and see something that is not actually there. Usually it is in the form of a specific body part, as she tends to focus on details. Veale (2004) has done extensive research on the "self as an aesthetic object." He said that external events or intrusive thoughts activate a distorted mental image. As a person becomes focused on specific features of her appearance, her awareness of those features increases. If dissatisfaction builds into dysphoria or body dysmorphic disorder, external events such as looking in a mirror or a seeing a picture of one's self, or having an intrusive thought like "The rolls in my stomach show in every shirt I

wear," trigger self-focused attention, which leads to the outcome of the "self as an aesthetic object." When women are objectified or objectify themselves, they have a fragmented view of themselves—a mere collection of body parts. The self-focused attention Veale describes becomes concerned with fixing or improving those fragments to become something more aesthetically pleasing to look at. This self-viewpoint is at the expense of seeing one's self as a thinking, feeling being with ideas, capabilities and experiences, worthy of love and respect regardless of appearance.

Veale's "self as an aesthetic object" has four main components: (a) mental imagery, (b) self-focused attention, (c) importance the individual places on self-focused attention, (d) the lack of a self-serving bias.

The mental imagery is a felt impression of how the individual appears to others. An individual with BDD uses this outside observer view of mental imagery of herself to distance herself from the emotion she might experience with a negative evaluation.

Self-focused attention can cause a fight or flight reaction. In fight mode, the individual compares herself to others. In flight mode, she uses safety-seeking behavior, such as camouflaging, avoiding eye contact, or removing herself from the situation. A person with BDD, who is excessively self-focused on negative mental imagery prevents herself from accurately processing external information or other's reactions to her. She may feel the need to know exactly how she looks, engaging in mirror checking often. This can become a vicious cycle, as the more she feels unacceptable, the more she looks in the mirror, the more self-focused she becomes, the worse she feels, and the more it reinforces her view of being fat, ugly, or unacceptable in some way. The person experiencing this cycle is processing information that in reality is benign, as a threat of humiliation or rejection. She may also engage in rumination, an

effortful cognitive strategy that maintains preoccupation and distress by trying to solve a body problem that may not actually exist (Neziroglu et al., 2008; Veale, 2004).

Self-serving bias is a person's tendency to attribute positive events to her own character, but negative events to external factors. It is a cognitive bias that has been extensively studied in social psychology. It can be understood in body image discussions as wearing "rose tinted glasses" when viewing one's self. Veale's "self as an aesthetic object" research sees a lack of a self-serving bias. A person with BDD or eating disorders may not attribute positive events to her own character, rather to external forces, and she may be more likely to attribute negative events to her own character.

The previous several paragraphs discussed Neziroglu's and Veale's BDD models. Several similarities were pointed out, including emphasizing the impact of early life experiences and social learning in the development of body image beliefs and attitudes. The main difference between the models is Neziroglu's use of conditioning in social learning as being central in the development of BDD. Veale emphasized the importance of cognitive processing, imagery from the observer perspective, and the role of safety-seeking behaviors.

Veale's "self as an aesthetic object is described above. Fredrickson and Roberts offer a broader theory encompassing objectification. Their Objectification Theory postulates that females are trained through our culture to internalize an observer's perspective as the primary view of their physical selves. Relying on the perspective of others can lead to habitual body monitoring, increased shame and anxiety, reduced motivation, increased depression, sexual dysfunction, and eating disorders (Fredrickson & Roberts, 1997).

While the body has always been the basis for distinction between the sexes, research has illuminated ways in which gender differences have more to do with differential socialization of

boys and girls than biology. The social and cultural contexts that these bodies exist in convey the social meaning that is taught and widely accepted. Part of that social meaning is the basis for Objectification Theory. When girls and women notice others observing their bodies simply as bodies, or even just body parts, they may begin to think of themselves in those terms as well. They may start to lose themselves to this social behavior, believing that their worth and identity is based solely on how good their bodies look. This is a type of gender oppression, called sexual oppression. Because this type of gender oppression is so common, consciously and subconsciously taught in our society by mothers, fathers, friends, media, and others, most women have shared social and shared psychological experiences in step with life-course changes in their bodies. These shared experiences create a framework of experiences, which allows for analysis of women's mental health risks at predictable times of life (Fredrickson & Roberts, 1997).

Kaschak (1992) said "the most subtle and deniable way sexualized evaluation is enacted—and arguably the most ubiquitous—is through the gaze or visual inspection of the body." Females experience this visual inspection in three arenas: during actual interpersonal and social encounters, gazers looking at other females, or looking at women in visual media that depicts interpersonal and social encounters and/or that spotlights bodies or body parts. When the gaze is observed in visual media, a common theme in advertising is something described by Goffman (1979) as "anchored drift." This is when a male is shown staring at a female who is looking off into the distance, mentally drifting from the scene. Girls and women see the faces of these gazers, and hear comments picking apart and praising the body parts. They may start to believe that their main purpose is that of a body to be used and viewed for pleasure (Bartky, 1990).

The gender oppression mentioned above goes deeper than just an objectifying gaze. It can greatly affect her life experiences. Research demonstrates that obesity negatively affects women's social mobility more than men's, including obese women attaining lower education and economic statuses than their parents. Job discrimination based on obesity and/or unattractiveness is also reported by women more often than men (Snow & Harris, 1985).

Objectification leads to psychological and experiential consequences for women, including shame, anxiety, inability to reach peak motivational states, and a lack of awareness of internal bodily states. Individuals experience shame when they feel they do not measure up to a cultural ideal—in the case of this paper, the thin ideal. They usually attribute their shortcomings to their self as a whole person as opposed to more narrowly attributing them to their actions (H. Lewis, 1971). Internalization of objectification is central to the experience of shame. As an individual internalizes the objectification and feels she does not measure up to what is expected, she experiences shame as she notes the potential for her deficiency to be socially exposed. Because women are continually exposed to messages promoting the thin ideal, women continually feel a sense of inadequacy and shame at their inability to measure up. Intense shame from this perceived failure can cause women to want to hide and escape from the painful gaze of others. It can compound an already fragmented state of consciousness, disrupting activity as the woman focuses only on her physical self, and is left unable to think clearly, speak, and act without the distraction of her self-shame (M. Lewis, 1992). When shame is the emotion felt as a change is desired, it might be seen as a moral obligation and motivation to achieve societal standards of beauty. In a culture that objectifies the female body, shame is recurrent, difficult to mitigate, and constructed as a matter of morality.

Fredrickson and Roberts (1997) discuss two types of anxiety in their paper on Objectification Theory: appearance anxiety and safety anxiety. Appearance anxiety often looks like vanity, as it is shown by checking and adjusting one's appearance. However, although vanity has a negative connotation, feeling the need to check and adjust is often motivated more by anxiety than vanity. This appearance anxiety results in motor tension, vigilance, and scanning. Women may be more anxious about their appearance because they never know when their appearance will be evaluated or which type of clothing will be criticized. What will set off the criticism? A neckline or hemline? A brand or lack of a brand? The wrong fit?

The other type of anxiety discussed is safety anxiety. There are a host of strategies women must employ to ensure personal safety that most men never have to think about (for example, double-checking locks, carrying keys between fingers, checking the backseat of their car, jogging with the dog, walking outside after dark). Many men who rape women say that women "ask for it" because of the clothing they wear. It is hard for women to feel safe in the face of the threat of rape when so many politicians—the leaders in government those women expect to pass laws to protect them and prosecute their attackers—have made unconscionable statements about rape. Todd Akin, a former U.S. Representative from Missouri coined the term "legitimate rape," implying that certain types of rape were legitimate and certain types were not. Akin was also concerned that if non-consensual sex in marriage was considered rape, women might use it "as a legal weapon to beat up on the husband in a divorce." Stephen Friend, former Representative from Pennsylvania expanded on this, saying that most women who were raped would not get pregnant because "women who were raped secrete a certain secretion that kills sperm." This was obviously disputed by the medical community. Paul Ryan, currently the Speaker of the House of Representatives, wanted to specify in legislation that abortions could

only be legal if the pregnancies resulted from "forcible rape," as if there is any other kind. This is a small selection of comments made by male politicians in the United States in the recent past. If women are expected to meet the appearance expectations of society, but in turn experience the fear and anxiety that accompanies the threat of rape—rape that is deemed legitimate by some of our lawmakers—how can these women be safe? On top of this, empirical studies show that more attractive rape victims are assigned greater blame for their own rape than less attractive victims (Jacobson & Popovich, 1983).

Safety anxiety does not only apply to physical violence; it can also apply to other aspects of a woman's security. As mentioned earlier, women are more often discriminated against at work based on appearance than men.

Women live in a culture that objectifies them and causes anxiety-provoking experiences, but then criticizes them for attempting to conform through chronic vigilance to their appearance and safety.

Another result of objectification of females is reduced motivation. Csikszentmihalyi coined the term *flow*, which occurs "when a person's body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile" (1990, p. 3). Csikszentmihalyi pinpoints flow as an important source of optimal experience, those rare moments during which we feel we are truly living, uncontrolled by others, creative and joyful. Maximizing these experiences improves the quality of life, according to Csikszentmihalyi. Females in a culture of objectification can struggle to achieve that experience of *flow.* They are derailed by thoughts, comments, behavior of others, and functions of her own body. As early as elementary school, girls' activities and thoughts of play and joy can be interrupted by boys and even other girls. Comments and images influencing body image will increase as girls grow into

adulthood. If we must lose self-consciousness to achieve this peak motivational state known as flow, women who are continually self-conscious will struggle to reach it.

This state of perpetual self-consciousness can limit the flow of women's physical activities in two ways. First, movement itself draws attention to the body, which increases the potential for objectification. And second, cultivating an observer's viewpoint on one's own physical self may force women to experience their bodies as objects. When objectification limits women's chances to experience flow, quality of life is reduced.

Objectification causes women to focus so many of their perceptive resources on how their body measures up in society, they have a hard time detecting internal physiological sensations, such as heartbeat, stomach contractions, and blood-glucose levels (Blascovich, Brennan, Tomaka, Kelsey, Hughes, Coad, Adlin,1992). Women appear to make less use of these bodily cues than men in determining how they feel. The habits of people who are restrained eaters may have a generalized insensitivity to internal bodily cues. Because women are vigilantly aware of their outer bodily appearance, they may be left with fewer perceptual resources available for attending to inner body experience.

Fredrickson and Roberts (1997), also discuss three psychological disorders experienced predominantly by females: unipolar depression, sexual dysfunction, and eating disorders. They believe that there are two ways in which sexual objectification contributes to poor mental health for women. The first is the habitual body monitoring which leaves women with shame and anxiety, shortage of flow, and lower awareness of internal bodily states contributes to psychological disorders. The second is through actual sexual victimization, such as rape, incest, battering, sexual harassment. With these more direct and extreme forms, the woman's body is

treated as an object or thing by the abuser. Trauma suffered in these types of victimization also contributes to poor mental health for women.

Many theories exist as to why more women experience depression than men. Some have to do with biology and hormone fluctuations (Nolen-Hoeksema, 1990). Others blame women's inferior social status and relative lack of power in the home and the workplace (Seligman, 1975). A third camp believes it is accounted to personality characteristics more common in women than men, such as nurturing, emotional, nonassertive, self-sacrificing, and relationship-oriented (Brown & Gilligan, 1992). Objectification Theory (Fredrickson & Roberts, 1992) brings these three classes of theories together and focuses them on the experience of being female in a culture that objectifies the female body, putting the female at risk for depression.

Seligman (1975) explains that learned-helplessness, recurrent and uncontrollable experiences of shame and anxiety, leads to depression because people attribute their failings to internal, stable, and global causes. In the case of body image, if women are unable to alter their body to meet societal standards, they consider this a personal failure and feel shame and anxiety they cannot easily overcome. They feel helpless to correct this failing and control others' reactions to their appearance. They ruminate on these failings, sinking further into depressive episodes.

Sexual dysfunction is the second psychological disorder experienced more by women that Fredrickson and Roberts (1997) attributed to objectification. According to research, this is not a physiological problem (Heiman & Verhulst, 1982). Socialization theories suggest that cultural double standards and gender-role stereotypes may be partially to blame. Women are generally more passive and considered selfish when focusing on their own sexual needs. But Objectification Theory offers that rather than focusing on enactment of feminine roles, women

are focusing on their self-conscious body monitoring, body-based shame and anxiety, and inattention to internal bodily states, all of which leaves them unable to enjoy a functional sexual experience. This can be severely compounded if a woman is a victim of sexual violence, leaving her unable to enjoy sexual experiences often for years.

The third psychological disorder discussed by Fredrickson and Roberts (1997) is eating disorders. Eating disorders are discussed in more detail in the *Risks/Outcomes of Body Image Issues* section of this literature review.

The researchers contributing to Objectification Theory tie together many themes discussed throughout the literature, including gender differences, media, unreachable societal standards, oppression, mental health risks, and the probability of being affected over a lifetime. Objectification of women may result in distorted mental images; less acute senses due to focus on appearance; loss of self as a thinking, feeling person worthy of love and respect; body dysmorphic disorder; rumination and continuing distress; sexual oppression; shame; appearance and safety anxiety; inability to reach peak motivational states; lack of awareness of bodily states; depression; sexual dysfunction; and eating disorders.

Cultivation Theory

Cultivation Theory also relates to Social Cognitive Theory and Social Comparison Theory as they are applied to body image development over the lifespan. It was defined by George Gerbner (1998) as "the independent contributions television viewing makes to viewer conceptions of social reality." Cultivation suggests that media effects build over time, with frequent and persistent exposure to messages. This theory explains an inconsistency in the research which seeks to establish a relationship between viewing thin models in advertisements and body image dissatisfaction. Many researchers have measured immediate body image

dissatisfaction before and after simple viewing of such advertisements, with inconsistent results. If the effect is cumulative, one simple view in a research study following millions of views from real life, is not likely to have a measurable effect, without other factors present.

Heuristic processing and accessibility, as mentioned above, are also associated with cultivation theory. When using heuristic processing, people seek out small amounts of information that is readily accessible (i.e. images seen in media) and make quick judgments, as opposed to a more systematic approach to coming to a conclusion (Shrum & Bischak, 2009). Shrum and Bischak also believed that because heuristic processing does not rely on more systematic problem-solving, it may not actually create attitudes, rather reinforce existing attitudes. The more thin-ideal images to which women compare themselves, the more these images become accessible in their minds, and drawn on for future comparisons and reinforcements of an upward comparison. In other words, over time media "cultivates" body image standards by promoting the thin-ideal body type.

Another element of cultivation theory that influences the viewer's conception of social reality is that of resonance. Shrum and Bischak (2009) define resonance as the notion that viewers' life experiences affect their perceptions of television. If they can identify with what they are seeing on television, the media messages are more salient, and makes it difficult to later recall if their perceptions of body image stem from reality or a mediated television experience.

Summary of the Literature

Body image dissatisfaction is a ubiquitous problem that starts in elementary age children, and often continues through adulthood. Prevention and intervention programs need to be accessible through school counselors, youth leaders, mental health professionals, and community parenting education programs.

A review of current research indicated that prevention of body image dissatisfaction in children uses the following two strategies: (a) enhancing protective factors; and (b) a broad-based, holistic focus. These protective factors build on the child's strengths and promote resilience to prevent BID. In other words, these factors help prevent multiple problems faced in adolescence, not just the body image symptoms of the problems. These problems stem from the physical changes mentioned above, but also hormonal changes, changes in family and friend dynamics, the influence of media, friends and family on mindsets, and being caught mid-development in their maturity, when maturity is most needed to buffer them from such influences (Cash, 2002; Crago, Shisslak, & Ruble, 2001; Irving, 1999; Piran, Levine, & Steiner-Adair, 1999; Striegel-Moore & Cachelin, 1999; Taylor & Altman, 1997). The broad-based, holistic focus, means that prevention and intervention programs, besides treating the individual as whole, should reach out to the individual's family, peers, schools, media, and other sociocultural influences (Crago et al., 2001; Irving, 1999; Piran et al., 1999). These sociocultural influences are so strong and pervasive for children and adults, it is crucial that a prevention and intervention program teaches individuals an internal locus of control, including how to challenge broader sociocultural influences and become resilient to them (Choate, 2007). Martin and Kennedy (1993) agreed with the resiliency factor, indicating that it is important for girls to develop a positive perception of one's self between grades four and twelve. Building resiliency young becomes a protective factor to messages as the individual grows older.

There is a great deal of literature that discusses parental—especially maternal—negative effects on children's—especially girls'—body image. This is an important consideration for prevention and resiliency issues. It supports the belief that positive, healthy maternal modeling may be a protective factor and help build resiliency to more negative factors. Parenting education

programs that teach parents to model healthy body attitudes may prevent the transmission of body image dissatisfaction to children.

Although there is a body of research that focuses on women, the bulk of those studies use a convenience sample of college students, which severely limits the age range reached, and fails to explore body image issues of women during the years they are most likely to experience negative body changes and emotions due to those changes. More research that focuses on women during and after child bearing years is needed to fill this gap.

Rieves and Cash (1996) said that whether body image therapy is cognitive, experiential, psychodynamic, or family-oriented, an important goal is to explore and reconstruct self-representations that have been damaged, weaken the influence of negative etiological factors, and relearn positive, healthy associations with those factors. Gaps in the research call for the need for more longitudinal studies, and starting them at an earlier age.

According to Corcoran, Crusius, and Mussweiler (2011), a more encompassing perspective on social comparison that integrates cognitive, motivational, and affective influences is needed. Presnell et al. (2004) also believed cognitive factors such as attributional style or perceived control, which have been linked to depression and anxiety, could be associated with BID. More research is emerging regarding how information processing styles influence how individuals make sense of media messages they receive. A better understanding of these processing styles will have implications for the design of treatment programs. Knowing how information is processed provides direction to how materials should be presented in clinical and nonclinical treatment programs. Experiments using deliberate information processing will guide researchers to develop preventions and interventions that put the affected individual in a position of taking control of her disorder.

Thompson and Stice (2001) called for replication from other laboratories of theirs and other colleagues' work. This would include testing correlations between body image and eating disturbances, testing whether thin-ideal internalization predicts body image dissatisfaction and eating disturbances, experiments to reduce the impact of thin-ideal images portrayed in the media, experiments that rule out potential third variables in explaining findings, and establishing internalization as a causal risk factor for body image dissatisfaction and eating disturbances. They also recommended research that explains physiological and cognitive correlates of internalization, such as reaction time and processing biases in response to weight and shape stimuli (Thompson & Stice, 2001). Finally, Thompson and Stice (2001) recommended theoretical research to investigate factors that promote thin-ideal internalization, and factors that buffer the effects of internalization.

Halliwell et al. (2005) recommended future research to explore the effect of moderate-sized models on advertising effectiveness. To date, a small body of research exists reporting moderate-sized models do not negatively affect advertising effectiveness, and do not correlate to body image dissatisfaction as do ultra-thin models. Halliwell et al. (2005) studied the impact of advertisements using ultra-thin models compared to moderate-sized models on women with a history of eating disorders. Exposure to ultra-thin models did not lead to the increased body-focused anxiety that was expected; however, exposure to moderate-sized models appeared to create a relief effect. This result could lead to research to explore if women with a history of eating disorders are more often influenced by peer and parent or other family members rather than by media. As mentioned, more brands are using a wider variety of shapes and sizes of women, men, and children in advertising, including Dove, Debenham's, and H&M.

Future research in depression and negative affect needs to delineate the nature of the relationship between depression and body dissatisfaction, and negative affect and body dissatisfaction.

Children who grow up with body image issues often become mothers with body image issues who unwittingly transmit those issues to their own daughters. Children need protective factors to buffer them from the etiological factors discussed in this paper, especially the media. A stronger sense of resiliency and an intentional source of self-worth will help children enjoy healthy body images and self-esteems, and grow into healthy, happy women and mothers.

CHAPTER THREE. METHODS AND PROCEDURES

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body images. Using Q methodology, the study addressed the following questions:

1. What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?
2. What are the positive and negative influences that women report lead to the development of their body image?
3. How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?
4. In the opinion of the participants, what should be done to intervene with factors that lead to negative body image?

Design

As previously noted, this study employed Q methodology in data collection and analysis. Originally developed by the psychologist William Stephenson (1935), Q methodology (also known as Q factor analysis) is a flexible analytical technique for the purposes of examining human subjectivity (for a complete treatment of this topic, see Watts & Stenner, 2012). This approach provides a method to operationalize subjective viewpoints thereby allowing for a more objective analysis. Further, it encompasses psychometric principles that provide a systematic and rigorously quantitative means for studying human subjectivity. However, unlike purely quantitative approaches, Q methodology is a true mixed method that incorporates qualitative data in order to facilitate a richer, more in-depth analysis.

Q methodology is a close relative of exploratory factor analysis (also known as R methodology), but these differ in two important ways: First, Q methodology generally uses a much smaller sample than its R counterpart, which allows for a more in-depth, subjective examination. The second key difference is that Q methodology uses correlations among the participants (with respect to variables/items), where factor analysis uses correlations among variables/items (with respect to participants). Thus, factors in Q methodology represent shared viewpoints within the context of the variables/items.

Q methodology is based on a two-part premise that subjective points of view are communicable and always advanced from a position of self-reference. Each person's experience is unique to the combination of etiology that factors in their individual resilience levels and whether they were passive or deliberate in their information processing styles. Although many experiences are similar, a deep understanding of an individual's experience would be necessary to intervene and improve their body image.

McKeown and Thomas (2013) said the purpose of conducting a Q study is to discern people's perceptions of their world from the vantage point of self-reference. This statement, in addition to the participants' experiences being unique and subjectively communicated by the subject herself (position of self-reference) makes a Q sort an excellent fit for exploring women's perceptions of the sources of information that led to the development of their body images (purpose of the current study).

In Q methodology, the variables are treated as the sample and/or population, as opposed to participants. For this reason, the variables, called the Q set are as carefully chosen as participants would be in R methodology. The Q set for the current study used themes extracted from the literature review in etiology. This set of themes was as collectively exhaustive as

possible for this research design. It provided good coverage in relation to the research questions, and was broadly representative of the opinion domain of etiology for body image issues. The themes (etiological factors influencing development of body images) were as follows: mothers, fathers, siblings, significant others, other family members, friends, acquaintances, media, self-talk, and internalization. Statements were composed using these themes regarding the source's use of positive and negative comments and behavior modeling. Examples of behavior modeling may include counting calories, cutting food into small pieces, exercising excessively, garment adjustments, mirror checking, or changing clothes frequently. Behavior modeling from the media may include the overuse of anorexic models and sexualization of young girls in advertisements. The Q set employed statements regarding how these people may have influenced the participants' body image.

Five open-ended questions afforded participants the opportunity to more fully explain their rankings and tell their stories, in turn giving the research a richer, more in-depth understanding of these women's experiences.

Participants

Potential participants for this study were women ages 20 and above. Seventy-five women were initially invited to participate, with forty as the targeted minimum (ideally ten in each age decade). Data was collected from women for two time periods of their lives to compare perceptions of changing etiology: recalling influences on their body image when they were in adolescence, and reporting influences on their body image at their current ages. The initial group of potential participants was both a purposive and a convenience sample as they were acquaintances of the researcher.

To comply with federal guidelines and North Dakota State University policy, this study was submitted to the Institutional Review Board (IRB) for approval. IRB approval demonstrated compliance and the researcher took measures to ensure privacy and human rights of the participants involved. The following sections discuss the details of the Q study, specifically focusing on the construction of the sortable items (Q set), the composition of the participant pool (P set), and the analysis procedures used to identify emergent factors.

Procedures

Potential participants were recruited via email which provided a web link to the online instrument (FlashQ-sorting software). When participants began the Flash Q software, before they began the study, they were presented with a screen that explained informed consent, and that clicking the box on that screen implied informed consent. Upon entering, participants were prompted to create a subject-generated identification code (SGIC) comprised of a four- to six-character permutation of the first letter of the respondent's birth city, birth month number, number of older siblings, and middle initial. Since there was data from two separate Q-sorts for each participant, the SGIC allowed for these sets of responses from each respondent to be linked while preserving anonymity (Yurek, Vasey, & Havens, 2008).

As previously mentioned, each participant was instructed to complete two separate Q-sorts under different conditions of instruction. The first condition of instruction addressed the perceptions of influences on the development of their body image, recalling their perspectives on their experiences as adolescents (ages 10 to 18). The second condition of instruction addressed how they perceived the influences to affect their current body image as adults. A sort is the ordered ranking of the Q set by an individual participant usually using a quasi-normal distribution, expressing the individual's ranking of individual statements/items relative to the

condition of instruction. Sorts were conducted for two age groups to determine if body image changed with age and life experience.

For each sort, the 45 items were randomly displayed one at a time. In the first stage the participant completed a "rough sort." The software provided three "bins" into which each of the items could be dropped: Least Influential, Neutral, and Most Influential. The respondents clicked and dragged each item into one of these bins before the next item in the Q-set appeared. Once the respondents categorized each of the 45 items into one of the three bins, they were asked to further differentiate each category by placing the items into the sorting array shown in Figure 2. All 45 items of the Q-set were eventually placed into this array. Items placed toward the left side of the array represented those that are least influential, whereas items placed toward the right side of the array represented those that are most influential.

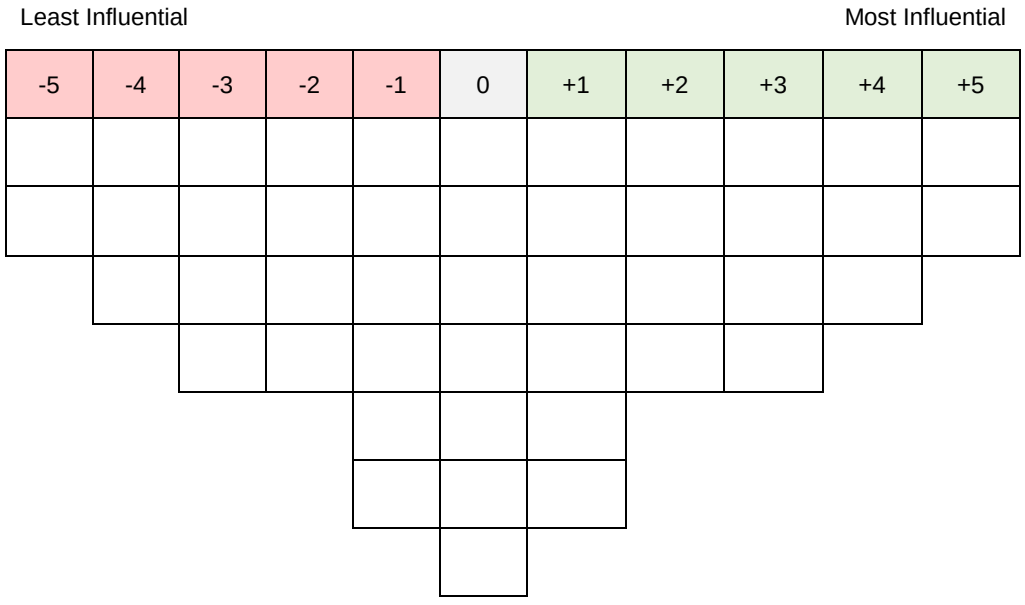

Figure 2. Q-sorting array for 45 statements.

Starting with the Most Influential bin of items, participants were asked to choose the two items from that bin that were the most influential to their body image development. These two items were to be placed into the two boxes on the far right of the sorting array (column 5). (Note: the order in which the items are stacked into a column is not taken into consideration in the analysis). Then they were asked to do the same with the two items from the Least Influential bin, placing these two items into the boxes on the far left (column -5). Moving back to the items in the Most Influential bin, they selected the two remaining items that were most influential and placed them into the two boxes in column 4. Then they did the same for the next two items from the Least Influential bin, placing them in column -4. They continued this back and forth placing of items until all of the boxes were filled. Finally, once the array was complete, they had an opportunity to view the entire grid and make any changes to their sorts until they were satisfied.

The process for the sort for second condition of instruction was completed in the same manner as described above. Only the initial instructions were changed to focus on what respondents perceived the influences were that affected their current body image as adults, at their current age. After completion of the second sort, participants were asked to respond to five optional open-ended question items.

Instrument

The instrument was comprised of 45 statements (items), a few demographic items, and a small set of open-ended questions. Note that the very same Q-set was presented twice under two different conditions of instruction. The first condition of instruction was as follows: Sort the following items according to those which you believe most influenced (+5) the development of your body image during adolescence (ages 10-18), to those which you believe least influenced (-5) your body image during adolescence. The second condition of instruction read: Sort the

following items according to those which you believe most influence (+5) the development of your body image at your current age to those which you believe least influenced (-5) your body image at your current age.

Q-set

The following items represent etiological factors of body-image development discussed in the literature reviewed in the previous chapter of this dissertation:

1. Positive direct comments from my mother
2. Negative direct comments from my mother
3. Positive behavior modeling from my mother
4. Negative behavior modeling from my mother
5. Positive comments from my father
6. Negative comments from my father
7. Positive behavior modeling from my father
8. Negative behavior modeling from my father
9. Positive comments from my siblings
10. Negative comments from my siblings
11. Positive behavior modeling from my siblings
12. Negative behavior modeling from my siblings
13. Positive comments from my significant other
14. Negative comments from my significant other
15. Positive behavior modeling from my significant other
16. Negative behavior modeling from my significant other
17. Positive comments from my children

18. Negative comments from my children
19. Positive comments from other family members (uncles, aunts, cousins, grandparents, etc.)
20. Negative comments from other family members (uncles, aunts, cousins, grandparents, etc.)
21. Positive behavior modeling from my other family members
22. Negative behavior modeling from my other family members
23. Positive comments from my close friend peers
24. Negative comments from my close friend peers
25. Positive behavior modeling from my close friend peers
26. Negative behavior modeling from my close friend peers
27. Positive comments from my acquaintance peers
28. Negative comments from my acquaintance peers
29. Positive behavior modeling from my acquaintance peers
30. Negative behavior modeling from my acquaintance peers
31. Positive, realistic images from the media
32. Negative, unrealistic images from the media
33. Positive behavior portrayed in the media
34. Negative behavior portrayed in the media
35. My own positive self-talk
36. My own negative self-talk
37. My own positive modeling of past behavior
38. My own negative modeling of past behavior

39. Positive internalization due to an appearance-related personal accomplishment (prom queen, weight loss/gain, pageant winner, etc.)
40. Negative internalization due to a traumatic event (illness, accident, birth defect, etc.)
41. Negative internalization due to rape or abuse
42. Positive internalization due to pregnancy, post-partum body changes
43. Negative internalization due to pregnancy, post-partum body changes
44. Positive body-related messages from religious teachings
45. Negative body-related messages from religious teachings

Demographic Items

The demographic items collected include age, level of education, income, profession, number of children, and marital status.

Open-ended Questions

The following five optional open-ended questions were presented after the demographic items:

1. Do you feel that your sorts from part 1 and part 2 were noticeably different? If so, please explain why.
2. Please share any stories/experiences you had that were particularly salient in developing your body image.
3. What caused you to first become aware of your own body image, either positive or negative?
4. What would you like to see done to help girls and women improve their body images?

5. Finally, please feel free to provide any additional comments, suggestions or insight regarding the ideas presented in the statement cards you were asked to sort.

Analysis

Data from the Q sorts were analyzed using exploratory Q-mode factor analysis in PQMethod 2.35 (Schmolck, 2014). The analysis was started by first correlating each sort with every other sort. Next, principle components factor analysis was performed on the resulting correlation matrix, which yielded an un-rotated factor matrix. Three factors were extracted as principle components. For details on computational methods, see Watts and Stenner (2012). Finally, varimax rotation was performed on the extracted factors to identify those with the greatest number of sorts defining each one. In varimax rotation, factor rotation takes on spatial or geometric function. They are used as coordinates and hence as a means of mapping the relative positions, or viewpoints. Rotation happens as the view of the data rotates to organize the factors around a different viewpoint.

The following four values were examined for each factor: variance, number of significant sorts (i.e. those that loaded onto a factor), number of confounded sorts (i.e. those that loaded onto more than one factor), and number of non-significant sorts (i.e. those that did not load onto a factor). Varimax rotation was performed on two, three, four, five, and six factor possibilities.

In the PQMethod software, factor loading significance is determined by two criteria, both of which must be met.

1. $|a| > z/\sqrt{n}$, where a represents the individual factor loading, z represents the z-score for the desired confidence interval, and n represents the number of items in the Q set.
2. $a^2 \geq h^2/2$, where a represents the individual factor loading and h represents the communality (i.e. the sum of the squares of all factor loadings for that particular sort).

This criterion assures that the individual factor loading accounts for at least 50% of the common variance for that particular sort.

Per Brown (1980), at least four sorts must be significant to retain a factor. The three-factor solution, which accounted for 45 percent of the variance, satisfied this condition. Although the two, four, five, and six factor possibilities also all met this condition, and all had a fairly even number of participants in each factor, these factors did not have characteristics that were particularly unique from the others. Therefore, most of the differences in the sorts could be accounted for in the three-factor solution. Table 1 shows the sorts that loaded significantly onto each of the three factors (denoted by X). In this table, each Q sort is labeled with a numbered pair, where the first number refers to the participant and second number refers to the condition of instruction used for that sort (e.g. 1_1 refers to the sort of participant 1 using condition of instructions 1). Note that the three-factor solution accounted for 45 percent of the total variance (26, 10, and 9 for each factor, respectively). Twenty-six sorts loaded to factor one, twenty-six sorts to factor two, and twenty-seven sorts to factor three. Eleven of the 90 sorts were non-significant and there were no confounded sorts.

Z-scores were calculated for each item in each factor for the three-factor solution (i.e. a standardized score calculated as a mathematical expression of the distance between an absolute score and the mean average score of the measured sample). Ordering the z-scores within each factor from largest to smallest provided the theoretical sort that defines that factor. The items at the extremes of the list define a factor in a magnified way: the larger the absolute value of each item's z-score, the more likely its inclusion in that factor is not due to chance. The items with the highest z-scores (most positive) are the items that are the most influential on the development of body image who would theoretically fit into that factor. Likewise, the items with the lowest

(most negative) z-scores are the items that would be the least influential on the development of body image who would theoretically fit into that factor. The characteristics of these three factors, along with the open-ended responses, demographic information provided by the participants, and results of the body image assessment tool, were used to identify and name the three archetypes of women concerning the perceived influences on body image as detailed below. (The term archetype is an interpretation of the statistical term factor.)

CHAPTER FOUR. RESULTS

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body images. Using Q methodology, the study addressed the following questions:

1. What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?
2. What are the positive and negative influences that women report lead to the development of their body image?
3. How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?
4. In the opinion of the participants, what should be done to intervene with factors that lead to negative body image?

Forty-five items were derived from a concourse of potential influences on the development of body image in women. Participants sorted these 45 items twice (under two different conditions of instruction) yielding 90 sorts which revealed their perceptions of the potential influences on the development of their body images. The first condition of instruction addressed the perceptions of influences on the development of their body image, recalling their perspectives on their experiences as adolescents (ages 10 to 18). The second condition of instruction addressed how they perceived the influences to affect their current body image as adults.

Table 1, the eigenvalues for the potential factors, contains the eigenvalues for the number of factors considered, the percentage of variance explained by each, and the cumulative variance

explained. The eigenvalue indicates a factor's statistical strength and explanatory power. A factors eigenvalue is calculated by summing the squared loadings of all the Q sorts on that factor (Watts & Stenner, 2012).

Table 1

Eigenvalues for the First Eight Potential Factors

	Factors							
	1	2	3	4	5	6	7	8
Eigenvalues	22.998	8.677	7.887	6.397	4.627	3.588	3.231	2.774
Variance Explained	26%	10%	9%	7%	5%	4%	4%	3%
Cum. Variance Explained	26%	35%	44%	51%	56%	60%	64%	67%

Note. Only the first three factors are retained for this analysis.

Table 2, the factor characteristics table, contains the reliability and error measures for each of the factor arrays.

Table 2

Factor Characteristics

	Factor 1	Factor 2	Factor 3
No. of Defining Variables	26	26	27
Average Rel. Coef.	0.8	0.8	0.8
Composite Reliability	0.99	0.99	0.991
S.E. of Factor Z-Scores	0.1	0.1	0.095

Table 3 shows the factor loadings and demographic information for each individual sort. The correlations are given for each factor, with an X indicating which factor the sort loaded onto. This is shown for each condition of instruction. The demographic information includes age and marital status.

Table 3

Factor Loading Matrix with Demographic Information

P#	Age Range	Marital Status [a]	Loadings for Sort 1 (Adolescent COI)			Loadings for Sort 2 (Adult COI)		
			Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
#01	30-39	M	.089	.572 X	.387	.319	.436 X	-.136
#02	40-49	M	.171	.268	.357 X	.057	.604 X	.068
#03	30-39	M	.196	.031	.610 X	.518 X	.350	.169
#04	50+	D	.382 X	.280	.197	.220	.605 X	.207
#05	30-39	S	.091	-.109	.527 X	.314	.478	.461
#06	50+	M	.196	.007	.487 X	.658 X	.025	.040
#07	50+	M	.108	.278	.692 X	.131	.590 X	.108
#08	20-29	S	-.057	-.154	.604 X	.527 X	.141	.267
#09	20-29	S	-.164	.490 X	.366	.369 X	.287	.220
#10	40-49	M	-.333	.185	.610 X	.045	.759 X	.099
#11	30-39	S	.200	.238	.744 X	.137	.689 X	.336
#12	40-49	M	.279	.495	.463	.545 X	.344	.136
#13	20-29	S	.244	-.046	.111	.550 X	-.038	.003
#14	40-49	M	.366	.519	.518	.532	.378	.466
#15	20-29	M	.678 X	.024	.423	.623 X	.224	.450
#16	20-29	S	.307	-.010	.669 X	.468	.023	.626 X
#17	30-39	D	.708 X	.051	-.094	.733 X	.003	.041
#18	50+	M	.366 X	.345	.088	.498 X	.430	-.044
#19	40-49	M	.486 X	.015	.033	.376 X	.168	-.141
#20	30-39	M	-.081	.654 X	.227	.366	.540 X	.105
#21	30-39	M	.483	.077	.627 X	.659 X	.387	.281
#22	50+	M	.718 X	.027	.080	.241	.319 X	-.138
#23	50+	M	.208	.294	.557 X	.143	.766 X	-.157
#24	40-49	M	-.030	-.064	.616 X	.508 X	.215	.109
#25	20-29	U	.437	.122	.505 X	.434	.448	-.245
#26	40-49	M	-.200	.603 X	.364	.392	.420	.285
#27	20-29	S	.456	.094	.711 X	.542	.178	.552
#28	30-39	M	.184	-.071	.648 X	.072	.196	-.087
#29	30-39	M	.091	.395	.574 X	.246	.770 X	.140
#30	40-49	M	-.455	.447	.182	.303 X	.162	.236
#31	40-49	M	-.187	-.141	.714 X	.038	.596 X	.092
#32	40-49	S	.027	.123	.719 X	.210	-.014	.736 X
#33	20-29	S	.509 X	.055	.358	-.028	.073	.484 X
#34	20-29	S	-.158	.329	.654 X	-.069	.408	.591 X
#35	30-39	M	.149	.159	.670 X	.182	.439 X	-.054
#36	40-49	M	.245	.154	.399 X	.726 X	.344	.246
#37	30-39	M	.692 X	-.366	.322	.582 X	.111	-.086
#38	20-29	S	-.156	.425 X	.250	.142	.429 X	.195

Table 3. *Factor Loading Matrix with Demographic Information* (continued)

#39	30-39	M	.358 X	.104	.222	.300	.658 X	-.126
#40	40-49	M	-.290	.412 X	.159	.088	.635 X	-.056
#41	30-39	M	-.232	.359	.370	.441 X	.266	.258
#42	30-39	M	.105	.520 X	.074	.413	.552 X	-.198
#43	40-49	M	.010	.370	.522 X	.189	.762 X	-.095
#44	30-39	S	.451	-.244	.536 X	.619 X	.547	-.053
#45	30-39	S	-.083	.375 X	.303	.036	.659 X	.179

Note. Defining sorts for each factor are indicated by an "X" to the right of the relevant factor loading.

(a) Marital status codes: D = divorced, M = married, S = single, U = unmarried couple

Factor one identified the archetype of the *Resilient*. The name *Resilient* was derived from the participants' tendency to be influenced by positive comments and/or behavior as opposed to negative comments and/or behavior. Factor two identified the archetype of the *Transitional.* The name *Transitional* was derived from the participants' tendency to be transitioning between being influenced by negative comments and behavior modeling to more positive comments and behavior modeling. Factor three identified the archetype of the *Impressionable.* The name *Impressionable* was derived from the participants' tendency to be influenced by negative comments and/or behavior as opposed to positive comments and/or behavior. The three archetypes will be explained in greater detail.

Table 4 demonstrates the factor correlations ranging from 0.3181 to 0.4427. Note that there is a moderate correlation between factors one and two, and a moderate correlation between factors one and three. This indicates that the participants loading onto these factors had similarity in their sorting patterns. However, all three factors were retained because of significant differences that appeared in the overall analysis.

Table 4

Correlation Matrix between Factor Scores

	Factor 1	Factor 2
Factor 2	.414	
Factor 3	.443	.318

Archetypes

The archetypes were identified and named using the Q sort items ranked at the extremes for each factor, along with the open-ended responses, demographic information provided by the participants, and the results of the body image assessment. Consensus items (i.e. items that were ranked similarly across all factors) were also considered in the analysis.

The Q sorts from both conditions of instruction were analyzed together to answer this question. That is, the sorts the women completed concerning the influences on their body image in adolescence (age 10-18) and the sorts they completed concerning the influences on their body image in adulthood (current age) were equally considered. The sorting array was set up with columns for items that were *not influential*, *neutral*, and *influential*.

Table 5

Archetype 1: The Resilient

S#	Most Influential Statements	*Z* Score	Sort Value
13	Positive comments from my significant other	1.924	5
9	Positive comments from my siblings	1.906	5
1	Positive direct comments from my mother	1.722	4
23	Positive comments from my close friend peers	1.552	4
35	My own positive self-talk	1.519	4
5	Positive comments from my father	1.321	3
25	Positive behavior modeling from my close friend peers	1.237	3
37	My own positive past behavior	1.198	3
11	Positive behavior modeling from my siblings	1.054	3
S#	**Least Influential Statement**	**Z Score**	**Sort Value**
20	Negative comments from other family members (uncles, aunts, cousins, grandparents, etc.)	-0.963	-3
8	Negative behavior modeling from my father	-1.087	-3
34	Negative behavior portrayed in the media	-1.11	-3
22	Negative behavior modeling from my other family members (uncles, aunts, cousins, grandparents, etc.)	-1.142	-3
40	Negative internalization due to a traumatic event (illness, accident, birth defect, etc.)	-1.163	-4
30	Negative behavior modeling from my acquaintance peers	-1.319	-4
45	Negative body-related messages from religious teachings	-1.432	-4
28	Negative comments from my acquaintance peers	-1.49	-5
41	Negative internalization due to rape or abuse	-1.505	-5

Least Influential Most Influential

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
41	45	22	43*	12*	6	7	36*	11*	35*	9*
28*	30*	34	32*	16	38*	31	15	37*	23	13
	40*	8*	18*	44*	10	21*	39	25*	1*	
		20*	42*	26*	29*	17*	3*	5*		
				4	19	14				
				24*	2*	27				
					33					

Figure 3. The theoretical array and distinguishing statements for factor 1. Note that the distinguishing statements are marked with an asterisk.

Archetype I: The Resilient

The name *Resilient* was derived from the participants' tendency to be influenced by positive comments and/or behavior as opposed to negative comments and/or behavior. It suggests an ability to be resilient to the negative (risk) influences on body image development, but stay open to the positive (protective) influences, and to be more internally rather than externally motivated. The *Resilient* view seeks to reject negative sentiments, emphasizing self-efficacy in determining standards for themselves. Figure 3 shows the theoretical array (i.e. the ordered ranking of the Q set by an individual participant usually using a quasi-normal distribution, expressing the individual's ranking of individual statements/items relative to the condition of instruction) for the *Resilient*.

The first characterizing statement for the *Resilient* was positive comments from my significant other (statement 13: sort value 5). The significant other was an important influence in both adolescence and adulthood, but most salient in adulthood, where relationships (spousal) are

longer lasting. One of the participants stated, “This is the person you believe in most to be honest.” Another said in adulthood, “To have him see me in a positive way makes me feel like a complete person.” It was commonly discussed that after many years together, it is easy to get comfortable and complacent, therefore continuing to hear positive comments from a significant other was very meaningful.

The second characterizing statement, positive comments from my siblings (9:5), was only reported as most influential during adulthood. Siblings were not the most reported influence, but still notable enough to help characterize the factor. One participant whose sort defined this view said, “I take my siblings comments seriously because they are most honest with me.” The weight of the influence depended upon how close the participant was to these siblings. It is likely that there are many aspects of family dynamics that could help define this influence.

The third characterizing statement was positive direct comments from my mother (1:4). Mothers are an exceptionally central influence on the development of body image in their daughters, as discussed in detail in Chapter Two (Streigel-Moore, Silberstein & Rodin, 1986). The bond shared by mothers and daughters is not only psychological, but biological. Daughters often shared a need to please their mothers, the relief they felt when their mother showed pride in them, and the trust they had for their mothers’ opinions. One of the participants stated, “My mom is honest, sincere, and blunt. I knew her positive comments were true compliments and I cared about getting her acceptance and approval.” Another said, “My mother and her words and actions are still very influential to me. Knowing she was proud is what motivated me in my teens and still does today.” The understanding that mothers exert such a weighty influence on their daughters’ body image is an opportunity for mothers to choose to influence them positively. This

underlines the critical need for mothers to learn the importance of this role when their children are young, before negative salient experiences are internalized.

The fourth characterizing statement was positive comments from my close friend peers (23:4). Peers are part of the Tripartite Influence Model (van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002), especially in adolescence. One of the participants reported of adolescence, "What my friends thought of me, especially male friends, was basically the only thing that mattered to me. My parents or siblings or anyone could tell me positive or negative things but the only thing I listened to was what my friends thought of me." To connect the comments from peers with resiliency, one participant said, "What my friends said to me about me helped me build my self-confidence."

The last characterizing statement was my own positive self-talk (35:4). Internalization is highly influential in both adolescence and adulthood. Positive self-talk was more characterizing than negative self-talk in Factor 1, as it is defined by resiliency. The participants who reported being influenced by positive self-talk emulate the essence of resilience because they have the forethought, mindfulness, and intentionality to listen to and process positive messages. They also cultivate them for themselves. This takes discipline and self-efficacy. One participant reported, "Over the years I've learned that only what I say to/about myself matters. I surround myself with positive people and that has helped to grow my inner voice. I know that other people's opinions about me might be different but I'm the one who needs to live in this skin so I'm no longer held captive to those mind games." Another said, "As an adult, I focus primarily on my own concept of self-worth rather than letting myself be as influenced by others. I use positive self-talk daily (sometimes hourly) to remind myself what I like about my body and its importance." Further,

another participant stated concisely, “How I speak to myself is the backbone of my body image. How I feel about me is all that matters to me.”

The *Resilient* reported being least influenced by negative items, the first being internalization due to rape or abuse (statement #41), all explanations reporting that they were never raped or abused. This group of participants also reported not being influenced by negative comments from acquaintance peers (statement #28). It was clear from some statements that they did receive negative comments from these peers, but could resist feeling influenced by them. One participant said, “Sometimes there are people that are just jealous or happy to bring you down to their level.” Another participant reiterated with, “Who cares what others say…half the time it is to be spiteful for one reason or another or because they are jealous.” Negative body-related messages from religious teachings (statement #45), also fell on the least influential list of items. Several participants said they did not recall any body-related religious teachings. One participant said, “I don’t recall ever hearing these types of messages.” Another said in adulthood, “I refuse to pay attention to negative comments from religious teachings.” Negative behavior modeling from acquaintance peers (statement #30) was also not influential to the *Resilient*. However, this was only reported by participants in adulthood. One woman said, “I have spent a great deal of time over the last 10 years trying to separate my opinion of myself from the behavior of others, and to allow other people to live however they want to.”

While the characterizing statements indicate which stimuli were most influential are important for describing the factor, they are only one aspect of the viewpoint. It is important to include distinguishing statements and difference scores to more holistically describe and differentiate the viewpoints. Distinguishing statements are those whose score on two factors is higher than the difference score. The characterization of the *Resilient* participants being

influenced by positive factors is highlighted by the following distinguishing statements: positive comments from my siblings (statement #9), positive direct comments from my mother (statement #1), my own positive self-talk (statement #35), positive comments from my father (statement #5), positive behavior modeling from my close friend peers (statement #25), and my own positive past behavior (statement #37). A complete list of distinguishing statements for Factor 1 can be found as Appendix item B. Notice that some of these statements are the same as the most influential statements (statements #9, #1, and #35), but statements #5, #25, and #37, while not in the top 6 of the list of influential statements, are very important in defining Factor 1 because they indicate items that distinguish it from Factors 2 and 3. Regarding positive comments from my father (statement #5), one participants wrote, "Cared very much about what both my parents thought of me and wanted their respect." As mentioned above in discussing the importance of positive comments from mothers, many participants said that influence from both of their parents was important because they trusted and respected their opinions. Another distinguishing statement, positive behavior modeling from my close friend peers (statement #25), brought this comment from adolescence: "I was part of a team sport…there was positive pressure to keep in line, but we were all healthy athletes who strived for performance not appearance." Another said during adulthood, "My close peers, especially other women, have helped me to realize that all body types can be loved and accepted." Maybe somewhat surprisingly for the *Resilient* in adulthood, one woman in her forties said, "My friends are now my biggest influence as to what is acceptable body image." Although my own positive past behavior (statement #37) was another distinguishing statement for the *Resilient,* not one respondent reported it being most influential in adolescence. However, self as an influence became very important in adulthood for the *Resilient*. One respondent said in adulthood, "I have worked hard to make positive changes in my life and

to become accepting of who I am, and those changes have influenced my self-perception." Another said, "I have been cultivating self-esteem for long enough, now, it is my own positive past behavior." Statements #5, #25, and #37 were not among the most influential items or distinguishing statements for Factors 2 and 3. They are all consistent with the characterization of Factor 1 being influenced by positive items, and by people who are close to them, including themselves.

Of the 26 sorts that loaded onto Factor 1 (*The Resilient*), nine came from the first condition of instruction (adolescence) and nearly twice as many, 17, came from the second condition of instruction (adulthood). Almost half of those, seven, who loaded onto the *Resilient* archetype did not have children. Twelve out of the 17 were married, and three of those married participants did not have children. Four out of the 17 sorts that loaded onto the *Resilient* archetype in second condition of instruction were single, and one was divorced. The breakdown of participants in the *Resilient* archetype by age group are represented in Table 6. The number of participants in each age group increased, in some cases more than doubled, except for participants in their 50s (the age group with the fewest participants).

Table 6

Frequencies of Participants Classified as Resilient by Condition of Instruction and Age

Age Groups	Condition of Instruction	
	First	Second
20 to 29	2	4
30 to 39	3	6
40 to 49	1	5
50 to 59	3	2

Under the first condition of instruction (adolescence), nine of the sorts loaded onto the *Resilient* archetype (Factor 1), the group characterized by positive comments. Five of the nine stayed in the *Resilient* archetype, three moved to the *Transitional* archetype (Factor 2), and one

moved to the *Impressionable* archetype (Factor 3). All five of the women who were not assigned a factor under first condition of instruction moved to Factor 1 under second condition of instruction. Three of those five did not have the highest correlation to Factor 1 under first condition of instruction, thus can report a change.

Table 7

Archetype 2: The Transitional

S#	Most Influential Statements	Z Score	Sort Value
36	My own negative self-talk	2.044	5
13	Positive comments from my significant other	1.905	5
14	Negative comments from my significant other	1.814	4
23	Positive comments from my close friend peers	1.597	4
24	Negative comments from my close friend peers	1.425	4
17	Positive comments from my children	1.03	3
18	Negative comments from my children	0.926	3
27	Positive comments from my acquaintance peers	0.729	3
35	My own positive self-talk	0.721	3
S#	Least Influential Statements	Z Score	Sort Value
34	Negative behavior portrayed in the media	-0.866	-3
11	Positive behavior modeling from my siblings	-1.122	-3
12	Negative behavior modeling from my siblings	-1.188	-3
7	Positive behavior modeling from my father	-1.213	-3
21	Positive behavior modeling from my other family members (uncles, aunts, cousins, grandparents, etc.)	-1.225	-4
22	Negative behavior modeling from my other family members (uncles, aunts, cousins, grandparents, etc.)	-1.452	-4
8	Negative behavior modeling from my father	-1.485	-4
45	Negative body-related messages from religious teachings	-2.141	-5
44	Positive body-related messages from religious teachings	-2.26	-5

Least Influential Most Influential

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
44*	8*	7*	30*	3*	6	1*	37	35	24	13
45*	22	12*	20*	4	5*	26*	25	27	23	36
	21*	11*	33*	32*	9	16*	43*	18*	14*	
		34	29	10	42*	28	38	17*		
				19	31	15				
				41*	39*	2*				
					40					

Figure 4. The theoretical array and distinguishing statements for factor 2. Note that the distinguishing statements are marked with an asterisk.

Archetype II: The Transitional

The name *Transitional* was derived from the participants' tendency to be transitioning between being influenced by negative comments and behavior modeling to more positive comments and behavior modeling. This transitional tendency is noted by the movement of participants who loaded onto the *Impressionable* archetype (characterized by being Impressionable to negative influences) in adolescence and moved or are in transition toward moving to the *Resilient* archetype in adulthood. Out of 52 sorts who loaded onto the *Resilient* or *Transitional* archetypes in the first condition of instruction, only one moved to the *Impressionable* archetype in second condition of instruction, illustrating the direction of the transition toward becoming more resilient with age. The *Transitional* archetype includes a fairly even mix of positive and negative influences. Interestingly, the most influential items (characterizing statements) are mainly comments (what was said), and the least influential items

were examples of behavior modeling (what was seen). Figure 4 shows the theoretical array for the *Transitional*.

The first characterizing statement for the *Transitional* was my own negative self-talk (statement #36). One participant said of adolescence, "I repeatedly used negative self-talk to put myself down in all areas—appearance, intelligence, etc." Another said, "My internal monologue as a teen was largely about how much I disliked various aspects of my body." Even more harsh, "Throughout my life, what I have said to myself has been instrumental in my decision making…It is extremely hard for me to be nice to myself, because most of the time, I do not even like myself." Self-talk is one of only a couple influences examined in this study that the individual can control. While they can attempt to control their own intentionality toward what types of messages they internalize, their own behavior is the only thing they actually control. Despite this, self-talk was reported as one of the most difficult influences to overcome, because that voice of negativity is, for some people, always there, playing like a broken record in their heads. This continuous negative voice can keep the person stuck in a mindset to listen to and internalize the negative comments from others as well, keeping the person stuck in the *Impressionable* or the *Transitional*.

Like with the *Resilient*, positive comments from my significant other (statement #13) is also a characterizing statement for the *Transitional*. One participant said of adolescence, "My relationship with my boyfriend at the time was very important to me and what thought was the same." Another said of adulthood, "After being married for a while, sometimes people start to get very familiar and comfortable with each other. When my husband says something new that is nice or positive it means a lot." It is important to note that while positive comments have a closer

affinity to resiliency, a person could also be highly influenced by them because of a high level of insecurity and need to be frequently reassured.

The third characterizing statement was negative comments from my significant other (statement #14). One participant shared this experience: “My husband, who is also overweight, will make comments from time to time, such as if I am having a bowl of ice cream at night, do I really need that? Or if he thinks something I’m wearing makes me look fat (or ‘shows how fat you are’). He says he’s concerned because my knees are not as strong, I can’t walk a mile without having to sit or rest for a few moments before going on, etc…But it still hurts.” Another participant shared, “If my husband is critical of me, it tends to strike me pretty deeply. He has assumed the role of the most important person in my life, so when he criticizes me or says something negative, it hurts.”

Close friend peers were a salient influence for the *Transitional* archetype. Both positive and negative comments characterize the factor. From the positive comments from my close friend peers (statement #23), one participant said of adolescence, “I loved to feel included and part of a group, so any compliments from my friends meant a lot.” Another comment from adolescence: “I always cared so much about what my friends said or thought about me.” From adulthood: “My friends are very much a large influence on my lifestyle. When I hear positive comments about my looks or recent athletic endeavors it makes me feel like I fit in with them, as most of my friends enjoy being active and also like to go out.” On the other side of the coin, from negative comments (statement #24) in adolescence: “I have always had a hard time with worrying about what people think about me. I tend to be hard on myself and when people make negative comments about me, I get upset and worry about what’s wrong with me.” Another comment: “I wanted nothing more than to fit and impress my friends and classmates. Whenever I

thought I let them down or did something my best friend disagreed with I took it very hard. I was extremely worried of being 'out' or losing my best friend, and when I was younger I thought that would happen easily if I didn't constantly please them." From adulthood: "My friends that are close to me are not just going to tell me what I want to hear, but rather what they actually think, so I would take this to heart."

Participants in the *Transitional* archetype reported being least influenced by positive (statement #44) or negative (statement #45) body-related messages from religious teachings, one participant saying, "Religious teachings had very little to do with my thoughts on body image." Another participant said, "I do not remember any situation from church or confirmation where we learned about this. If we did learn about this, it didn't leave a lasting impact on me in any way." Religion was commonly cited as least influential across all factors for these same reasons.

Also, least influential for the *Transitional,* negative behavior modeling from my father (statement #8). One participant said, "My dad doesn't really model behavior related to body image. He is who he is and that is that."

Behavior modeling from other family members, whether positive (21:-4) or negative (22:-4) was also ranked as least influential to the development of body image. On participant shared, "I don't really see my other family that often so this one didn't really affect me so much." Another participant shared the exact same sentiment.

As explained in Factor 1, distinguishing statements are an important aspect of more holistically describing the factors. The characterization of the *Transitional* participants being influenced by a combination of positive and negative factors, moving in the direction toward resilience with age, is highlighted by the following distinguishing statements: my own negative self-talk (36:5), negative comments from my significant other (14:4), positive comments from

my children (17:3), negative comments from my children (18:3), negative internalization due to pregnancy, post-partum body changes (43:2), and negative direct comments from my mother (2:1). A complete list of distinguishing statements for Factor 2 can be found as Appendix item B. Four of these six distinguishing statements for Factor 2 are not in the list of most influential items or distinguishing statements for Factors 1 and 3. Statement 36, my own negative self-talk, and 2, negative direct comments from my mother are also important items in Factor 3. Negative comments from my significant other (S14), positive or negative comments from my children (S17, 18), and negative internalization due to pregnancy, post-partum body changes distinguish Factor 2 from Factors 1 and 3.

Of the 26 sorts that loaded onto Factor 2 (*The Transitional*), eight came from first condition of instruction (adolescence) and more than twice as many, 18, came from second condition of instruction (adulthood). Five out of the 18 sorts who loaded onto the *Transitional* archetype did not have children. Fourteen were married, three were single, and one was divorced. The breakdown of participants in the *Transitional* archetype by age group are represented in Table 8. All the age groups increased in number in the *Transitional* from first condition of instruction to second condition of instruction except those in their 20s. That age group went from two individuals to one individual.

Table 8

Frequencies of Participants Classified as Transitional by Condition of Instruction and Age

Age Groups	Condition of Instruction	
	First	Second
20 to 29	2	1
30 to 39	4	7
40 to 49	3	5
50 to 59	0	4

Under first condition of instruction (adolescence), eight of the sorts were loaded into the *Transitional* archetype (Factor 2), the group characterized by a mix of positive and negative influences. Six of the eight sorts stayed in the *Transitional* archetype, one moved to the *Resilient* archetype (Factor 1), and zero moved to the *Impressionable* archetype (Factor 3). None of the women who were not assigned a factor under first condition of instruction moved to Factor 2 under second condition of instruction. One of the women who loaded onto the *Transitional* archetype in first condition of instruction was not assigned a factor in second condition of instruction.

Table 9

Archetype 3: The Impressionable

S#	Most Influential Statements	Z Score	Sort Value
36	My own negative self-talk	1.756	5
24	Negative comments from my close friend peers	1.599	5
23	Positive comments from my close friend peers	1.352	4
2	Negative direct comments from my mother	1.185	4
1	Positive direct comments from my mother	1.147	4
26	Negative behavior modeling from my close friend peers	0.908	3
35	My own positive self-talk	0.826	3
28	Negative comments from my acquaintance peers	0.801	3
25	Positive behavior modeling from my close friend peers	0.736	3
S#	Least Influential Statements	Z Score	Sort Value
29	Positive behavior modeling from my acquaintance peers	-0.424	-3
16	Negative behavior modeling from my significant other	-0.719	-3
44	Positive body-related messages from religious teachings	-1.07	-3
45	Negative body-related messages from religious teachings	-1.53	-3
41	Negative internalization due to rape or abuse	-1.842	-4
17	Positive comments from my children	-1.928	-4
18	Negative comments from my children	-1.981	-4
42	Positive internalization due to pregnancy, post-partum body changes	-2.366	-5
43	Negative internalization due to pregnancy, post-partum body changes	-2.525	-5

Least Influential Most Influential

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
43*	18*	45	15*	21*	31	27	38	25	1*	24
42*	17*	44*	30*	22*	40	20*	32*	28	2*	36
	41	16	12*	34*	9	6*	3*	35	23	
		29	11*	33	14	37	39	26*		
				8*	19	13*				
				7	4*	5*				
					10*					

Figure 5. The theoretical array and distinguishing statements for factor 3. Note that the distinguishing statements are marked with an asterisk.

Archetype III: The Impressionable

The name *Impressionable* was derived from the participants' tendency to be influenced by negative comments and/or behavior as opposed to positive comments and/or behavior. It suggests less of an ability to be resilient to the negative (risk) influences, instead to be more impressionable to them. Like the *Resilient*, participants from the *Impressionable* group are most influenced by those closest to them—themselves, their close friends, and their mothers. Further study might help us better understand these sources of influence. Is the strength of the influence due to them being like-minded women to the participant? Is it due to them being the women from whom the participant most needs acceptance? Unlike the *Resilient*, the participants whose sorts define this factor do not seem able to intentionally choose the messages that are healthiest for them, the positive messages. Figure 5 shows the theoretical array for the *Impressionable*.

The first characterizing statement for the *Impressionable* was my own negative self-talk (statement 36: sort value 5). To support this viewpoint, one participant responded, "I repeatedly

used negative self-talk to put myself down in all area—appearance, intelligence, etc." Additionally, a participant shared, "I've always been very hard on myself, especially when it comes to body image. I've always thought of myself as 'fat' and 'the ugly friend.'" Self-talk was a common theme across all three factors. Comments and observation of behavioral modeling from others that contribute to internalization, in turn contributes to thoughts that continue to run through individuals' heads and become the things they say to themselves—their self-talk.

Like the *Transitional*, close friend peers were an important influence on the *Impressionable*. The next characterizing statements were positive (23:4) and negative (24:5) comments from my close friend peers. One participant whose sort defined this view said, "I had a peer in high school that wouldn't give me a ride because he said I was too fat to sit in the back seat." Further, another participant stated, "I spent majority of my time with my friends during the day in the school year or during summer programs. I wanted to be liked by them so if they said something was wrong with me I believed them." Although the *Impressionable* are primarily influenced by negativity, they can also be impacted by positive conditions. Examples of this were fewer and further in between, but one participants reported from adulthood, "I have a trusted friend group that all lead healthy, active lifestyles and who seem to have relatively health views on their bodies so I value their opinions and positive feedback."

As discussed in the section on the *Resilient*, mothers are one of the most powerful influences on daughters' body image development. Mothers were most prominently influential to the *Resilient* and the *Impressionable*, less so in the *Transitional* archetype. As such, negative direct comments from my mother (2:4) was also a characterizing statement to the *Impressionable* archetype. One participant shared the following particularly troublesome story from childhood: "My mom was always after me to suck in my stomach. That's probably my earliest memory of

her. She would tell tales how when I was an infant I was getting chubby, so she limited the bottle and how I would cry when she would give me 4 oz. and I wanted 6 or so. She would tell my aunts (in front of me) to not give me cookies when all my cousins would get some, so then my cousins would start saying things like, 'Your mom thinks you are too fat, so you can't have any' or 'Your mom doesn't want you to have any.' She would also tell that to friends' moms in front of me and the friends. I remember trick or treating with my best friend when I was 6 or 7 and my friend told me I should give her all my candy because my mom thinks I'm too fat." The same participant reported in adulthood, "She is still at it. 'I wish you would lose some weight. You'd be so pretty if you would just lose some weight.' I truly believe if I had cancer and dropped down to 90 pounds, it would not be enough for her." Although fewer were reported by the *Impressionable*, positive direct comments from my mother (1:4) was also a characterizing statement. One participant reported, "My mother and her words and actions are still very influential to me. Knowing she was proud is what motivated me in my teens and still does today." Another shared during adulthood, "I still seek approval from my mother even based on looks. When she tells me that a particular piece of clothing looks good I am more willing to wear it." While these items reported as most influential are somewhat of a combination of positive and negative items, the *Impressionable* archetype will be more wholly described as negative with distinguishing statements.

The *Impressionable* reported being least influenced by positive (statement #42) and negative (statement #43) internalization due to pregnancy and post-partum body changes, positive (statement #17) and negative (statement #18) comments from my children, and negative internalization due to rape or abuse (statement #41). All the participants who listed these items as

least influential reported that they did not have pregnancies, children, or rape/abuse experiences during this time.

The distinguishing statements for Factor 3 that more wholly describe it as influenced by negative items are my own negative self-talk (statement #36), negative direct comments from my mother (statement #2), positive direct comments from my mother (statement #1), negative behavior modeling from my close friend peers (statement #26), and negative comments from my acquaintance peers (statement #28). A complete list of distinguishing statements for Factor 3 can be found in Appendix B. Examples of the first three distinguishing statements are included in the section above discussing characterizing statements. Regarding negative behavior modeling from my close friend peers, one participant shared this story about her childhood, "I didn't realize I was supposed to hate my body or be disgusted by it until I attended a sleepover in 3/4th grade and we spent most of the morning lining up and weighing ourselves. I was one of the taller girls so obviously I weighed more. I knew I was athletic, strong and healthy but because the girls who were smaller than me were saying upon seeing their numbers 'I'm so fat' and 'I can't believe I'm such and such #'s.' When it was my turn (I had refused to 'play' a few times) the girls gasped at my larger number. I didn't know why it was bad but I knew I shouldn't like it. This was my least favorite game at sleepovers." Regarding negative comments from my acquaintance peers, a participant shared this salient memory: "Following my mother's negative direct comments I placed 'Negative comments from my acquaintance peers,' because I was in their presence most of the day with school and activities afterwards. With ridiculing words and gestures, I began to view myself as someone that was less noticeable and had to compensate for my lack of good looks with academic achievements or other honor or awards, but even that was diminished thinking I was being looked down negatively to begin with."

Factor 3 is also characterized as being more common in adolescence and the twenties, and being transitioned out of as a person ages. The above distinguishing statements reflect influences one would expect to be more important and salient to a younger person (i.e. adolescence) than a more mature adult (age groups of forties or fifties).

Of the 27 sorts that loaded onto Archetype 3 (*The Impressionable*), 23 came from first condition of instruction (adolescence) and only four came from second condition of instruction (adulthood). Although almost three times as many sorts loaded onto the *Impressionable* archetype than the other archetypes in first condition of instruction (adolescence), only four loaded onto the *Impressionable* archetype in second condition of instruction (adulthood). Out of these four, three were in their twenties. These findings support what was suggested in the explanation of the *Transitional* archetype: participants reported being more influenced by negative influences than positive influences during adolescence, and becoming more resilient to the negative and choosing to listen to positive influences in adulthood. Fifteen of the 23 sorts who loaded onto Archetype 3 in first condition of instruction had children, 8 did not. None of the four sorts who loaded onto Archetype 3 in second condition of instruction had children. All four were also single. Eight of the 23 sorts who loaded onto Factor 3 in first condition of instruction were single, 14 were married, one was part of an unmarried couple. The breakdown of participants in the *Impressionable* archetype by age group are represented in Table 10. The number of participants in each age group decreased, in all cases were almost completely eliminated.

Table 10

Frequencies of Participants Classified as Impressionable by Condition of Instruction and Age

Age Groups	Condition of Instruction	
	First	Second
20 to 29	4	3
30 to 39	8	0
40 to 49	7	1
50 to 59	3	0

Under the first condition of instruction (adolescence), 23 of the sorts were loaded into the *Impressionable* archetype (Archetype 3), the group characterized by negative comments and behavior modeling. Three of the 23 sorts stayed in the *Impressionable* archetype, six moved to the *Resilient* archetype, eight moved to the *Transitional* archetype, and five were not assigned a factor in second condition of instruction. Under both first condition of instruction and second condition of instruction, one of the participants who was not assigned a factor had the highest correlation with Factor 3. One participant was not assigned to a factor under either condition.

Non-group Data

Under first condition of instruction, five participants were not assigned to a factor. Under second condition of instruction, six participants were not assigned to a factor. One participant was not assigned a factor in either condition. The breakdown by age groups is represented on Table 11. In first condition of instruction, four of the five participants were married, one was single. Three of the married participants had children, the other married participant and the single participant did not have children. In second condition of instruction, three were married, two were single, and one was part of an unmarried couple. The single participants did not have children. The participant who was part of an unmarried couple and the married participant had children. The participants who were not assigned to factors were influenced by a fairly even mix of positive and negative comments and behavior modeling.

Table 11

Frequencies of Participants Not Classified by a Factor by Condition of Instruction and Age

Age Groups	Condition of Instruction	
	First	Second
20 to 29	1	2
30 to 39	1	2
40 to 49	3	2
50 to 59	0	0

Consensus and Disagreement Items

Consensus items are common themes that emerge from influences reported by participants, but do not necessarily define the factors. In other words, all the factors have ranked these items in pretty much the same way. However, consensus items can be useful, even if they do not distinguish between factors.

Table 12

Consensus Items with Array Positions

S#	Statement	Array Positions			z-Score Variance
31	Positive, realistic images from the media	1	0	0	0.008
23	Positive comments from my close friend peers	4	4	4	0.011
27	Positive comments from my acquaintance peers	1	3	1	0.019
19	Positive comments from other family members	0	-1	0	0.037
29	Positive behavior modeling from my acquaintance peers	0	-2	-3	0.056
25	Positive behavior modeling from my close friend peers	3	2	3	0.074

The first consensus item is Statement 31: Positive, realistic images from the media. Factor 1 placed this statement in column 1 of the theoretical array, Factors 2 and 3 in column 0. This means that positive, realistic images from the media was rarely reported as an influence on body image. This is not surprising as the literature overwhelmingly names the media as one of the most *negative* and salient influences on body image. What is interesting is that Statement 32: Negative, unrealistic images from the media was very low on the list of consensus items, falling

on the theoretical array for the factors in positions -2, -1, and 2, for Factors 1, 2, and 3 respectively. These positions on the theoretical array would indicate that participants reported that even negative images had a very mild, if any, influence on the development of their body image. This is supported by Blodgett Salafia, et al. (2015), which examined perceptions regarding the causes of eating disorders. Participants with eating disorders least endorsed media/culture as a cause, and participants without eating disorders most endorsed media/culture as a cause, along with psychological/emotional problems.

The next consensus item was Statement 23: Positive comments from close friend peers. All three factors placed this statement in position 4 on the theoretical array, which indicates that positive comments from close friend peers were very influential in the development of their body image. This is consistent with the literature, which indicates that close friend peers are one of the most salient influences on body image.

The third consensus item is Statement 27: Positive comments from acquaintance peers. Factors 1 and 3 placed this item in position 1 in the theoretical array, indicating it was not very influential for the participants that loaded on those factors. Factor 2 placed it in position 3 in the theoretical array, indicating higher influence on the development of body image. This is consistent with the result that the influence of friends and significant others was higher for Factor 2, the archetype characterized by transitional qualities.

Table 13

Disagreement Items with Array Positions

S#	Statement	Array Positions			z-Score Variance
24	Negative comments from my close friend peers	-1	4	5	0.862
28	Negative comments from my acquaintance peers	-5	1	3	1.019
42	Positive internalization due to pregnancy, post-partum body changes	-2	0	-5	1.026
18	Negative comments from my children	-2	3	-4	1.421
17	Positive comments from my children	1	3	-4	1.598
43	Negative internalization due to pregnancy, post-partum body changes	-2	2	-5	1.695

In some cases, two of the three factors are quite close on their theoretical array positions, with the third factor not close on the array, in other words in disagreement. These statements are called Disagreement Statements, and appear in the bottom half of the Consensus Item table. Like consensus items, they do not define factors, but still provide insight to the understanding of the factors, especially in differentiating one factor from the others.

An example of this is Statement 36: My own negative self-talk. This statement appeared on the disagreement half of the table because of the disagreement in array positions between two of the factors and the third (2, 5, 5). It was very commonly reported as highly influential in the study, as Factors 2 and 3 indicate, but the negative nature of the statement would not be consistent with the positive nature of Factor 1. The same can be said for Statement 24: Negative comments from close friend peers, also placed low on the theoretical array by Factors 1, but high by Factors 2 and 3 (-1, 4, 5).

Statement 1: Positive, direct comments from my mother, although a common theme in the study, also appeared as a disagreement statement. The disagreement in array positions (4, 1, 4) are consistent with the previously mentioned importance of mothers' influence in Factors 1 and 3, but less in Factor 2.

Statement 28: Negative comments from acquaintance peers, was placed in the theoretical array in positions -5, 1, and 3. Notice it is placed as the lowest influence by Factor 1 (characterized by positivity), highest in Factor 3 (characterized by negativity), and in the middle of the road in Factor 2 (characterized by transition).

The statement with the highest level of disagreement was Statement 43: Negative internalization due to pregnancy, post-partum changes. This was a surprise, as this is one of the biggest changes women's bodies go through. However, it was not commonly reported as highly influential in the development of body image by the participants. It was in positions -2, 2, -5 on the theoretical array. Many women reported enjoying the changes to their bodies during pregnancy. Some may not attribute the post-partum changes to their bodies to pregnancy, or may move on to having another child quickly. This might result in other attributes being considered.

The next highest level of disagreement was Statement 17: Positive comments from my children, falling in positions 1, 3, -4. Similarly, Statement 18: Negative comments from my children (-2, 3, -4) was a disagreement statement, mildly influential in Factor 2.

Tables 7, 9, and 11 provide summaries of each archetype's theoretical sort, highlighting the most influential and least influential items for each.

Difference Scores

Difference scores are the differences between the Z Scores of a statement between two factors. That difference is considered statistically significant if it is greater than or equal to 1.96. However, even statements with difference scores that are not statistically significant can be useful in defining the factors.

Two statements have significant difference scores between Factors 1 and 2. Statement 11: positive behavior modeling from my siblings had a difference score of 2.176. It was in the 3

position on the theoretical array for Factor 1, and -3 for Factor 2. This means that participants who loaded onto Factor 1, the *Resilient*, were moderately influenced by positive behavior modeling from their siblings, and participants who loaded onto Factor 2, the *Transitional*, were moderately not influenced by this item. This is consistent with the descriptions of these archetypes.

Statement 9: positive comments from my siblings had a difference score of 2. It was in the 5 position on the theoretical array for Factor 1, and did not load onto Factor 2. This statement had the second highest Z Score of most influential statement loaded onto Factor 1. In addition to the *Resilient* archetype being defined by positive influences, it is also more highly influenced by comments.

Statement 1: positive direct comments from my mother had a difference score of 1.473, which was not statistically significant, but an important influence for participants who loaded onto Factor 1 is the influence of their mothers. This item was in the 4 position on the theoretical array for the *Resilient*, and did not load onto Factor 2. Besides being very influential for the participants in Factor 1, those participants also shared many salient memories of their mothers offering encouragement and love in regard to their appearances. Mothers were not seen as influential for the *Transitional* archetype. They were more commonly influenced by their own self-talk, significant other, and close friend peers.

One statement had a significant difference score between Factors 1 and 3. Statement 17: positive comments from my children had a difference score of 2.271. This item did not load onto Factor 1, and was in the -4 position on the theoretical array for Factor 3. Although this is statistically significant, we may not treat the information very differently, as it was close enough to neutral to not load for one, and not influential for the other.

There are two differences of interest between Factors 1 and 3 that were not statistically significant. Statement 9: positive comments from my siblings was a 5 on the theoretical array for Factor 1, but did not load at all onto Factor 3. This is consistent with the positivity of the *Resilient* archetype, and the negativity of the *Impressionable* archetype. It is also consistent with what the results have shown about age: that in the adult sort (second condition of instruction), participants rated positivity as more influential, and in the adolescent sort (first condition of instruction), they rated negativity as more influential.

The second difference of interest between Factors 1 and 3 was Statement 13: positive comments from my significant other. Factor 1 placed this item in the 5 position on the theoretical array, and it did not load onto Factor 3. The explanation is the same as the paragraph above.

Three statements had statistically significant differences between Factors 2 and 3. Statement 43: negative internalization due to pregnancy and post-partum body changes had a difference score of 3.189. It did not load onto Factor 2, and loaded in the -5 position (least influential) for Factor 3. As mentioned in the demographic description of Factor 3, the *Impressionable*, none of the participants had children, and they were more commonly very young, or loaded onto this Factor in the adolescent sort (when children would have been much less likely). Because of this, it is not a surprise that this item was rated least influential for the *Impressionable* archetype.

Statement 17: positive comments from my children had a difference score of 2.958. This item was not highly influential to any of the three Factors, but was moderately influential to Factor 2, (position 3 on array), and not influential to Factor 3 (-4 on array). Again, this is consistent with the demographic characteristic of Factor 3 participants not having children.

The same situation arises with the next two significant difference scores for Statement 18: negative comments from children; and 42: positive internalization due to pregnancy and post-partum body changes.

Statement 14: negative comments from my significant other did not have a significant difference score, but had a fairly wide difference on the array between Factors 2 and 3. This item was a 4 on the array for Factor 2, the *Transitional*, and did not load onto Factor 3, the *Impressionable*. It also did not load onto Factor 1, likely due to its negative nature. It was very clear from both the statistics and the qualitative comments that the influence of mothers and significant others were among the most salient for participants. Mothers were especially influential in Factors 1 and 3, but not in 2, and significant others were more influential in Factor 2. Looking at other characteristics of these Factors, in particular age and typical struggles for these stages of development, it is possible that in the *Transitional* archetype, when women tend to be transitioning from a younger, more impressionable stage (Factor 3), to a more mature and resilient stage (Factor 1), the mother's influence is somewhat replaced by the significant other's influence. The *Transitional* archetype was highly influenced by self, significant other and close friend peers and heaviest in the age groups of 30s and 40s. In this stage of life, women are often going through a transition much like the adolescent transition previously experienced. Their home life has likely changed with marriage and kids, bodies changing due to childbirth and hormonal changes, kids eventually moving out, marriages commonly failing, remarriages occurring, and experiencing blended family challenges. This is not an exhaustive list of transitions that occur during this stage. As the day-to-day focus has moved away from the mother to the significant other, and the immediate home life, it is natural that the influence would also change.

CHAPTER FIVE. DISCUSSION

The purpose of this study was to explore women's perceptions of the sources of information that led to the development of their body images. Using Q methodology, the study addressed the following questions:

1. What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?
2. What are the positive and negative influences that women report lead to the development of their body image?
3. How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?
4. In the opinion of the participants, what should be done to intervene with factors that lead to negative body image?

Forty-five women ages 20 and above participated using Q methodology. They sorted a list of potential influences of body image development under two conditions of instruction (one pertaining to influence during adolescence and the other pertaining to influence during adulthood). The data were collected and analyzed, resulting in the identification of three archetypes: the *Resilient*, the *Transitional*, and the *Impressionable*. The follow provides responses to the four research questions, along with conclusions, possible weaknesses of the study, and further research considerations.

Response to Research Questions

Research Question One

What archetypes of women emerge from their perceptions concerning the influences on the development of their body image?

In choosing the number of factors to represent the data, two, three, four, five, and six factor possibilities were considered. The three-factor solution, which accounted for 45 percent of the variance, was used.

Factor one identified the archetype of the *Resilient*. As discussed in Chapter 4, the *Resilient* were primarily influenced by positive comments and/or behavior modeling as opposed to negative comments and/or behavior modeling. The participants who identified with factor one demonstrated the ability to selectively regard the influences that would develop their body image. They rated negative comments and behavior on the least influential end (left side) of the sorting array, exhibiting discrimination toward staying open to the positive (protective) influences, and to be more internally rather than externally motivated. These participants sought to reject negative sentiments, emphasizing self-efficacy in determining standards for themselves.

The open-ended responses of the participants in the *Resilient* archetype were saturated with an overall positive tone. The participants seemed mindful of only allowing positive, trustful, respectful, loving, encouraging influence on their body images. They talked about their ability to intentionally reframe situations so that they could filter out the negative, and surround themselves with positive messages. They chose who to spend time with, and what to think about themselves. They talked about cultivating self-esteem, and not being held captive to mind games. This reframing is reflective of Relational Frame Theory, discussed in Chapter Two (Neziroglu et al., 2008).

Factor two identified the archetype of the *Transitional*. The *Transitional* demonstrated a tendency to be transitioning between being influenced by negative comments and behavior modeling to more positive comments and behavior modeling. The *Transitional* archetype was made up largely of participants who loaded onto the *Impressionable* archetype under the first condition of instruction (adolescence), and transitioned from being primarily influenced by negativity to a combination of positive and negative comments. Out of the 52 sorts that loaded onto the *Resilient* or *Transitional* archetypes in the first condition of instruction, only one moved to the *Impressionable* archetype in the second condition of instruction. This movement illustrated the direction of the transition toward becoming more resilient with age. The *Transitional* archetype includes a fairly even mix of positive and negative influences, most influential items being chiefly comments (what was said), and least influential items being behavior modeling (what was seen).

The open-ended responses of the participants in the *Transitional* archetype included a combination of positive and negative tone, and reflect the higher influence coming from comments, least influence coming from behavior modeling. The participants shared their tendencies to beat themselves up when they feel they do not reach the societal standards of beauty, one even calling herself her own worst enemy. The data was rich with examples of the salience of comments from significant others—both positive and negative. These significant others were both boyfriends and husbands, and the salience was felt in both adolescence and adulthood. Participants also shared their need to fit in with friends, and worry at the thought of not being included. This was more prevalent in adolescence, but some comments reflected adulthood. Although pregnancy/post-partum changes were not as highly ranked of an influence as one might expect overall in the study, some comments were made within the *Transitional*

archetype about struggling with the shock of one's body not going back to normal after pregnancy.

Factor three identified the archetype of the *Impressionable*. Participants who identified with Factor three were primarily influenced by negative comments and/or behavior as opposed to positive comments and/or behavior. It was the largest group under the first condition of instruction—23 participants—leaving only four participants under the second condition of instruction. Like the *Resilient*, participants from the *Impressionable* archetype are most influenced by those closest to them—themselves, their close friends, and their mothers.

The open-ended responses of the participants in the *Impressionable* archetype were saturated with an overall negative tone. The participants reported having a very negative internal dialogue, feeling overweight when they, in fact, were not overweight, and continuing to degrade themselves even after losing weight. They talked about the cruelty of other young people, and friends' negative comments standing out more than positive comments. They reported feeling hurt by criticisms and a perceived lack of acceptance from their mothers.

If most the messages that are received or internalized are negative, the individual will likely suffer from low self-esteem. Low self-esteem can also lead to low self-efficacy in other areas of life, such as career, which may result in the failure to reach her full potential.

Research Question Two

What are the positive and negative influences that women report lead to the development of their body image?

The positive and negative influences most reported as influential to the development of body image were positive and negative comments from the participant's significant other, positive comments from the participant's siblings, positive and negative comments from the

participant's mother, positive and negative self-talk, and positive and negative comments from the participant's close friend peers.

Overall in the study, comments were rated more influential than behavior modeling, especially from those who were closest to them. However, some participants had a slightly different view of which source was more meaningful. While most participants said that comments from those closest to them were the most meaningful, others said that mothers and best friends were *supposed to* be nice, but acquaintances and extended family were less expected to be as impressionable to their feelings.

Significant others are reported as a greater source of influence in adulthood, when the significant other is often a spouse, and the relationship is of longer duration and deeper connection and commitment. However, it is worth noting that a negative comment made by a boyfriend or girlfriend during adolescence can be salient enough to feel traumatic, triggering unhealthy thoughts or behaviors that stay with the individual her entire life. Significant others, similar to parents, should view their level of influence as an opportunity and a responsibility to encourage and enhance the self-esteem of their wives and girlfriends. They should help them feel accepted regardless of weight or appearance.

Much of the research on the etiology of body image dissatisfaction has focused on mothers. Mothers are also one the three components examined in the Tripartite Influence Model (van den Berg, Thompson, Obremski-Brandon, & Coovert, 2002). This model investigates three primary sources that influence the development of body image: parents, peers, and media. One of the reasons mothers are a particularly salient influence for girls in the development of their body image is that messages from one's immediate subculture may be especially pertinent and meaningful (Presnell, Bearman, & Madeley, 2007). While fathers are also influential to their

daughters, as the same gender parent, mothers have a special ability to impart influence on issues that are meaningful to the daughters (McCabe & Ricciartdelli, 2001b). Mothers need to see this as an opportunity to influence them positively, also to be especially mindful of the possibility of transmission of the negativity of their comments and behavior.

Siblings also make up immediate subculture and may be part of the support system that can act as a protective factor against body image dissatisfaction. When people feel accepted by their social environment, they generally feel more secure and positive about themselves and their bodies (Stice & Whitenton, 2002). Unfortunately, as children, siblings are not always a source of support for each other. It is not uncommon for siblings to go through phases of cruelty and competition with each other. Brothers are especially guilty of teasing sisters, which can lead to low self-esteem. Children and adolescents tend to compare themselves to siblings based on academic, athletic, artistic, and musical abilities; and on the basis of physical attractiveness and popularity (Rieves & Cash, 1996). In these comparisons, because the child is not only comparing herself to another person, but a sibling, the dynamic of competing for parental and other family favor can exacerbate the complexity of the feelings created. In adulthood, siblings generally (not always) have outgrown these petty grievances, and become a greater source of support to them.

Self-talk and internalization is an influence of special consequence because it is the only one that individuals can control themselves. An individual who is receiving largely negative messages may become overcome with self-loathing at the thought of not being accepted in her environment, especially if she perceives that to be the case with those closest to her. There are several strategies and therapies that can be taught by counselors and/or therapists and reinforced by parents and teachers to help children build resilience and develop a more internal locus of control. An internal locus of control means that the individual can control themselves and

influence the world around them, as opposed to being at the mercy of external forces in the world around them. The individual with an internal locus of control can be more mindful of how she processes messages received by the external environment.

Like sibling relationships, the dynamics of the relationships girls have with close friends is often different in adolescence than in adulthood. During adolescence, the insecurity that many girls feel can cause them to act out, even with close friends. This may include forming cliques, teasing, exclusion, holding each other to the thin-ideal standards they see emulated in the media, and outright bullying. Kremar, Giles, and Helme (2008) observed that when peers reinforce the thin-ideal found in the media, it is more likely that these young women will embrace this ideal as realistic and expected. Conversely, the adolescent girl who wishes to be included with the cliques who possess the standards mentioned above, may do anything, including engaging in destructive behavior (dieting, binging and purging, excessive exercise) to achieve those standards and be accepted. The importance an individual places on her peer's opinion depends on the type of relationship she has with her. Of course, there are also examples of loving, accepting, and supportive close friend relationships during adolescence.

While some adult close friend relationships also include the pressure to conform to such standards, the "mean girl culture" described above is more highly reported in adolescence. In adulthood, women have had life experience and time to mature, been through hormonal and body changes, and tend to seek out healthier support systems in which to participate. For those who do feel the pressure to conform, McCabe and Ricciardelli (2001b) stated that peer influence can have a significant impact on what one considers normal or desirable regarding body size and shape. They found that women who experienced high body dissatisfaction were more likely to

have felt peer pressure about weight, particularly in the form of criticism for weight gain, and praise for weight loss.

Media, one of the most researched and considered one of the most influential sources of BID in current research, was not reported as influential with this group of participants. It is possible that not growing up with much of the current media (larger quantity of television stations and magazines, the internet, and social media) which place increasing importance on images (use of Photoshop and size zero models/actresses), most of this group of participants was spared some of the pressure felt by today's youth.

The other influence that was examined, but reported as surprisingly little influence was pregnancy and post/partum body changes. This was expected under the first condition of instruction (adolescence), as most women would not have experienced pregnancy yet. But under the second condition of instruction (adulthood), only five out of 45 participants rated pregnancy/post-partum body changes as most influential (4 or 5 on the sorting array). Eighteen rated it on the negative side (not influential).

Although this study found that media and pregnancy/post-partum changes were not rated as most influential by these participants, an interesting follow-up question would ask if these less influential items reinforce messages from the more influential items. It may be beneficial to understand not just the primary influences (positive and negative) to body image development, but the dynamics and synergy created between secondary and tertiary influences that either reinforce or contradict what was primarily viewed as influential.

Research Question Three

How do women report the salience of body image influences has changed from adolescence (ages 10-18) to adulthood (present)? What differences are reported by women based on different ages?

Table 14

Factor Movement by Age Group

	20s	30s	40s	50s
Factor				
0 to 1	1	2	2	0
1 to 1	1	2	1	1
1 to 2	0	1	0	2
1 to 3	1	0	0	0
2 to 0	0	0	1	0
2 to 1	1	0	0	0
2 to 2	1	4	1	0
2 to 3	0	0	0	0
3 to 0	2	3	0	0
3 to 1	1	2	2	1
3 to 2	0	2	4	2
3 to 3	2	0	1	0

The open-ended question that connects with research question three asked participants if they felt the factors that influence their body image had changed from adolescence to adulthood. Thirty-one participants said yes, nine said no, and five were unsure (some were the same and some had changed). Twenty-two of the 31 who said the influences had changed showed an actual change between archetypes. Six of the nine who did not believe the influences changed showed an actual change. Three of the five who were unsure showed an actual change. Most of the participants who answered yes, the influences had changed, reported the change moving from friends and parents as the more salient influences in adolescence to their own self-talk and significant others in adulthood. Those that said no, the influences had not changed, reported being mostly influenced by their own self-talk and internalization in both adolescence and

adulthood. And those that said some influences changed and some stayed the same reported continuing to be influenced by friends, self, and parents, but choosing to listen to the positive comments and ignore the negative. They also report adding the importance of the opinion of their significant other.

Table 14 exhibits how the participants moved between factors from adolescence to adulthood. It breaks this movement down by age group, adding more depth to the understanding of why certain influences are more salient at different ages. As discussed in the description of the archetypes in Chapter 4, the *Resilient* archetype started with 9 participants under the first condition of instruction (adolescence), but nearly double that number, 17 loaded into the *Resilient* under the second condition of instruction. Only four participants in their twenties loaded onto the *Resilient* under the second condition of instruction (adulthood). The remaining 13 were all in their thirties or above. This suggests that as the women get older, they report being more resilient to the negative influences, and identify with more positive influences. Many made comments that they chose to listen to positive comments and think more positively as they aged.

The number of participants loading onto the *Transitional* archetype for each condition of instruction was very similar to that of the *Resilient*: 8 participants under the first condition of instruction (adolescence), and 18 under the second condition of instruction (adulthood). Six of the 8 participants who started in the *Transitional*, remained in that factor in adulthood. Most of those were in their twenties and thirties. They may have remained in this transitional state because they are still in early adulthood. It is possible they would move to the *Resilient* archetype as they gain life experience and maturity through age. One of those 8 moved to the *Resilient* (unexpectedly, a participant in her twenties), zero moved to the *Impressionable*, and one did not load onto a factor. The other 11 that made up the *Transitional* under the second

condition of instruction moved from the *Resilient* (three participants), and the *Impressionable* (8 participants). The participants that moved from the *Impressionable* were in their thirties and above. This suggests moving from a time of being more influenced by negative (*Impressionable*) to a combination of being influenced by positive and negative (*Transitional*). Most of the participants who moved from *Impressionable* to *Transitional* were in their twenties and thirties, some went from being single to married, and some had children. It is likely that eventually some of these individuals would move into the *Resilient* archetype.

The *Impressionable* archetype had the greatest number of participants (23) under the first condition of instruction (adolescence), compared to 9 in the *Resilient*, and 8 in the *Transitional*. This means that over half of the participants reported identifying with the *Impressionable* archetype during adolescence. Their body image was more influenced by negative comments and behavior modeling largely from their friends, their mothers, and their own self-talk, than by positive comments and behavior modeling. In the second condition of instruction (adulthood), only four participants remained in the *Impressionable* archetype, three of them in their twenties. This suggests that the individuals still being mainly influenced by negative factors, are still quite young, and yet to work through life stages that lead to higher resilience.

The change from being influenced by negative factors to being influenced by more positive factors was the most noticeable change in the structure of the results, but women also report that they were less influenced by friends and their mothers in adulthood than they were in adolescence. They reported listening more to their own voices, and using their voice to improve their self-esteem rather than tear it down. Looking at the age groups in the three factor, it is also noteworthy that significant others seem to replace mothers in the *Transitional* archetype as an influence. The largest age group of this archetype in adulthood was the thirties. It is possible that

during these years, women were more consumed by their own home and immediate families (husbands and children). Husbands became the daily source of "closest loved one" as an influence.

Research Question Four

In the opinion of the participants, what should be done to intervene with influences that lead to negative body image?

The open-ended question that connects with research question four was asked to give the researcher a glimpse into the minds of the participants not only for their past experiences, but also for their views moving forward. Participants were asked what they thought should be done to intervene with influences that lead to negative body images. Three themes emerged from the responses to this question: media, comparisons, and education.

The first theme, media, connects with several suggestions and concerns. One participant shared, "This seems like an impossible task. I think media has a tremendous influence on body image. There have been some positive changes made, but obviously, it is still a problem." Participants shared concerns about unrealistic images used in the media, and our young people using dangerous methods striving to attain the bodies portrayed in those images. They called for less Photoshop, less sexualization of young girls, more diversity in body size and race, and more positive body campaigns (i.e. Dove) to appear in the media. One participant said, "No more Photoshop in media; more diverse female bodies in the media; abandonment of 'petite' and 'plus size' terms in fashion and media; more outspoken women and men in children's lives." Additionally, "I think that the media is doing a much better job at spreading body positive messages than I have heard it used to. I think continue those kinds of campaigns is very

important.” They also shared concern over the use of social media for young people to body shame each other.

The second theme, comparisons, had the fewest mentions, but connects to one of the theories discussed at length in Chapter 2: Social Comparison Theory. The comments regarding comparisons called for a stop to pitting women against each other, instead encouraging women to support each other. One participant even suggested increased use of school uniforms to discourage children from making social comparisons at such a young age.

The third theme that emerged from the data, education received the most attention and included the richest data. Discussion included not only educating children about body image at a young age, but educating adults (parents, teachers). Participants believe that adults need to teach children that self-love, strength, kindness, creativity, and how to be helpful are better ways to cultivate self-esteem and self-worth than how their body looks. They also want to teach them how to be curious, positive self-talk, to see bodies as tools to shape the world, and how to develop talents to help build confidence. Others wish to teach children how to judge what is realistic and what is not by showing them how the use of Photoshop alters images in the media. And finally, participants reported believing it is important to teach children that their actions create an experience for others, compassion for themselves and others, and how much their comments and behaviors can influence and hurt others.

Conclusions

The problem this study addressed was women receive messages that contribute to negative body image throughout their lifetimes. When these messages are processed without intentional thought, especially when cultivated over time, serious disorders and the transmission of unhealthy behaviors to children and peers can result.

Body image issues can start in children as young as six years old. Intervention is difficult because mindsets regarding appearance standards are deep-seated and those standards are virtually unattainable for most women. A negative body image has been associated with poor self-esteem, depression, social anxiety, sexual dysfunction, body dysmorphic disorder, eating disorders, drastic body change measures, and death (Cash & Pruzinsky, 2002; Fredrickson & Roberts, 1997; Stice & Shaw, 2002; Stice & Whitenton, 2002; Thompson, Heinberg, Altabe, & Tantless-Dunn, 1999).

Everyone has experienced a set of circumstances that has contributed to both how they view themselves, and how they view the world. There is not a one-size-fits-all solution to help people who suffer from dissatisfaction from body image issues. The further after onset body image issues persist (clinical or not), the more difficult it is to intervene successfully.

It was clear from this study that there are many influences that contribute to BID. Forty-five influences were examined, but others exist. Some influences not considered in this study are teachers, coaches, other school/activity mentors, bosses, and co-workers. Social comparison was tucked under the umbrella of internalization in the Q set, but would be interesting to consider on its own.

It is important to acknowledge that influences on the development of body image are ubiquitous and synergistic. To better understand the individualistic and continuously changing/evolving set of body image influences, imagine looking into a kaleidoscope at the image created by multicolored bits of glass, thrown into a pattern by tiny mirrors. Each bit of glass represents an influence of body image development (positive and negative). Even the slightest turn of the instrument results in a different pattern, but of the same bits of glass (same influences). Every person experiences a set of influences, but each person's view of those

influences is slightly different and their response to those influences is slightly different. Influences will always exist. Parents can be taught not to make comments and portray behavior that leads to negative transmission. The media can include a more diverse selection of models in terms of body shape and general appearance. School can incorporate more prevention programs and workshops to intervene with internalization and teasing. But influences will still always exist. While these influences pose a serious threat in the kaleidoscope of this problem, we must look even further—into the person holding the kaleidoscope. The person making the processing decisions that will make sense of the image—the pattern of the influences seen and felt as the kaleidoscope image is observed. This means researchers, therapists, school counselors, and parents must start when children are very young, not just educating them about healthy body images in general, but from a holistic perspective, teaching them resilience and an internal locus of control.

It is difficult to separate body image in childhood from body image in adulthood, as the development of body image in childhood influences the body image in adulthood, which is then often passed on to the subjects' children. There are several opportunities for adult education to address the problem examined by this study. First, stakeholders and influencers of body image in our society must continue to build campaigns promoting healthy body image. This can be done indirectly, by including a variety of shapes and sizes of models in advertising campaigns, television shows, and movies. The themes used in these campaigns and in popular entertainment can avoid using sexualization of women and girls, and avoid topics that encourage valuing appearance. Research has shown that the media is very influential in shaping our values and expectations in regard to appearance (Thompson et al., 1999). Media has used models and actors who fit very specific criteria for beauty and size for decades. If they broaden their criteria, based

on the strength of their previous influence, it is likely that viewers will follow their lead, and gain greater acceptance of a variety of shapes and sizes of people being normal (Bandura, 1977).

Second, women who experience body image dissatisfaction can get help through educational channels. It is very important that women stop normalizing discontent with their bodies. Help is offered in several different forms. Counseling is the most common. Education is a very important component of counseling, both in the form of research informing the counselor, and in the form the counselor uses to pass on to the client.

Third, there are many healthy body image websites with structured educational materials like classes, workshops, and workbooks. Some of these are specific to teenagers, others are for all ages. Examples of websites with structured educational materials include www.tolerance.org, https://www.thebodypositive.org, https://bodyimagemovement.com, and www.bodylovewellness.com. These types of classes could also be taught as part of community education programs. Teaching healthy body image to children can be included in parenting classes offered by community education. Online and community classes are a more direct, intentional approach to building a healthy body image than what can be achieved by passively viewing a variety of sized models in the media, but both are important pieces to the overall movement.

Another form of education involves an individual seeking out information, but not necessarily structured educational materials. Body image is an increasingly popular subject for blogs, magazine articles, websites, books, documentaries, and other forms of literature. The internet offers easy access to these materials.

Possible Weaknesses of the Study

This study exhibited a few minor weaknesses. Participants were expected to recall experiences from their adolescence. Although experiences that influence the development of body image are generally very salient, the demand placed on these women to recall thoughts, feelings, and experiences from many years ago may have been difficult.

The time required to complete the study was longer than expected for the majority of participants. While this can be seen as a weakness because a long study risks losing participants to fatigue, it also indicates that participants put a great deal of thought into their responses, providing meaningful data.

Using two conditions of instruction for different stages of life created the possibility that a participant might forget which condition of instruction they were answering. To expose this type of error, participants were asked to explain their ranking of each item. These explanations allowed the researcher to ensure the correct condition of instruction was being followed. In cases where it was not, the participant's data was removed from the study.

Future Research Considerations

Body image dissatisfaction is a ubiquitous problem that starts in elementary age children, and often continues through adulthood. Prevention and intervention programs need to be accessible through school counselors, youth leaders, mental health professionals, and community parenting education programs.

A review of current research indicates that prevention of body image dissatisfaction in children uses the following two strategies: (a) enhancing protective factors; and (b) a broad-based, holistic focus. These protective factors build on the child's strengths and promote resilience to prevent BID. In other words, these factors help prevent multiple problems faced in

adolescence, not just the body image symptoms of the problems. These problems stem from the physical changes mentioned above, but also hormonal changes, changes in family and friend dynamics, the influence of media, friends and family on mindsets, and being caught mid-development in their maturity, when maturity is most needed to buffer them from such influences (Cash, 2002; Crago, Shisslak, & Ruble, 2001; Irving, 1999; Piran, Levine, & Steiner-Adair, 1999; Striegel-Moore & Cachelin, 1999; Taylor & Altman, 1997). The broad-based, holistic focus, means that prevention and intervention programs, besides treating the individual as whole, should reach out to the individual's family, peers, schools, media, and other sociocultural influences (Crago et al., 2001; Irving, 1999; Piran et al., 1999). These sociocultural influences are so strong and pervasive for children and adults, it is crucial that a prevention and intervention program teaches individuals how to challenge broader sociocultural influences and become resilient to them (Choate, 2007). Martin and Kennedy (1993) agreed with the resiliency factor, indicating that it is important for girls to develop a positive perception of one's self between grades four and twelve. More research is needed regarding building resiliency in young people to enhance protective factors.

There is a body of research connecting locus of control (tendency of people to believe that control resides internally within them, or externally, with others or the situation) to body image that was not reviewed for this study. Research testing strategies to build more internal locus of control may contribute to women and children's ability to more selectively influences.

There is a great deal of literature that discusses parental—especially maternal—negative effects on children's—especially girls'—body image. This is an important consideration for prevention and resiliency issues. It supports the belief that positive, healthy maternal modeling may be a protective factor and help build resiliency to more negative factors. Parenting education

programs that teach parents to model healthy body attitudes may prevent the transmission of body image dissatisfaction to children.

Although there is a body of research that focuses on women, the bulk of those studies use a convenience sample of college students, which severely limits the age range reached, and fails to explore body image issues of women during the years they are most likely to experience negative body changes and emotions due to those changes. More research that focuses on women during and after child bearing years is needed to fill this gap.

Rieves and Cash (1996) said that whether body image therapy is cognitive, experiential, psychodynamic, or family-oriented, an important goal is to explore and reconstruct self-representations that have been damaged, weaken the influence of negative etiological factors, and relearn positive, healthy associations with those factors. Gaps in the research call for the need for more longitudinal studies, and starting them at an earlier age.

According to Corcoran, Crusius, and Mussweiler (2011), a more encompassing perspective on social comparison that integrates cognitive, motivational, and affective influences is needed. Presnell et al. (2004) also believed cognitive factors such as attributional style or perceived control, which have been linked to depression and anxiety, could be associated with BID. More research is emerging regarding how information processing styles influence how individuals make sense of media messages they receive. A better understanding of these processing styles will have implications for the design of treatment programs. Knowing how information is processed provides direction to how materials should be presented in clinical and nonclinical treatment programs. Experiments using deliberate information processing will guide researchers to develop preventions and interventions that put the affected individual in a position of taking control of her disorder.

Thompson and Stice (2001) called for replication from other laboratories of theirs and other colleagues' work. This would include testing correlations between body image and eating disturbances, testing whether thin-ideal internalization predicts body image dissatisfaction and eating disturbances, experiments to reduce the impact of thin-ideal images portrayed in the media, experiments that rule out potential third variables in explaining findings, and establishing internalization as a causal risk factor for body image dissatisfaction and eating disturbances. They also recommended research that explains physiological and cognitive correlates of internalization, such as reaction time and processing biases in response to weight and shape stimuli (Thompson & Stice, 2001). Finally, Thompson and Stice (2001) recommend theoretical research to investigate factors that promote thin-ideal internalization, and factors that buffer the effects of internalization.

Halliwell et al. (2005) recommend future research to explore the effect of moderate-sized models on advertising effectiveness. To date, a small body of research exists reporting moderate-sized models do not negatively affect advertising effectiveness, and do not correlate to body image dissatisfaction as do ultra-thin models. Halliwell et al. (2005) studied the impact of advertisements using ultra-thin models compared to moderate-sized models on women with a history of eating disorders. Exposure to ultra-thin models did not lead to the increased body-focused anxiety that was expected; however, exposure to moderate-sized models appeared to create a relief effect. This result could lead to research to explore if women with a history of eating disorders are more often influenced by peer and parent or other family members rather than by media. As mentioned, more brands are using a wider variety of shapes and sizes of women, men, and children in advertising, including Dove, Debenham's, and H&M.

Future research in depression and negative affect needs to delineate the nature of the relationship between depression and body dissatisfaction, and negative affect and body dissatisfaction.

Children who grow up with body image issues often become mothers with body image issues who unwittingly transmit those issues to their own daughters. Children need protective factors to buffer them from the etiological factors discussed in this paper, especially the media. A stronger sense of resiliency and an intentional source of self-worth will help children enjoy healthy body images and self-esteems, and grow into healthy, happy women and mothers.

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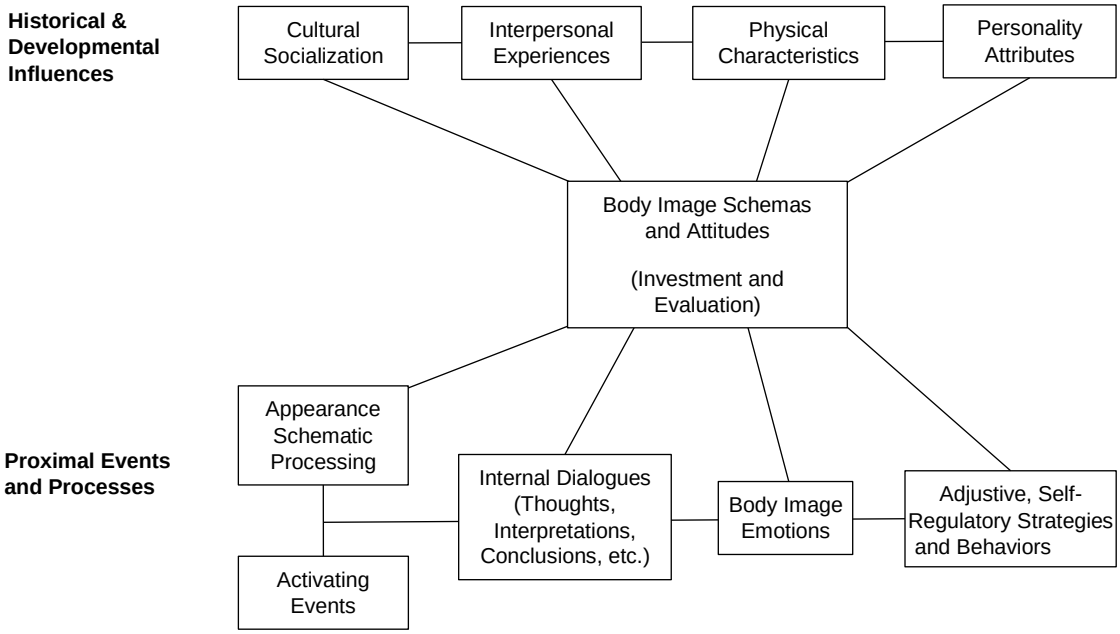
APPENDIX A. COGNITIVE-BEHAVIORAL MODEL OF BODY IMAGE DEVELOPMENT AND EXPERIENCES



(Cash, 2002, p. 39)

APPENDIX B. COMPLETE OUTPUT FOR THE DISTINGUISHING STATEMENTS FOR ALL FACTORS

This appendix contains the complete output from the PQMethod analytical software for the three sets of distinguishing statements.

Table B.1

Distinguishing Statements for Factor 1

S#	Statement	F1 SV	F1 Z-SCR	SIG	F2 SV	F2 Z-SCR	F3 SV	F3 Z-SCR
9	Positive comments from my siblings	5	1.906	*	0	-0.094	0	0.123
1	Positive direct comments from my mother	4	1.722	*	1	0.249	4	1.147
35	My own positive self-talk	4	1.519	*	3	0.721	3	0.826
5	Positive comments from my father	3	1.321	*	0	-0.109	1	0.545
25	Positive behavior modeling from my close friend peers	3	1.237	*	2	0.606	3	0.736
37	My own positive past behavior	3	1.198	*	2	0.568	1	0.463
11	Positive behavior modeling from my siblings	3	1.054	*	-3	-1.122	-2	-0.288
3	Positive behavior modeling from my mother	2	1.048	*	-1	-0.479	2	0.677
39	Positive internalization due to an appearance-related personal accomplishment	2	0.988		0	0.132	2	0.682
36	My own negative self-talk	2	0.534	*	5	2.044	5	1.756
14	Negative comments from my significant other	1	0.438		4	1.814	0	0.163
17	Positive comments from my children	1	0.343	*	3	1.03	-4	-1.928
21	Positive behavior modeling from my other family members	1	0.241	*	-4	-1.225	-1	-0.243
33	Positive behavior portrayed in the media	0	0.147		-2	-0.526	-1	-0.137
2	Negative direct comments from my mother	0	0.147	*	1	0.562	4	1.185
29	Positive behavior modeling from my acquaintance peers	0	0.042	*	-2	-0.492	-3	-0.424
38	My own negative past behavior	0	-0.238	*	2	0.702	2	0.578
24	Negative comments from my close friend peers	-1	-0.452	*	4	1.425	5	1.599
26	Negative behavior modeling from my close friend peers	-1	-0.613	*	1	0.289	3	0.908
44	Positive body-related messages from religious teachings	-1	-0.629	*	-5	-2.26	-3	-1.07
12	Negative behavior modeling from my siblings	-1	-0.735	*	-3	-1.188	-2	-0.368

Table B.1. *Distinguishing Statements for Factor 1 (continued)*

S#	Statement	F1 SV	F1 Z-SCR	SIG	F2 SV	F2 Z-SCR	F3 SV	F3 Z-SCR
42	Positive internalization due to pregnancy, post-partum body changes	-2	-0.75	*	0	0.072	-5	-2.366
18	Negative comments from my children	-2	-0.766	*	3	0.926	-4	-1.981
32	Negative, unrealistic images from the media	-2	-0.818	*	-1	-0.327	2	0.594
43	Negative internalization due to pregnancy, post-partum body changes	-2	-0.96	*	2	0.664	-5	-2.525
20	Negative comments from other family members	-3	-0.963	*	-2	-0.535	1	0.427
8	Negative behavior modeling from my father	-3	-1.087	*	-4	-1.485	-1	-0.115
22	Negative behavior modeling from my other family members	-3	-1.142		-4	-1.452	-1	-0.183
40	Negative internalization due to a traumatic event	-4	-1.163	*	0	0.168	0	-0.041
30	Negative behavior modeling from my acquaintance peers	-4	-1.319	*	-2	-0.855	-2	-0.385
28	Negative comments from my acquaintance peers	-5	-1.49	*	1	0.46	3	0.801
41	Negative internalization due to rape or abuse	-5	-1.505		-1	-0.181	-4	-1.842

P < .05 : Asterisk (*) Indicates Significance at P < .01

Table B.2

Distinguishing Statements for Factor 2

S#	Statement	F1 SV	F1 Z-SCR	F2 SV	F2 Z-SCR	SIG	F3 SV	F3 Z-SCR
36	My own negative self-talk	2	0.534	5	2.044		5	1.756
14	Negative comments from my significant other	1	0.438	4	1.814	*	0	0.163
17	Positive comments from my children	1	0.343	3	1.03	*	-4	-1.928
18	Negative comments from my children	-2	-0.766	3	0.926	*	-4	-1.981
43	Negative internalization due to pregnancy, post-partum body changes	-2	-0.96	2	0.664	*	-5	-2.525
2	Negative direct comments from my mother	0	0.147	1	0.562	*	4	1.185
28	Negative comments from my acquaintance peers	-5	-1.49	1	0.46		3	0.801
16	Negative behavior modeling from my significant other	-1	-0.732	1	0.328	*	-3	-0.719
26	Negative behavior modeling from my close friend peers	-1	-0.613	1	0.289	*	3	0.908

Table B.2 *Distinguishing Statements for Factor 2 (continued)*

S#	Statement	F1 SV	F1 Z-SCR	F2 SV	F2 Z-SCR	SIG	F3 SV	F3 Z-SCR
1	Positive direct comments from my mother	4	1.722	1	0.249	*	4	1.147
39	Positive internalization due to an appearance-related personal accomplishment	2	0.988	0	0.132	*	2	0.682
42	Positive internalization due to pregnancy, post-partum body changes	-2	-0.75	0	0.072	*	-5	-2.366
5	Positive comments from my father	3	1.321	0	-0.109	*	1	0.545
41	Negative internalization due to rape or abuse	-5	-1.505	-1	-0.181	*	-4	-1.842
19	Positive comments from other family members	0	0.112	-1	-0.224		0	0.229
32	Negative, unrealistic images from the media	-2	-0.818	-1	-0.327	*	2	0.594
3	Positive behavior modeling from my mother	2	1.048	-1	-0.479	*	2	0.677
33	Positive behavior portrayed in the media	0	0.147	-2	-0.526	*	-1	-0.137
20	Negative comments from other family members	-3	-0.963	-2	-0.535	*	1	0.427
30	Negative behavior modeling from my acquaintance peers	-4	-1.319	-2	-0.855	*	-2	-0.385
11	Positive behavior modeling from my siblings	3	1.054	-3	-1.122	*	-2	-0.288
12	Negative behavior modeling from my siblings	-1	-0.735	-3	-1.188	*	-2	-0.368
7	Positive behavior modeling from my father	1	0.162	-3	-1.213	*	-1	-0.056
21	Positive behavior modeling from my other family members	1	0.241	-4	-1.225	*	-1	-0.243
22	Negative behavior modeling from my other family members	-3	-1.142	-4	-1.452		-1	-0.183
8	Negative behavior modeling from my father	-3	-1.087	-4	-1.485	*	-1	-0.115
45	Negative body-related messages from religious teachings	-4	-1.432	-5	-2.141	*	-3	-1.53
44	Positive body-related messages from religious teachings	-1	-0.629	-5	-2.26	*	-3	-1.07

P < .05 : Asterisk (*) Indicates Significance at P < .01

Table B.3

Distinguishing Statements for Factor 3

S#	Statement	F1 SV	F1 Z-SCR	F2 SV	F2 Z-SCR	F3 SV	F3 Z-SCR	SIG
36	My own negative self-talk	2	0.534	5	2.044	5	1.756	
2	Negative direct comments from my mother	0	0.147	1	0.562	4	1.185	*
1	Positive direct comments from my mother	4	1.722	1	0.249	4	1.147	*
26	Negative behavior modeling from my close friend peers	-1	-0.613	1	0.289	3	0.908	*
28	Negative comments from my acquaintance peers	-5	-1.49	1	0.46	3	0.801	
39	Positive internalization due to an appearance-related personal accomplishment	2	0.988	0	0.132	2	0.682	
3	Positive behavior modeling from my mother	2	1.048	-1	-0.479	2	0.677	*
32	Negative, unrealistic images from the media	-2	-0.818	-1	-0.327	2	0.594	*
5	Positive comments from my father	3	1.321	0	-0.109	1	0.545	*
13	Positive comments from my significant other	5	1.924	5	1.905	1	0.489	*
6	Negative comments from my father	0	-0.406	0	-0.164	1	0.46	*
20	Negative comments from other family members	-3	-0.963	-2	-0.535	1	0.427	*
10	Negative comments from my siblings	0	-0.077	-1	-0.293	0	0.393	*
4	Negative behavior modeling from my mother	-1	-0.577	-1	-0.361	0	0.276	*
14	Negative comments from my significant other	1	0.438	4	1.814	0	0.163	
8	Negative behavior modeling from my father	-3	-1.087	-4	-1.485	-1	-0.115	*
33	Positive behavior portrayed in the media	0	0.147	-2	-0.526	-1	-0.137	
34	Negative behavior portrayed in the media	-3	-1.11	-3	-0.866	-1	-0.168	*
22	Negative behavior modeling from my other family members	-3	-1.142	-4	-1.452	-1	-0.183	*
21	Positive behavior modeling from my other family members	1	0.241	-4	-1.225	-1	-0.243	*
11	Positive behavior modeling from my siblings	3	1.054	-3	-1.122	-2	-0.288	*
12	Negative behavior modeling from my siblings	-1	-0.735	-3	-1.188	-2	-0.368	*
30	Negative behavior modeling from my acquaintance peers	-4	-1.319	-2	-0.855	-2	-0.385	*
15	Positive behavior modeling from my significant other	2	0.675	1	0.525	-2	-0.392	*
44	Positive body-related messages from religious teachings	-1	-0.629	-5	-2.26	-3	-1.07	*

Table B.3. *Distinguishing Statements for Factor 3 (continued)*

S#	Statement	F1 SV	F1 Z-SCR	F2 SV	F2 Z-SCR	F3 SV	F3 Z-SCR	SIG
41	Negative internalization due to rape or abuse	-5	-1.505	-1	-0.181	-4	-1.842	
17	Positive comments from my children	1	0.343	3	1.03	-4	-1.928	*
18	Negative comments from my children	-2	-0.766	3	0.926	-4	-1.981	*
42	Positive internalization due to pregnancy, post-partum body changes	-2	-0.75	0	0.072	-5	-2.366	*
43	Negative internalization due to pregnancy, post-partum body changes	-2	-0.96	2	0.664	-5	-2.525	*

P < .05 : Asterisk (*) Indicates Significance at P < .01

APPENDIX C. DIFFERENCE SCORES

This appendix contains the difference scores between Factors 1 and 2, Factors 1 and 3, and Factors 2 and 3.

Table C.1

Difference Scores between Factor 1 and Factor 2

S#	Statement	F1	F2	Difference
11	Positive behavior modeling from my siblings	1.054	-1.122	*2.176
9	Positive comments from my siblings	1.906	-0.094	*2.000
44	Positive body-related messages from religious teachings	-0.629	-2.26	1.631
3	Positive behavior modeling from my mother	1.048	-0.479	1.527
1	Positive direct comments from my mother	1.722	0.249	1.473
21	Positive behavior modeling from my other family members (uncles, aunts, cousins, grandparents, etc.)	0.241	-1.225	1.466

* denotes significant difference ($z \geq 1.96$)

Table C.2

Difference Scores between Factor 1 and Factor 3

S#	Statement	F1	F3	Difference
17	Positive comments from my children	0.343	-1.928	*2.271
9	Positive comments from my siblings	1.906	0.123	1.783
42	Positive internalization due to pregnancy, post-partum body changes	-0.75	-2.366	1.616
43	Negative internalization due to pregnancy, post-partum body changes	-0.96	-2.525	1.565
13	Positive comments from my significant other	1.924	0.489	1.435
11	Positive behavior modeling from my siblings	1.054	-0.288	1.342

* denotes significant difference ($z \geq 1.96$)

Table C.3

Difference Scores between Factor 2 and 3

S#	Statement	F2	F3	Difference
43	Negative internalization due to pregnancy, post-partum body changes	0.664	-2.525	*3.189
17	Positive comments from my children	1.03	-1.928	*2.958
18	Negative comments from my children	0.926	-1.981	*2.907
42	Positive internalization due to pregnancy, post-partum body changes	0.072	-2.366	*2.438
41	Negative internalization due to rape or abuse	-0.181	-1.842	1.661
14	Negative comments from my significant other	1.814	0.163	1.651

* denotes significant difference ($z \geq 1.96$)